



## Joint Study on Mental Health Support Mechanisms for Employees

(Targeting positions in the Program Administrative and Technical Services  
Bargaining Units but could be applicable to all positions in which  
employees could be at risk of psychological harm)

Prepared by the  
Joint Committee on Mental Health Support Mechanisms

**Content warning: This report contains information that may be disturbing to some readers.**



## Abbreviations and Acronyms

CBT	cognitive behavioural therapy
CPTSD	complex post-traumatic stress disorder
DSM-5	American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders
HPP	hazard prevention program
MOU	memorandum of understanding
PA	Program and Administrative Services bargaining unit
PSAC	Public Service Alliance of Canada
PTSD	post-traumatic stress disorder
RCMP	Royal Canadian Mounted Police
STS	secondary traumatic stress
TBS	Treasury Board of Canada Secretariat
TC	Technical Services bargaining unit
TRiM	trauma risk management

## Table of Contents

Abbreviations and Acronyms .....	i
Table of Contents .....	ii
Executive Summary .....	iii
1.0 Background .....	1
2.0 Introduction to Trauma .....	2
3.0 Overview of the Committee’s Work.....	4
4.0 Approach, Methodology and Limitations.....	4
5.0 Identification of Positions .....	6
6.0 Inventory of Promising Mental Health Mechanisms .....	6
7.0 Literature Review Findings .....	8
7.1 Trauma in the Workplace .....	10
7.2 Workplace Susceptibility to Trauma.....	13
7.3 Proactive Workplace Programs .....	14
7.4 Treatment of Psychological Injuries and Disorders.....	17
7.5 Pandemic Context.....	17
8.0 Needs for Mental Health Support Mechanisms.....	18
9.0 Conclusions and Recommendations .....	18
10.0 Summary Table of Findings and Recommendations.....	21
Appendix A: Memoranda of Understanding .....	24
Appendix B: Guiding Criteria for Identifying Positions .....	26
Appendix C: Recommended Reading .....	28
Various occupations and trauma exposure .....	28
Risk Factors, Protective Factors .....	29
Prevention and Intervention .....	30
Treatment.....	31
PTSD and Other Disorders.....	32
Other .....	33

## Executive Summary

The request for this study came about with the joint recognition by the union and the employer that:

- potential exposure to traumatic material, events and circumstances experienced in the workplace by those in the Program Administrative and Technical Services bargaining units, could be hazardous and contribute to increased risks to employee mental health
- the *Canada Labour Code* includes a regulatory requirement, the hazard prevention program (HPP), for the systemic identification of workplace hazards under Part XIX of the *Canada Occupational Health and Safety Regulations*

In developing their HPP, departments and agencies are expected to consider aggregate hazards, including job hazards with risks of traumatization, that employees could face in the course of their duties.

In October 2020, two memoranda of understanding (MOUs) with respect to a Joint Study on Mental Health Support Mechanisms for Employees were signed by the Public Service Alliance of Canada (PSAC) and the Treasury Board of Canada Secretariat (TBS). The study aimed to:

1. identify positions within the bargaining unit inherently exposed, in the course of their duties, to explicit and disturbing material, and/or potentially threatening situations which may require support mechanisms with regard to employees' mental health
2. identify the specific needs for support mechanisms
3. identify and document promising and best practices with regard to support mechanisms for those employees
4. recommend how to implement promising and best practices identified by the study

To conduct this work, the Joint Committee on Mental Health Support Mechanisms was formed, co-chaired by a representative from TBS and from the PSAC, along with 13 executive-level employer members representing the departments named in the MOU, and 10 PSAC representatives.

The committee fulfilled the four study requirements by taking a blended, holistic research approach, meaning multiple lines of evidence were explored to draw conclusions and recommendations. This included:

- the development of guiding criteria to identify positions involving risk
- an analysis of inventories of current and promising practices in departments to identify mental health support gaps and needs
- the task of conducting a literature review of effective mental health supports related to trauma, including vicarious trauma

The study concluded that there are a variety of mental health supports available to employees who are exposed to risks of trauma as part of their duties at work. However, the uptake, frequency and effectiveness of these supports for prevention, response, treatment and recovery are not well known. Also, identifying appropriate preventive or corrective support mechanisms to be put in place for affected employees is a challenge in the absence of the systematic identification of workplace hazards and psychological risks.

The literature suggests that psychoeducational programs that improve understanding of mental health risk factors and programs that increase awareness of mental health warning signs and symptoms are helpful for organizations to prevent or mitigate work-related risks, including those related to trauma. Cognitive behavioural therapy (CBT) is shown to be effective to treat various forms of trauma, and having a strong support network can considerably reduce the risk of trauma symptoms.

The recommendations focused on:

1. the need for all employees to be equipped with foundational knowledge of mental health and psychological health and safety in the workplace
2. better integration of occupational health and safety and psychological health and safety to properly identify psychological risks at work
3. recovery and response options for employees
4. informal peer support
5. measurement and evaluation of mental health supports

## 1.0 Background

The Treasury Board of Canada Secretariat (TBS) and the Public Service Alliance of Canada (PSAC) jointly recognize that workplace exposure to potentially traumatic events, circumstances and material, including vicarious experiences, represent a risk to the mental health of employees. Mental injuries are a risk not only to employees experiencing traumatic events directly in the course of their duties, but also to those who experience it indirectly, or “vicariously.”

Employers have a legal duty to provide a safe and healthy workplace to all employees. They are accountable for understanding and managing psychological and physical risks in the workplace. As of 2020, the *Canada Labour Code* includes psychological injuries and illnesses in occupational health and safety requirements. Employers are required to identify, prevent when and where possible, mitigate, and manage psychological hazards and risks in the workplace while putting measures in place to protect the psychological health and safety of workers.

In October 2020, two memoranda of understanding (MOUs) with respect to a Joint Study on Mental Health Support Mechanisms for Employees were signed by PSAC and TBS. The MOUs differ slightly regarding timelines and target populations. One MOU focused on the Technical Services (TC) bargaining unit; the other, on the Program and Administrative Services (PA) bargaining unit. The MOUs covered different departments. A total of 13 departments were named in the MOUs. TBS and PSAC agreed to align the timelines and to amalgamate the MOU to conduct one study, establishing one joint committee co-chaired by a representative from each party.

The MOU (see Appendix A for the official MOU) outline the study’s specifications, which are to:

1. identify positions within the bargaining unit inherently exposed, in the course of their duties, to explicit and disturbing material, and/or potentially threatening situations which may require support mechanisms with regard to employees’ mental health
2. identify the specific needs for support mechanisms
3. identify and document promising and best practices with regard to support mechanisms for those employees
4. recommend how to implement promising and best practices identified by the study

To conduct this work, the Joint Committee on Mental Health Support Mechanisms was formed. Thirteen executive-level employer members represented the departments named in the MOU. TBS provided a co-chair and performed the committee secretariat function. There was voluntary participation by the Canada Border Services Agency and Correctional Service Canada. The committee also had 11 PSAC representatives, including a co-chair.

The participating departments were as follows:

1. Public Prosecution Service of Canada
2. Parole Board of Canada

3. Royal Canadian Mounted Police (RCMP)
4. Veterans Affairs Canada
5. Transport Canada
6. Transportation Safety Board of Canada
7. Fisheries and Oceans Canada
8. Environment and Climate Change Canada
9. Employment and Social Development Canada
10. Canadian Coast Guard
11. Indigenous Services Canada
12. Department of Justice Canada
13. Immigration and Refugee Board of Canada
14. Canada Border Services Agency (not named in MOU)
15. Correctional Service Canada (not named in MOU)
16. Treasury Board of Canada Secretariat

## 2.0 Introduction to Trauma

Before we delve into the work of the committee and the findings from the study undertaken, it is important to establish a common understanding of what trauma is and the various types that exist.

Trauma is described by the Substance Abuse and Mental Health Services Administration as follows:

Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental physical, social, emotional, or spiritual well-being.<sup>1</sup>

Whether someone experiences an event as traumatic depends on the meaning they assign to it and how psychologically or physically they are disrupted by it.<sup>2</sup> Adverse reactions to trauma can happen immediately or be delayed by months or years, may be long-term or short-term, and have many physical and psychological manifestations.<sup>3</sup>

As we continue to understand trauma more fully, the definitions and guiding criteria evolve. In the newest edition of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-5), post-traumatic stress disorder (PTSD) has been moved from the anxiety disorders category to a new diagnostic category named "Trauma and Stressor-Related Disorders." Considerable research has demonstrated that PTSD entails multiple emotions (e.g.,

---

<sup>1</sup> Substance Abuse and Mental Health Services Administration. [SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach](#). October 2014, pp. 1–27.

<sup>2</sup> Substance Abuse and Mental Health Services Administration, 2014.

<sup>3</sup> Centre for Addiction and Mental Health (CAMH). ["Posttraumatic Stress Disorder."](#) (Toronto, Ontario: CAMH, 2019).



guilt, shame, anger) outside of the fear and anxiety spectrum,<sup>4</sup> thus providing evidence inconsistent with the inclusion of PTSD with anxiety disorders. PTSD is thought to contribute to negative stigma associated with mental health disorders; therefore, the non-clinical terms, “post-traumatic stress injury” and “operational stress injury” are often used to capture the full range of mental injuries that are the result of traumatic experiences.<sup>5, 6</sup>

Complex PTSD (CPTSD) is a new disorder that describes the more complex and more severe reactions that are typical of individuals who have sustained multiple exposures to traumatic experiences or who have sustained long-term traumatic circumstances.<sup>7</sup> The trauma associated with PTSD generally refers to a single traumatic event or possibly similar events in a short time frame. CPTSD, on the other hand refers to long-standing, recurring traumas such as ongoing exposure to psychological harm from, for example, harassment, emotional neglect, racism, bullying, unmanaged chronic stress, psychological abuse, or physical abuse.<sup>8, 9</sup> CPTSD can result in all the symptoms one might have with PTSD, including the following additional symptoms, which set it apart from PTSD: long-term difficulties maintaining relationships, difficulties managing emotions, and strong feelings of worthlessness and guilt.<sup>10</sup>

“Vicarious trauma” and “secondary traumatic stress” (STS) are frequently used interchangeably to refer to the indirect trauma that can occur when we are exposed to difficult or disturbing images and stories second-hand.<sup>11</sup> Vicarious trauma happens when we experience trauma through exposure to the pain of others via written, oral or visual material, and it involves a shift in our world view. It can lead to many negative mental health symptoms and disorders, up to and including anxiety, depression and PTSD.<sup>12</sup> The concept of STS was developed by trauma specialists trying to understand why service providers displayed symptoms very similar to

---

<sup>4</sup> Williamson, J. B., Jaffee, M. S., and Jorge, R. E. “[Posttraumatic Stress Disorder and Anxiety-Related Conditions.](#)” *Continuum*. 2021; 27(6):1738–1763.

<sup>5</sup> Government of Canada. [Healthy Minds, Safe Communities: Supporting Our Public Safety Officers Through a National Strategy for Operational Stress Injuries](#). Report of the Standing Committee on Public Safety and National Security, 5th report, 42nd Parliament, 1st session, Chair: Robert Oliphant (Ottawa: House of Commons, October 2016).

<sup>6</sup> Canadian Institute for Public Safety Research and Treatment (CIPSRT). [Glossary of Terms: A Shared Understanding of the Common Terms Used to Describe Psychological Trauma](#) (version 2.2). (Regina: CIPSRT, 2019).

<sup>7</sup> Maercker, A., Cloitre, M., Bachem, R., Schlumpf, Y. R., Houry, B., Hitchcock, C., and Bohus, M. “[Complex Post-Traumatic Stress Disorder.](#)” *The Lancet*. 2022 Jul 2; 400(10345):60–72.

<sup>8</sup> Leonard, J. “[What Is Complex PTSD: Symptoms, Treatment, and Resources to Help You Cope.](#)” *Medical News Today*, 2022.

<sup>9</sup> Herman, J. L. *Trauma and Recovery: The Aftermath of Violence—From Domestic Abuse to Political Terror* (USA: Basic Books, 2015).

<sup>10</sup> World Health Organization. [ICD-11 for Mortality and Morbidity Statistics \(Version: 02/2022\) 6B41 Complex post traumatic stress disorder](#). 2022.

<sup>11</sup> TEND Academy. “[What Are Vicarious Trauma and Secondary Traumatic Stress?](#)” 2018.

<sup>12</sup> McCann, I. L., and Pearlman, L.A. “[Vicarious Traumatization: A Framework for Understanding the Psychological Effects of Working With Victims.](#)” *Journal of Traumatic Stress*. 1990; 3(1):131–149.

post-traumatic stress syndrome (e.g., emotional numbing, avoidance, arousal, and chronic irritability), even though they were not necessarily directly exposed to trauma themselves.<sup>13</sup>

Vicarious trauma was initially the focus of this study, but when examining the supports available, a distinction was not necessarily made between the different types of trauma and supports to prevent and treat trauma.

### 3.0 Overview of the Committee's Work

Since March 23, 2021, the date of the inaugural meeting of the Joint Committee on Mental Health Support Mechanisms, the committee met 16 times. Over the course of the study, the committee:

- developed guiding criteria for the identification of positions (see section 5.0 Identification of Positions)
- compiled an inventory of potentially promising mental health support mechanisms that exist in the participating departments (see section 6.0 Inventory of Promising Mental Health Support Mechanisms)
- prepared a literature review on the topic of trauma, trauma in the workplace, and effective support mechanisms (see section 7.0 Literature Review Findings)
- identified needs for mental health support mechanisms (see section 8.0 Needs for Mental Health Support Mechanisms)
- considered the role of the hazard prevention program (HPP), preventing exposure, and eliminating or reducing hazards
- heard 10 presentations by external experts and various departments on promising practices
- developed recommendations for identified needs and the implementation of promising practices

### 4.0 Approach, Methodology and Limitations

This study involved departments of various sizes, structures and mandates, which helped guide the methodologies chosen. The committee fulfilled its obligations as stated in the MOU by taking a blended, holistic research approach, exploring multiple lines of evidence to draw conclusions and recommendations.

In reference to the term “support mechanisms,” the committee agreed that this could refer to prevention, response, as well as treatment and recovery mechanisms. Other clarifications and specific limitations for each of the four MOU requirements listed in section 1.0 of this report are described here, along with the methodology used to yield the most accurate results.

---

<sup>13</sup> Figley, C. [\*Compassion Fatigue: Coping With Secondary Traumatic Stress Disorder in Those Who Treat the Traumatized\*](#). (New York: Brunner/Routledge, 1995).

For the first requirement (identification of positions within the bargaining unit inherently exposed, in the course of their duties, to explicit and disturbing material, and/or potentially threatening situations which may require support mechanisms with regard to employees' mental health), a working group made up of equal numbers of union and employer members was established to determine a consistent methodology for identifying these positions.

The working group concluded (and the committee agreed) that this type of exercise would need to be ongoing. Due to the evolving nature of work undertaken by people in particular positions in the federal public service, a snapshot in time would not be all that useful in the long term. The committee members therefore agreed that the term, "position" does not need to refer to a certain position number or a standalone position but could refer to groups of employees doing similar tasks or work. Members agreed that for a position to be identified, employees would need to encounter one or more risks from a set of risk criteria while conducting their work duties. These risk criteria were proposed as a general guide by the working group and were agreed to by the committee for use in screening positions that potentially involve risk. As expected, given the uniqueness of each department represented, each departmental committee member, in collaboration with their union counterpart, took on the responsibility for identifying positions using these risk criteria in their department.

All members established new, internal working groups, or used existing joint union-employer working groups to consult with in the effort to identify departmental positions. The approach varied between departments. All members agreed that the identification of positions was a huge, ongoing exercise. For this reason, there is no extensive list of positions broken down by department in this report. Rather, the guiding criteria developed by the committee to identify positions that could put people at risk of psychological harm in the course of performing their duties are included in Appendix B so that they can be used in the future by any department to inform their HPP.

The methodology to complete the second requirement in the MOU (identify the specific needs for support mechanisms) was connected to the third requirement in the MOU (identify and document promising and best practices with regard to support mechanisms for those employees). These requirements were challenging for several reasons. In order to identify mental health support needs or gaps, we need to know what is being offered by each department and compare that with known best practices. However, committee members could not identify, with confidence, best practices in their departments in the absence of evaluation results and effectiveness data. Most mental health supports in place in departments have not been evaluated in a systematic way. This situation is not unique to the federal public service; there is limited information on what types of supports are most effective in the literature on this subject as well.

Instead, an inventory of existing and promising practices in departments was compiled using a standardized template developed by a different union-employer working group under the committee and agreed upon by committee members. The template included over 20 variables in

3 identified support categories: prevention, response, and treatment and recovery. This level of detail was required to adequately identify any gaps and needs in each of these three categories. All the inventories were compiled into a database and were analyzed.

Given the challenges in consolidating departmental inventories due to various member interpretations of the template and its components and variables, departments and union representatives were asked to share their overall observations and analysis of their departmental inventory with the committee to identify trends and common themes. This information was used to corroborate the results of the compiled inventory analysis.

The methodology used to complete the fourth requirement in the MOU (recommend how to implement promising and best practices identified by the study) was to compile the results from the first three requirements in the MOU and consider them alongside findings from a literature review of existing peer-reviewed research about trauma in general and about trauma in the workplace. The committee reviewed all the conclusions and recommendations together to ensure they address the findings of the study and the requirements in the MOU.

## **5.0 Identification of Positions**

With the understanding that, whenever possible, the prevention of exposure to explicit and disturbing material and potentially threatening situations is a priority, the working group developed a list of guiding criteria to identify positions involving risk using precise, accessible and clear language about how psychological hazards can occur (see Appendix B: Guiding Criteria to Identify Positions). They recognized that identifying exposure to vicarious trauma (or secondary traumatic stress) is less straightforward than identifying incidents of direct trauma due to the indirect nature of the source or root cause of trauma.

As mentioned previously, approaches to identifying affected positions varied. For example, Environment and Climate Change Canada and the RCMP identified positions affected beyond the PA and TC groups in the MOU. Other departments stuck to the study parameters. Transport Canada took a more elaborate data-driven approach. It developed an online survey tool to assist with the identification of positions involving risk, which was then modified to be used in other departments.

In terms of progress to date, 76% of departments have identified affected positions in the PA and TC groups, using the guiding criteria developed; 23% have identified affected positions beyond the PA and TC groups.

## **6.0 Inventory of Promising Mental Health Mechanisms**

In order to create a useful inventory of departmental practices related to mental health supports, the supports needed to be categorized. The template for the inventory of promising mental health support mechanisms therefore contained the following categories of supports:

- **Prevention (pre-exposure)**  
Control measures, programs and practices to educate and prepare at-risk employees to reduce and, if possible, eliminate the exposure to the psychological stressor and strengthen resistance
- **Response (exposure)**  
Actions aimed at early detection and prompt intervention after a critical or traumatic event has taken place or after exposure to one or more psychological stressors
- **Treatment and recovery (diagnosis)**  
Mechanisms, strategies and treatment directed aimed at limiting disability from a psychological injury and/or at restoring function

Approximately 160 support practices were collected for the inventory by committee member organizations. These practices fell into nine broad groups:

1. Mental health support and stigma reduction
2. Education and training
3. Trauma and crisis response
4. Anti-threat measures and health and safety measures
5. Stress management and resilience
6. Professional counselling services
7. Communication and working with others
8. Peer support
9. Other

The most common practices used in departments involved general mental health education and training, stress management and resilience training and standard critical incident response practices to respond to crisis.

In terms of audience, most support practices targeted all employees (68%). Only 5% targeted supervisors, managers or executives.

Of the programs offered to specific occupational subgroups, 58% were recommended; 42% were mandatory.

Examples of recommended programs for occupational subgroups include:

- training in handling abusive telephone calls
- introduction to mental health
- navigating difficult conversations
- resilience
- vicarious trauma

Examples of mandatory programs in departments include:

- annual check-ins with a mental health professional
- boundaries and ethics training
- critical incident stress management training
- mental health benefits
- Veterans Affairs Canada suicide awareness and prevention protocol training
- training for veterans experiencing anger

Most mental health support mechanisms identified in the inventory were available as requested or as required and were offered on an ongoing basis. Promotion of these supports was mainly virtual, and it varied in terms of frequency. Additionally, the results of the inventory exercise indicated that 64% of programs were adaptable for other departments, likely because 63% of programs were delivered by external providers. Approximately 77% of programs were able to report on the number of people who used the support mechanism, as the results were tracked, for the most part, using a participant feedback approach (i.e., satisfaction surveys). Very few support practices have been evaluated for effectiveness, except Mental Health First Aid courses, which are shown to result in participants being more confident about having discussions about mental health due to better knowledge and attitudes about mental health problems.<sup>14</sup>

## 7.0 Literature Review Findings

When it became clear that it was going to be difficult to identify best practices without having sufficient data, the co-chairs proposed that the committee conduct a literature review to get more insights on what types of supports would be promising and recommended. In response, an employer representative, a union committee member and the two co-chairs volunteered to conduct a literature review to address the MOU requirement to “draw from existing research and/or other sources of information.”

The following information was obtained from reviewing, compiling and analyzing the information in approximately 270 research articles dealing with trauma and vicarious trauma in the workplace.

The literature indicates that there is an array of immediate and delayed impacts that traumatic experiences can have on an individual that include emotional, physical, cognitive, behavioural and existential reactions. The table below<sup>15</sup> lists some examples of the impact.

E.g., Immediate <u>Emotional</u> Reactions	E.g., Delayed <u>Emotional</u> Reactions
Numbness and detachment, guilt, anger, helplessness, feeling overwhelmed	Irritability, hostility, mood swings, depression, shame, emotional detachment

<sup>14</sup> Mental Health First Aid International. [Program Evaluations](#).

<sup>15</sup> Substance Abuse and Mental Health Services Administration. [Trauma-Informed Care in Behavioral Health Services](#). Treatment Improvement Protocol (TIP) Series, 57. (Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014).

## Joint Study on Mental Health Support Mechanisms for Employees

<b>E.g., Immediate <u>Physical</u> Reactions</b>	<b>E.g., Delayed <u>Physical</u> Reactions</b>
Nausea, sweating or shivering, elevated heartbeat, extreme exhaustion, depersonalization / disassociation	Sleep disturbances, appetite and digestive changes, persistent fatigue, long-term health effects including heart, liver, autoimmune, and chronic obstructive pulmonary disease
<b>E.g., Immediate <u>Cognitive</u> Reactions</b>	<b>E.g., Delayed <u>Cognitive</u> Reactions</b>
Difficulty concentrating, racing thoughts, distortion of time and space, memory problems, strong identification with victims	Self-blame, intrusive memories, difficulty making decisions, belief that feelings or memories are dangerous, suicidal thinking
<b>E.g., Immediate <u>Behavioural</u> Reactions</b>	<b>E.g., Delayed <u>Behavioural</u> Reactions</b>
Restlessness, sleep and appetite disturbances, difficulty expressing oneself, argumentative, withdrawal and apathy, avoidant	Avoidance, social relationship disturbances, decreased activity level, high-risk behaviours, increased use of drugs and alcohol
<b>E.g., Immediate <u>Existential</u> Reactions</b>	<b>E.g., Delayed <u>Existential</u> Reactions</b>
Despair about humanity, disruption of life assumptions, intense use of prayer	Increased cynicism, disillusionment, loss of purpose, redefining meaning and importance of life

Psychological trauma increases the risk of many negative and serious mental health outcomes. It can exacerbate symptoms of pre-existing mental disorders and can precipitate the onset of mental disorders such as PTSD,<sup>16</sup> major depressive disorder,<sup>17</sup> anxiety and related disorders,<sup>18</sup> alcohol use disorder,<sup>19</sup> obsessive-compulsive disorder,<sup>20</sup> and suicide attempts.<sup>21</sup> Trauma in

<sup>16</sup> American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5). 2013.

<sup>17</sup> Bonde, J. P., Utzon-Frank, N., Bertelsen, M., Borritz, M., Eller, N. H., Nordentoft, M., and Rugulies, R. "[Risk of Depressive Disorder Following Disasters and Military Deployment: Systematic Review With Meta-Analysis.](#)" *British Journal of Psychiatry*. 2016; 208(4):330–336.

<sup>18</sup> Sareen, J., Cox, B. J., Afifi, T. O., Stein, M. B., Belik, S. L., Meadows, G., and Asmundson, G. J. "[Combat and Peacekeeping Operations in Relation to Prevalence of Mental Disorders and Perceived Need for Mental Health Care: Findings from a Large Representative Sample of Military Personnel.](#)" *Archives of General Psychiatry*, 2007; 64(7):843–852.

<sup>19</sup> Fetzner, M. G., McMillan, K. A., Sareen, J., and Asmundson, G. J. "[What Is the Association Between Traumatic Life Events and Alcohol Abuse/Dependence in People With and Without PTSD? Findings From a Nationally Representative Sample.](#)" *Depression and Anxiety*. 2011; 28(8), 632–638.

<sup>20</sup> Fetzner et al., 2011.

<sup>21</sup> Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., LeBouthillier, D. M., Duranceau, S., Sareen, J., Ricciardelli, R., MacPhee, R. S., Groll, D., Hozempa, K., Brunet, A., Weekes, J. R., Griffiths, C. T., Abrams, K. J., Jones, N. A., Beshai, S., Cramm, H. A., Dobson, K. S., Hatcher, S., Keane, T. M., Stewart, S. H., and Asmundson, G. J. "[Suicidal Ideation, Plans, and Attempts Among Public Safety Personnel in Canada.](#)" *Canadian Psychology / Psychologie canadienne*. 2018; 59(3):220-231.

adulthood is associated with a four-fold increase in the risk of a later mental disorder.<sup>22</sup> Another study about trauma exposure and mental illness confirmed that the prevalence rates of trauma exposure and trauma-related disorders is significantly higher in people with severe mental illness than in the general population.<sup>23</sup> Despite this, trauma exposure and PTSD are significantly overlooked in the treatment of patients with severe mental illness.<sup>24</sup>

PTSD can be caused by exposure to direct or vicarious trauma.<sup>25</sup> Symptoms may appear many months or even years after the experience and include changes in memory systems, psychological needs, worldview, beliefs, and perception of self and others. Hallmark symptoms are grouped into four clusters: avoidance, numbing, hyper-arousal, and re-experiencing or intrusive symptoms.<sup>26</sup>

## 7.1 Trauma in the Workplace

Mental injury and the harmful impacts on workers' mental health through exposure to direct and vicarious trauma in the workplace have been identified and studied in many occupations. This section of the report considers some of the many different aspects of workplace trauma that are important to understand to support a workplace culture that is psychologically healthy and safe. Exposure to traumatic experiences at work affects the individual, their family, social circles, and workplaces.<sup>27</sup> Trauma-informed or trauma-sensitive workplaces help intervene and sometimes prevent or reduce symptoms.<sup>28</sup> They are also conducive to inclusivity, equity and diversity because repeated, or even single acts of marginalization, oppression and racism are traumatic.<sup>29</sup>

In the World Health Organization's 11th edition of the International Classification of Diseases, burnout is included as an occupational phenomenon (rather than a medical condition). It's defined as:

...a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It's characterized by three dimensions: 1) feelings of energy depletion or exhaustion; 2) increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and 3) a sense of ineffectiveness and lack of accomplishment.

---

<sup>22</sup> Hogg, B., Gardoki-Souto, I., Valiente-Gómez, A., Rosa, A. R., Fortea, L., Radua, J., Amann, B. L., and Moreno-Alcázar, A. "[Psychological Trauma as a Transdiagnostic Risk Factor for Mental Disorder: An Umbrella Meta-Analysis.](#)" *European Archives of Psychiatry and Clinical Neuroscience*. 2023; 273(2):397–410.

<sup>23</sup> Mauritz, M. W., Goossens, P. J., Draijer, N., van Achterberg, T. "[Prevalence of Interpersonal Trauma Exposure and Trauma-Related Disorders in Severe Mental Illness.](#)" *European Journal of Psychotraumatology*. 2013; 4(1).

<sup>24</sup> Mauritz et al., 2013.

<sup>25</sup> Canadian Institute for Public Safety Research and Treatment, 2019.

<sup>26</sup> American Psychiatric Association, 2013.

<sup>27</sup> Gerbrandt, N., Grieser, R., and Enns, V. [A Little Book About Trauma-Informed Workplaces](#). Crisis and Trauma Resource Institute: 2021.

<sup>28</sup> Gerbrandt, N. [5 Principles of Trauma-Informed Workplaces](#). Crisis and Trauma Resource Institute.

<sup>29</sup> Cénat, J. M. "[Complex Racial Trauma: Evidence, Theory, Assessment, and Treatment.](#)" *Perspectives on Psychological Science*. 2022; 18(3):675-687.



It refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life.<sup>30</sup>

Burnout is a developmental process that occurs when the stress we experience exceeds our capacity to cope with that stress. It

...begins with excessive and prolonged levels of job stress. This stress produces strain in the worker (feelings of tension, irritability, and fatigue). The process is completed when the workers defensively cope with the job stress by psychologically detaching themselves from the job and becoming apathetic, cynical, or rigid.<sup>31</sup>

Some people are less resilient to this kind of stress, such as survivors of trauma (vicarious or direct), people living with chronic pain, or people experiencing difficulties in other areas of life.

Burnout is an organizational rather than individual problem.<sup>32</sup> Designing effective burnout intervention requires a high degree of creative problem-solving for dealing with organizational issues, and a willingness to shift from the existing workplace culture and team structure to an approach that takes into account individuals, teams and systems.<sup>33</sup>

The likelihood of encountering direct or vicarious trauma differs among occupational groups, and in some occupations, workers are exposed to both types of trauma. For example, professionals at risk of trauma include border officers, mental health and social service providers, lawyers, legal professionals and administrators, interpreters, justice workers, investigators, crimes-against-children and child-exploitation investigators, coroners and forensic scientists, trauma researchers, people who work with abused animals, animal researchers, veterinarians, journalists and photographers.

Addressing potential risks to employees' mental health in the workplace can be beneficial to all involved. From an economic perspective, addressing mental health issues, including potentially traumatic events, is also a sound financial decision. While there is no information specifically about the cost of mental health disorders caused by psychological trauma, the costs of poor mental health in the workplace are immense. In Canada, \$6.3 billion of annual indirect costs stems from lost productivity, working while unwell (presenteeism), and work absences, with 500,000 Canadians unable to work each week due to mental health problems or illnesses.<sup>34</sup>

---

<sup>30</sup> World Health Organization. [Burn-Out an "Occupational Phenomenon": International Classification of Diseases](#). 2019.

<sup>31</sup> World Health Organization. [Guidelines for the Primary Prevention of Mental, Neurological and Psychosocial Disorders. 5. Staff Burnout](#). 1994. (WHO/MNH/MND/94.21)

<sup>32</sup> Moss, J. "[Beyond Burned Out](#)." *Harvard Business Review*. The Big Idea Series/The Burnout Crisis. 2021.

<sup>33</sup> Weiss, L. "[Burnout From an Organizational Perspective](#)." *Stanford Social Innovation Review*. 2020.

<sup>34</sup> Chapman, S., Kangasniemi, A., Maxwell, L. and Sereneo, M. [The ROI in Workplace Mental Health Programs: Good for People, Good for Business. A Blueprint for Workplace Mental Health Programs](#). Deloitte Insights, 2019.

In the public service, mental health conditions remain the leading cause of new disability claims approved in 2021 and 2022<sup>35</sup> and this is the experience across other Canadian disability plans as well.<sup>36</sup> The most frequent cause of new approved claims in 2022 was mental health conditions (60.9% of the total), an increase from 57.6% in 2021. The second largest cause of new disability claims in 2022 was neoplasm (cancer), at 10%, down from its second-place spot in 2021 (11.6%).<sup>37</sup>

Companies with strong mental health programs often have a significant return on investment. Deloitte Canada explored historical investment and savings data from seven large Canadian companies as they rolled out mental health programs and supports. The median yearly return on investment among companies in a recent study was \$1.62. Companies with programs in place for three or more years had a median yearly return on investment of \$2.18.<sup>38</sup>

Understanding warning signs and symptoms of trauma can be helpful for workers and organizations to create solutions that take into consideration personal behavioural, physical, cognitive, emotional, and social symptoms and warning signs. The table below contains some examples<sup>39, 40</sup>

<b>Behavioural</b>
Thinking about quitting job, tardiness, absenteeism, irritability, irresponsibility, overwork, talking to oneself, rejecting closeness, avoiding colleagues or staff gatherings, not returning phone calls
<b>Interpersonal</b>
Conflictual engagement, blaming others, poor relationships, impatience, poor communication, lack of collaboration, withdrawal and isolation from colleagues, engaging in negative gossip or venting, difficulty separating personal life and professional life
<b>Personal Values and Beliefs</b>
Dissatisfaction, negative perceptions, loss of interest, apathy, hopelessness, low self-image, questioning world view and identity, imposter syndrome, cynicism, anger, insensitivity, emotional numbing
<b>Job Performance</b>

<sup>35</sup> National Joint Council. *Disability Insurance Plan Board of Management – Annual Report 2021* (2022); and [Disability Insurance Plan Board of Management – Annual Report 2022](#) (2023).

<sup>36</sup> National Joint Council, 2023.

<sup>37</sup> National Joint Council, 2023 and 2022.

<sup>38</sup> Chapman et al., 2019.

<sup>39</sup> Policy Research Associates. [How being trauma-informed improves criminal justice system responses](#). 2021.

<sup>40</sup> TEND Academy. [Warning Signs of Secondary Trauma and Compassion Fatigue](#). 2017.

Low motivation, increased errors, perfectionism or over-involvement in details, lack of flexibility, feeling helpless

## 7.2 Workplace Susceptibility to Trauma

Factors at the individual and organizational levels can increase the susceptibility of a workplace to traumatization and mental injuries. For example, at the individual level, a history of intergenerational trauma, depression and anxiety, or generally poor mental health, can intensify post-traumatic mental injury symptoms. These factors can also negatively affect psychological adjustment after trauma, making it more difficult to bounce back.<sup>41</sup>

At the organizational level, in some cases, exposure to traumatic experiences can be unavoidable for certain positions in the workplace. However, many organizational variables affect the risk of traumatization in the workplace. Reducing the emotional and psychological impact of traumatic events through organizational strategies can be as predictive for someone's recovery as clinical treatments, which suggests that ensuring a supportive work environment is a critical component of ensuring resilience.<sup>42, 43</sup>

Workplace risks that increase mental injury due to traumatization include an actual or perceived lack of workplace safety and security, a heavy workload, a perception of systemic failure (when an organization continues to conduct its business in a manner that is known to be a risk of psychological harm), and stigma. Stigma can seriously affect the well-being of those who experience it, and it prevents approximately 40% of people with anxiety and depression from seeking help.<sup>44</sup> A workplace culture that promotes long hours, praises workers who appear stoic and unphased by trauma, or perceives openness about the experience and impact of trauma as a weakness increases the likelihood of stigma-related hesitance to access mental health care to address mental health issues.<sup>45, 46</sup> At least half of all workers worry about negative job-related consequences if they seek mental health care, and only 20% are comfortable discussing mental health issues with their coworkers or supervisors.<sup>47</sup> Common concerns include worry about confidentiality, potential negative career impacts, and being perceived as lazy, weak, deceitful,

<sup>41</sup> Brewin, C. R., Andrews, B., and Valentine, J. D. "Meta-Analysis of Risk Factors for Posttraumatic Stress Disorder in Trauma-Exposed Adults." *Journal of Consulting and Clinical Psychology*. 2000; 68(5):748–766.

<sup>42</sup> Noblet, A., Rodwell, J., and McWilliams, J. "Organizational Change in the Public Sector: Augmenting the Demand Control Model to Predict Employee Outcomes Under New Public Management." *Work and Stress*. 2006; 20(4):335–352.

<sup>43</sup> Bishop, S., McCullough, B., Thompson, C., and Vasi, N. "Resiliency in the Aftermath of Repetitious Violence in the Workplace." *Journal of Workplace Behavioral Health*. 2006; 21(3-4):101–118.

<sup>44</sup> Centre for Addiction and Mental Health. [Addressing Stigma](#).

<sup>45</sup> Jury, A., Thorburn, N., and Weatherall, R. "Workers' Constructions of the 'Good' and 'Bad' Advocate in a Domestic Violence Agency." *Human Service Organizations: Management, Leadership and Governance*. 2018; 42(3):318–326.

<sup>46</sup> Jirek, S. L. "[Soul Pain: The Hidden Toll of Working With Survivors of Physical and Sexual Violence](#)." *Sage Open*. 2015; 5(3).

<sup>47</sup> American Psychiatric Association. "[About Half of Workers Are Concerned about Discussing Mental Health Issues in the Workplace; A Third Worry about Consequences if They Seek Help](#)." May 19, 2019. 2019 Annual Meeting.

or not suited for the job.<sup>48</sup> When a workplace is understaffed or has an increase in vacancies, remaining workers may now have to take on additional work or work longer. The job can become more challenging or stressful and can put workers at increased risk of mental injury.<sup>49</sup>

Workplace strategies that reduce risks of mental injury due to traumatization include making sure supervisors and managers are supportive, having peer support groups, and making psychosocial support available.<sup>50</sup> Supportive organizational culture and non-judgmental work environments that are created and nurtured by the organization can be a positive influence as well.<sup>51</sup> Supervisors who acknowledge and validate that trauma, including vicarious trauma exists, and those who understand the demands of the job are also perceived as effective protective factors.<sup>52</sup> In addition, gaining a sense of control through sharing responsibilities and setting goals may act as protective factors that combat workplace helplessness and frustration. Having access to a mental health professional or occupational therapist who understands the type of work and who can anticipate the effects of the work has been shown to be impactful.<sup>53</sup>

### 7.3 Proactive Workplace Programs

Although extensive research has been done on effective, evidence-based treatments available for trauma-related disorders, less research has focused on preventing or reducing the negative effects of trauma before it can cause harm and the onset of disorders.<sup>54</sup> The literature review did not uncover a single best program for proactive interventions other than removing or reducing the hazard. Rather, multi-modal approaches along with resilience-promotion programs are most likely to achieve consistent, moderate decreases in mental injury symptoms. These approaches, however, don't decrease suicidal behaviour and absenteeism symptoms.<sup>55</sup> Longer training time

---

<sup>48</sup> Haugen, P. T., McCrillis, A. M., Smid, G. E., and Nijdam, M. J. "Mental Health Stigma and Barriers to Mental Health Care for First Responders: A Systematic Review and Meta-Analysis." *Journal of Psychiatric Research*. 2017; 94:218–229.

<sup>49</sup> Donnelly, E. A., Bradford, P., Davis, M., Hedges, C., and Klingel, M. "[Predictors of Posttraumatic Stress and Preferred Sources of Social Support Among Canadian Paramedics](#)." *Canadian Journal of Emergency Medicine*. 2016; 18(3):205–212.

<sup>50</sup> Posselt, M., Baker, A., Deans, C., and Procter, N. "Fostering Mental Health and Well-Being Among Workers Who Support Refugees and Asylum Seekers in the Australian Context." *Health and Social Care in the Community*. 2020; 28(5):1658–1670.

<sup>51</sup> Kindermann, D., Sanzenbacher, M., Nagy, E., Greinacher, A., Cranz, A., Nikendei, A., Friederich, H. C., and Nikendei, C. "[Prevalence and Risk Factors of Secondary Traumatic Stress in Emergency Call-Takers and Dispatchers: A Cross-Sectional Study](#)." *European Journal of Psychotraumatology*. 2020; 11(1).

<sup>52</sup> Blome, W. W., and Safadi, N. S. "[Shared Vicarious Trauma and the Effects on Palestinian Social Workers](#)." *Illness, Crisis and Loss*. 2016;24(4):236-260.

<sup>53</sup> Burns, C., Morley, J., Bradshaw, R., and Domene, J. "[The Emotional Impact On and Coping Strategies Employed By Police Teams Investigating Internet Child Exploitation](#)." *Traumatology*. 2008; 14(2):20–31.

<sup>54</sup> Tsai, J., Jones, N., Pietrzak, R. H., Harpaz-Rotem, I., and Southwick, S. M. "Susceptibility, Resilience, and Trajectories." In F. J. Stoddard, Jr., D. M. Benedek, M. R. Milad, and R. J. Ursano (Eds.). *Trauma- and Stressor-Related Disorders*. (Oxford University Press: 2018, pp. 223–238).

<sup>55</sup> Di Nota, P. M., Bahji, A., Groll, D., Carleton, R. N., and Anderson, G. S. "[Proactive Psychological Programs Designed to Mitigate Posttraumatic Stress Injuries Among At-Risk Workers: A Systematic Review and Meta-Analysis](#)." *Systematic Reviews*. 2021; 10(126).

and more frequently repeated training sessions are effective in improving longer-term outcomes. Overall, in the studies examined, improvements were strongest immediately after training and at the follow-up one month after training; they largely faded by 18 months post-training.<sup>56</sup>

One study found a significant (13%) reduction of depression in police officers who took resilience training.<sup>57</sup> Resilience allows someone to adapt from a traumatic experience, tragedy, stress or other adversity and pivot to the next challenge. It is not an inherent trait possessed by the lucky few. It is possible to develop resilience through learned actions, behaviours and thoughts. The four core components of resilience (i.e., connecting with others, fostering personal wellness, addressing unhealthy thought patterns, and finding meaning) can help us increase the capacity to weather, and maybe even grow from, adversity.<sup>58</sup> As well, resilience may be a factor determining how well an intervention works in addressing PTSD.<sup>59</sup> Psychoeducation programs showed some positive trends such as decreases in depression, anxiety and burnout.<sup>60</sup> Mindfulness programs also showed some positive effects on trauma-related symptoms and mind-body wellness.<sup>61</sup>

Supporting workers after exposure to traumatic experiences is important in preventing the development of mental injury. Common immediate supports include critical incident stress debriefing,<sup>62</sup> trauma risk management (TRiM),<sup>63, 64</sup> and psychological debriefing.<sup>65, 66</sup> TRiM and critical incident stress debriefing emphasize peer processes to reduce stress through collective recovery, to decrease stigma and to restore group cohesion and unit performance; they are not

---

<sup>56</sup> Tsai et al., 2018.

<sup>57</sup> McCraty, R., and Atkinson, M. "[Resilience Training Program Reduces Physiological and Psychological Stress in Police Officers.](#)" *Global Advances in Health and Medicine*. 2012; 1(5):44–66.

<sup>58</sup> American Psychological Association. [Building your resilience](#). 2020.

<sup>59</sup> Szabo, Y. Z., Frankfurt, S., Kurz, A. S., Anderson, A., and McGuire, A. P. "[Resilience Predicts Posttraumatic Cognitions After a Trauma Reminder Task and Subsequent Positive Emotion Induction Among Veterans With PTSD.](#)" *Psychological Trauma: Theory, Research, Practice, and Policy*. 2022; 14(S1):S101–S108.

<sup>60</sup> Kim, J., Chesworth, B., Franchino-Olsen, H., and Macy, R. J. "[A Scoping Review of Vicarious Trauma Interventions for Service Providers Working With People Who Have Experienced Traumatic Events.](#)" *Trauma, Violence, and Abuse*. 2021; 23(5):1437–1460.

<sup>61</sup> Szabo et al., 2022.

<sup>62</sup> Mitchell, J. T. "When Disaster Strikes...The Critical Incident Stress Debriefing Process." *Journal of Emergency Medical Services*. 1983; 8(1):36–39.

<sup>63</sup> Jones, N., Burdett, H., Green, K., and Greenberg, N. "Trauma Risk Management (TRiM): Promoting Help Seeking for Mental Health Problems Among Combat-Exposed U.K. Military Personnel." *Psychiatry*. 2017; 80(3):236–251.

<sup>64</sup> Jones, N., Roberts, P., and Greenberg, N. "[Peer-Group Risk Assessment: A Post-Traumatic Management Strategy for Hierarchical Organizations.](#)" *Occupational Medicine*. 2003; 53(7):469–475.

<sup>65</sup> Dyregrov, A. "[Psychological Debriefing: An Effective Method?](#)" *Traumatology*. 1998; 4(2):6–15.

<sup>66</sup> Dyregrov, A. "[Caring for Helpers in Disaster Situations: Psychological Debriefing.](#)" *Disaster Management*. 1989; 2(1): 25–30.

intended to prevent or treat mental injuries, including PTSD.<sup>67, 68, 69</sup> Their main objective is to prevent the escalation of problems to crisis level to maintain and promote mental health by providing low-level psychological peer support, to help identify at-risk workers and to provide a path to accessing professional help.<sup>70</sup> Approximately half of the studies showed small, although rarely significant, positive impacts on PTSD symptom severity, work absences or self-reported quality of life.<sup>71</sup>

Improvements in symptom severity, quality of life, and workplace outcomes were more likely when managers and/or the organization were involved in the interventions. Over 80% of studies where managers were involved or leadership support was clear and presided over the intervention found improvements in symptom severity, quality of life, or workplace outcomes, and this was the case in only 36% if they were not involved.<sup>72</sup>

There is limited peer-reviewed empirical evidence to support the effectiveness of formal peer support, yet it remains popular. Factors impacting efficacy relate to potential concerns about the lack of confidentiality, availability of qualified volunteers, increased workload for supporters, and lack of organizational support. Helpful peer support programs can be social and informal; they can involve untrained participants who have something in common; they can include anything from banter to giving friendly advice; and they can be based on workplace friendships and a culture of safety and trust.<sup>73</sup>

It is evident in the findings from the literature review that there is a global need to improve evaluation efforts and research methods, and to increase the number of studies on interventions focused on preventing mental health injuries that have occurred by trauma, including vicarious trauma.

---

<sup>67</sup> Raphael, B., and Wilson, J. P. (Eds.) *Psychological Debriefing: Theory, Practice and Evidence*. (Cambridge University Press, 2000).

<sup>68</sup> Ruck, S., Bowes, N., and Tehrani, N. "Evaluating Trauma Debriefing Within the UK Prison Service." *Journal of Forensic Practice*. 2013; 15(4):281–290.

<sup>69</sup> Greenberg, N., Langston, V., Everitt, B., Iverson, A., Fear, N. T, Jones, N., and Wessely, S. "A Cluster Randomized Controlled Trial to Determine the Efficacy of Trauma Risk Management (TRiM) in a Military Population." *Journal of Traumatic Stress*. 2010; 23(4):430–436.

<sup>70</sup> Wallace, J. R. "[Field Test of a Peer Support Pilot Project Serving Federal Employees Deployed to a Major Disaster.](#)" *Social Work and Christianity*. 2016; 43(1):127–141.

<sup>71</sup> Creamer, M. C., Varker, T., Bisson, J., Darte, K., Greenberg, N., Lau, W., Moreton, G., O'Donnell, M., Richardson, D., Ruzek, J., Watson, P., and Forbes, D. "Guidelines for Peer Support in High-Risk Organizations: An International Consensus Study Using the Delphi Method." *Journal of Traumatic Stress*. 2012; 25(2):134–141.

<sup>72</sup> Richins, M. T., Gauntlett, L., Tehrani, N., Hesketh, I., Weston, D., Carter, H., and Amlôt, R. "[Early Post-Trauma Interventions in Organizations: A Scoping Review.](#)" *Frontiers in Psychology*. 2020; 11(1176).

<sup>73</sup> Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., Vaughan, A. D., Anderson, G. S., Ricciardelli, R., MacPhee, R. S., Cramm, H. A., Czarnuch, S., Hozempa, K., and Camp, R. D. "[Mental Health Training, Attitudes Toward Support, and Screening Positive for Mental Disorders.](#)" *Cognitive Behavioral Therapy*. 2020; 49(1):55–73.

## 7.4 Treatment of Psychological Injuries and Disorders

This study and the literature review do not address pharmacological treatment methods, and the information presented here does not constitute medical advice. The Canadian clinical practice guidelines provide a set of recommendations for the treatment of PTSD, anxiety and other disorders.<sup>74</sup> They are based on the strongest empirical evidence currently available.

The literature suggests that using multi-modal post-trauma interventions significantly decreases PTSD symptoms and increases coping capability and optimism. Tailoring programs specifically so that they are appropriate for different cultures, occupations and participants, providing periodic refresher training in a group setting, and taking into account diverse and intersecting lived experiences may increase longer-term success. For example, making Elders available to provide support for Indigenous employees could improve treatment results. Early interventions may be beneficial through facilitating mutual support and increasing social cohesion, decreasing negative coping responses such as alcohol abuse, reducing the number of sick days taken, and improving workplace performance.<sup>75</sup>

Fourteen guidelines published between 2004 and 2020 in the United States, Australia, Canada, the United Kingdom, South Africa, and by international organizations recommend cognitive behavioural therapy (CBT) as a first line of psychological treatment for PTSD; and trauma-focused cognitive processing therapy appears to be most effective.<sup>76</sup> Internet-based CBT is convenient, accessible at any location and cost-effective; and therapy outcomes are similar to those for traditional face-to-face CBT.<sup>77</sup>

## 7.5 Pandemic Context

A study on the prevalence of PTSD after infectious-disease pandemics found that PTSD is a significant public health concern.<sup>78</sup> The findings indicate that early screening and timely evidence-based interventions and social support should be applied to potentially mitigate post-pandemic PTSD and related psychological problems. Furthermore, the study recommends that PTSD should be paid attention to by policymakers all over the world due to its increased

---

<sup>74</sup> Katzman, M. A., Bleau, P., Blier, P., Chokka, P., Kjernisted, K., and Van Ameringen, M. "[Canadian Clinical Practice Guidelines for the Management of Anxiety, Posttraumatic Stress and Obsessive-Compulsive Disorders](#)." *BMC Psychiatry*. 2014; 14(S1).

<sup>75</sup> Regel, S., and Dyregrov, A. "Commonalities and New Directions in Post-Trauma Support Interventions: From Pathology to the Promotion of Post-Traumatic Growth." In R. Hughes, A. Kinder, and C. L. Cooper (Eds.). *International Handbook of Workplace Trauma Support*. (Wiley-Blackwell, 2012), pp. 48–67.

<sup>76</sup> Martin, A., Naunton, M., Kosari, S., Peterson, G., Thomas, J., and Christenson, J. K. "[Treatment Guidelines for PTSD: A Systematic Review](#)." *Journal of Clinical Medicine*. 2021; 10(4175).

<sup>77</sup> Andersson, G., Titov, N., Dear, B. F., Rozental, A., and Carlbring, P. "[Internet-Delivered Psychological Treatments: From Innovation to Implementation](#)." *World Psychiatry*. 2019; 18(1):20–28.

<sup>78</sup> Yuan, K., Gong, Y. M., Liu, L., Sun, Y. K., Tian, S. S., Wang, Y. J., Zhong, Y., Zhang, A. Y., Su, S. Z., Liu, X. X., Zhang, Y. X., Lin, X., Shi, L., Yan, W., Fazel, S., Vitiello, M. V., Bryant, R. A., Zhou, X. Y., Ran, M. S., Bao, Y. P., and Lu, L. "[Prevalence of Posttraumatic Stress Disorder After Infectious Disease Pandemics in the Twenty-First Century, Including COVID-19: A Meta-Analysis and Systematic Review](#)." *Molecular Psychiatry*. 2021; 26(9):4982–4998.

prevalence in all populations, no matter sex, gender, geographical coverage, income level, etc., post-pandemic.<sup>79</sup>

## 8.0 Needs for Mental Health Support Mechanisms

Committee members were asked to share their observations about needs and gaps for mental health supports after having conducted the collection of support practices in their organizations. Members were expected to draw from their experience, those of the internal departmental working groups and the information shared in the inventory template (e.g., usage, frequency, evaluation results), the literature review, and discussions held over the course of the study.

Members noted that:

- there are fewer recovery support mechanisms available compared with resilience and stigma-reduction supports
- mental health supports are:
  - not always targeted to specific needs, settings or audiences
  - not always accessed due to stigma and privacy concerns
- empirical evidence indicating the efficacy of mental health training programs is limited (The committee was unable to definitely identify best practices, needs and gaps.)
- information about frequency and usage of mental health training programs is not easy to obtain and is somewhat unclear as these are not generally tracked
- identifying how to create a psychologically healthy and safe workplace or the appropriate preventive or corrective support mechanisms to be put in place is a challenge in the absence of workplace hazards and psychological risks being identified for positions or various types of work
- as part of a Canadian Internet-based study on cognitive behavioural therapy, a well-being course for public safety personnel has been evaluated and shows promising results in the treatment of post-traumatic stress disorder, panic disorder, anxiety, anger and depression

## 9.0 Conclusions and Recommendations

This study aims to bring about a greater understanding and subsequently improve the capacity to support employees who are at risk of psychological harm. It underscores the importance of reducing the risk of traumatization in the workplace.

The committee observed, through the inventory of promising mental health practices and exercises, that there are a variety of mental health supports available to employees who are exposed to disturbing materials as part of their duties at work. They include mental health and stigma-reduction programs, stress-management and resilience training, crisis response, peer support and professional counselling. However, the uptake, frequency and effectiveness of these

---

<sup>79</sup> K. Yuan et al., 2021.



supports for prevention, response and mitigation of vicarious trauma is not well known in the Government of Canada or in the literature.

That said, we do know that psychoeducational programs that improve understanding of mental health risk factors and programs that increase awareness of mental health warning signs are helpful for organizations to prevent or mitigate work-related risks. Also, cognitive behavioural therapy (CBT), including emotional processing techniques, exposure-based therapies and mindfulness-based cognitive therapy are shown to be effective to treat various forms of trauma. We also know that having a strong social support network can reduce the risk of the trauma symptoms.

Identifying appropriate preventive or corrective support mechanisms to be put in place for affected employees is a challenge in the absence of the systemic identification of workplace psychological hazards and risks, as well as the availability of effectiveness data on various mental health supports.

The following recommendations are also included in a summary table in section 10.0 that aligns each recommendation with the findings of the study. This portion of the study responds to the requirement in the MOU to “recommend how to implement promising practices identified by the study.”

#### Recommendation 1

Inform employees about foundational psychologically healthy and safe practices and behaviours and provide them with evidence-based<sup>80</sup> mental health training and guidance in a systematic and continuous fashion. It is recommended that all employees (including executives) receive training about early symptoms and warning signs of mental illness, have tools and guidance to reduce the risk of psychological harm, and know how to apply the psychosocial factors in the National Standard of Canada on Psychological Health and Safety.

#### Recommendation 2

Better integrate psychological health and safety into occupational health and safety structures such as the following to make sure workplace psychological risks and hazards are identified:

- workplace harassment and violence prevention
- hazard prevention programs
- hazardous occurrence and investigation reporting

#### Recommendation 3

Explore ways of expanding response and recovery options for employees and executives that consider the following promising pilot projects:

---

<sup>80</sup> “Evidence-based,” in this context, means that there is literature or internal surveys to support the effectiveness of the training or mental health supports, understanding that there is not a significant amount of research and evaluation undertaken on this matter.

## Joint Study on Mental Health Support Mechanisms for Employees

- decompression programs for employees at high risk of exposure to mental injury
- the well-being course for public safety employees who are at high risk of to mental injury
- the RCMP's approaches to harm reduction, which limit exposure to risk and try to control timing of exposure

## Recommendation 4

Evaluate mental health support mechanisms (training, treatment, recovery) periodically to measure efficacy and ensure that they are reducing the risk of psychological harm. Mental health training and education programs should be tracked and reported on, and employees at risk of harm should participate in these programs regularly to help them maintain the skills they learn. TBS could develop and provide some central guidance on how to measure and evaluate mental health support mechanisms.

## Recommendation 5

Increase the availability of evidence-based mental health supports that are:

- tailored to users' needs
- trauma-informed
- occupationally and culturally appropriate

## Recommendation 6

Encourage employees to engage in informal peer and social support to build their resilience.

## Recommendation 7

Consider options and actions for implementing the recommendations in this study, with the aim of improving workplace culture (in a hybrid and increasingly digital workplace environment).

## 10.0 Summary Table of Findings and Recommendations

This summary table of findings and recommendations was developed by the committee to respond to the MOU requirement to “recommend how to implement promising practices identified by the study.”

#	Type of Practice	Theme	Literature Review Findings	Committee Member Observations	Inventory Analysis Observations	Recommendations
1	<b>Prevention (pre-exposure)</b> (Control measures, programs, and practices to educate and prepare at-risk employees to reduce and if possible, eliminate the exposure to the psychological stressor and strengthen resistance.)	Mental Illness and Psychological Health and Safety Education	<p>a. Psychoeducational programs that improve understanding of <b>personal</b> mental health risk factors such as age, gender social isolation, experiences of racism or discrimination, are shown to be helpful for organizations to mitigate risks and identify early symptoms of trauma and other mental disorders and injury; and warning signs that are behavioural, physical, cognitive, emotional and social.</p> <p>b. Mental health organizational workplace risks and hazards (including 13 factors) need to be identified and understood, to be managed and promoted.</p>	<p>a. Information about frequency and usage of mental health training programs is not easy to obtain and is somewhat unclear as these are not generally tracked.</p> <p>b. Identifying how to create a psychological healthy and safe workplace or the appropriate preventive or corrective support mechanisms to be put in place is a challenge in the absence of workplace hazards and psychological risks being identified.</p>	<p>a. Most programs do more than one thing and cannot be categorized into one type of practice.</p> <p>There are few Mental Health First Aid training options despite this program’s proven efficacy.</p>	<p><b>Inform employees about foundational psychologically healthy and safe practices and behaviours and provide them with evidence-based* mental health training and guidance in a systematic and continuous fashion.</b></p> <p><b>Better integrate psychological health and safety into occupational health and safety structures such as the following to make sure workplace psychological risks and hazards are identified:</b></p> <ul style="list-style-type: none"> <li>workplace harassment and violence prevention</li> <li>hazard prevention programs</li> <li>hazardous occurrence and investigation reporting</li> </ul>
2	<b>Response (exposure)</b> (Actions aimed at early detection and	Treatment of Psychological Injuries and Disorders	<p>a. Supporting emotionally distressed workers after exposure to psychological harm, including chronic stress, is of critical importance. Critical incident stress debriefing, trauma risk management, and</p>	<p>a. Overall, in participating departments, there are fewer recovery support mechanisms available compared with resilience</p>	<p>a. There are very few recovery options, including</p>	<p><b>Explore ways of expanding response and recovery options for employees and executives that consider the following promising pilot projects:</b></p> <ul style="list-style-type: none"> <li>decompression programs for employees at high risk of exposure to mental injury</li> </ul>

#	Type of Practice	Theme	Literature Review Findings	Committee Member Observations	Inventory Analysis Observations	Recommendations
	prompt intervention after a critical or traumatic event has taken place or exposure to one or more psychological stressors		<p>incident stress debriefing are shown to be somewhat effective when they include peers and when management and a mental health professional are involved.</p> <p>b. Cognitive behavioural therapy (CBT), including emotional processing techniques, exposure-based therapies, and mindfulness-based cognitive therapy is shown to be effective. Internet-based CBT has similar positive outcomes to traditional face-to-face CBT. Trauma-focused cognitive processing therapy appears to be most effective in treating trauma-based mental injury.</p>	<p>and stigma-reduction supports.</p> <p>b. As part of a Canadian Internet-based study on cognitive behavioural therapy, a well-being course for public safety personnel has been evaluated and shows promising results in the treatment of post traumatic stress disorder, panic disorder, anxiety, anger and depression.</p>	<p>crisis response, and crisis management programs.</p>	<ul style="list-style-type: none"> <li>the well-being course for public safety employees who are at high risk of exposure to mental injury</li> <li>the RCMP's harm reduction approaches, which limit exposure to risk and try to control timing of exposure</li> </ul>
3	<b>Treatment and recovery</b> (diagnosis) (Mechanisms, strategies and treatment aimed at limiting disability from a psychological injury and/or at restoring function.)	Mental Health Healing and Preparedness	<p>a. Positive experiences with peers, including informal interactions with colleagues and sharing support and humour to lighten the impact of stress, were shown to be helpful in qualitative studies. A sense of belonging to an occupation and the perception of social support are associated with a strong increase in resilience, social cohesion, collaboration, and inclusion. Peer and social support can be informal and based on workplace friendships.</p>	<p>a. Mental health supports are:</p> <ul style="list-style-type: none"> <li>not always targeted to specific needs, settings or audiences</li> <li>not always accessed due to stigma and privacy concerns</li> </ul> <p>b. Empirical evidence indicating the efficacy of mental health training programs is limited (The</p>	<p>b. There are few prevention, mitigation and control measures and mental health support mechanisms for managers and supervisors,</p>	<p><b>Evaluate mental health support mechanisms (training, treatment, recovery) periodically to track efficacy and ensure they are reducing the risk of psychological harm.</b></p> <p><b>Increase the availability of evidence-based mental health supports that are:</b></p> <ul style="list-style-type: none"> <li>tailored to users' needs</li> <li>trauma-informed</li> <li>occupationally and culturally appropriate</li> </ul> <p><b>Encourage employees to engage in informal peer and social support to build their resilience.</b></p>

## Joint Study on Mental Health Support Mechanisms for Employees

#	Type of Practice	Theme	Literature Review Findings	Committee Member Observations	Inventory Analysis Observations	Recommendations
			<p>b. Tailoring programs specifically so that they are appropriate for different participants and settings, given that personal background impacts efficacy.</p> <p>c. Resilience, empowerment, mindfulness, and other multi-modal programs are effective preventive interventions.</p>	committee was unable to identify best practices, needs and gaps.)	or executives, and few that bring the groups together.	<b>Consider options and actions for implementing the recommendations in this study, with the aim of improving workplace culture</b> (in a hybrid and increasingly digital workplace environment).
* In this context, “evidence-based” means that some literature or internal surveys support the effectiveness of the training or mental health supports, understanding that there is not a significant amount of research and evaluation on this matter.						

## **Appendix A: Memoranda of Understanding**

### **1) Memorandum of Understanding Between the Treasury Board of Canada and the Public Service Alliance of Canada with Respect to a Joint Study on Support Mechanisms for Employees**

This memorandum of understanding is to give effect to the agreement reached by the Employer and the Public Service Alliance of Canada with respect to employees in the Technical Services (TC) bargaining unit inherently exposed, in the course of their duties, to explicit and disturbing material, and/or potentially threatening situations.

The parties agree to establish a joint committee co-chaired by a representative from each party, which shall meet within ninety (90) days of the signing of this collective agreement to consult and reach agreement on the terms of reference to guide the study.

The study will draw from existing research and/or other sources of information as determined by the committee in order to:

- identify positions within the bargaining unit inherently exposed, in the course of their duties, to explicit and disturbing material, and/or potentially threatening situations which may require support mechanisms with regard to employees' mental health;
- identify the specific needs for support mechanisms;
- identify and document promising and best practices with regard to support mechanisms for those employees; and
- recommend how to implement promising and best practices identified by the study.

In addition, the parties shall explore opportunities to conduct its work jointly with the Program and Administrative Services (PA) group.

The study will review affected positions within:

- Transport Canada
- Transportation Safety Board
- Department of Fisheries and Oceans
- Environment and Climate Change Canada
- Employment and Social Development Canada
- Canadian Coast Guard
- Indigenous Services Canada
- Royal Canadian Mounted Police

Other departments or agencies in the core public administration agreed to by both parties.

The study shall be completed no later than June 21, 2021. This agreement may be extended by mutual agreement.

## **2) Memorandum of Understanding Between the Treasury Board of Canada and the Public Service Alliance of Canada With Respect to a Joint Study on Support Mechanisms for Employees**

This memorandum of understanding is to give effect to the agreement reached by the Employer and the Public Service Alliance of Canada with respect to employees in the Program and Administrative Services (PA) bargaining unit inherently exposed, in the course of their duties, to explicit and disturbing material, and/or potentially threatening situations.

The parties agree to establish a joint committee co-chaired by a representative from each party, which shall meet within ninety (90) days of the signing of this collective agreement to consult and reach agreement on the terms of reference to guide the study.

The study will draw from existing research and/or other sources of information as determined by the committee in order to:

- identify positions within the bargaining unit inherently exposed, in the course of their duties, to explicit and disturbing material, and/or potentially threatening situations which may require support mechanisms with regard to employees' mental health;
- identify the specific needs for support mechanisms;
- identify and document promising and best practices with regard to support mechanisms for those employees; and
- recommend how to implement promising and best practices identified by the study.

The study will review affected positions within:

- Public Prosecutions Service of Canada
- Parole Board of Canada
- Royal Canadian Mounted Police
- Veterans Affairs Canada
- Other departments or agencies in the core public administration agreed to by both parties.

The study shall be completed no later than June 20, 2022. This Agreement may be extended by mutual agreement.

## Appendix B: Guiding Criteria for Identifying Positions

The term, “positions” in this study, does not imply specific position numbers, but rather, groups of employees who perform certain functions or have certain roles (for example, para-legals, investigators, administrative officers).

Positions in which, in the course of their duties, employees may be inherently or potentially exposed to explicit and disturbing material, or to potentially threatening situations including, but not limited to:

1. A single severe or significant incident, or repeated, long-term, chronic exposure to psychological and physical hazards.
2. Explicit, graphic, violent or otherwise personally disturbing material or situations, including, but not limited to:
  - abuse, trauma, or death of an individual or child;
  - situations of a sexual or violent nature;
  - human rights abuses, neglect or abuse of vulnerable persons or living creatures, or failure to provide the necessities of life;
  - violent crime, torture, terrorism, combat, or first response;
  - vehicle, airplane, vessel, rail accidents or material collisions or explosions;
  - accident and coroners’ reports; and
  - violence against people based on prohibited grounds of discrimination,\* or animal or other violence.
3. Persons or situations that pose, or could pose, a threat to their own physical or psychological health or safety or to that of others, for example:
  - natural or human-made disasters, such as earthquakes, tornadoes, forest fires, fires, floods, terrorism, and pandemics;
  - vehicle, airplane, vessel, rail accident or material collisions or explosion site;
  - when encountering incarcerated persons in parole programs and corrections;
  - when encountering hostile, distraught or otherwise highly emotional individuals;
  - working alone in isolated or remote locations or situations, and/or without cell phone coverage, including situation where there could be dangerous wild animals;
  - as part of enforcement activities and first responder situations, such as when use of force training is activated and/or personal safety has potential to be compromised;



## Joint Study on Mental Health Support Mechanisms for Employees

- performing surveillance activities and compliance investigations;
  - where there is semi-confinement, including, but not limited to immigration and refugee holding centres, and
  - targeted harassment and bullying.
4. Activities that result in, or exposures to situations that result in guilt, ethical numbing, compassion fatigue, or intense moral conflict such as, or related to:
- trauma (direct, indirect or vicarious);
  - interacting with victims or survivors of accidents or other trauma or with their families or loved ones;
  - the perception of perpetuating colonial systems;
  - the residential school system and other social trauma; and
  - denial or refusal of care, including in situations where systems provided conflict with fundamental values, culture or faith (for example, work related to Jordan's Principle; claim, appeal and review processes at the Immigration and Refugee Board; medical assistance in dying at the Department of Justice).
5. Any additional guiding criteria in keeping with the spirit of the mandate of this study.

-----  
-----

**\*Prohibited grounds of discrimination**

- **3 (1)** For all purposes of this Act, the prohibited grounds of discrimination are race, national or ethnic origin, colour, religion, age, sex, sexual orientation, gender identity or expression, marital status, family status, genetic characteristics, disability and conviction for an offence for which a pardon has been granted or in respect of which a record suspension has been ordered.

## Appendix C: Recommended Reading

### Various Occupations and Trauma Exposure

1. Andrews, K. L., Jamshidi, L., Nisbet, J., Teckchandani, T. A., Price, J. A. B., Ricciardelli, R., Anderson, G. S., and Carleton, R. N. (2022). "[Exposures to Potentially Psychologically Traumatic Events among Canadian Coast Guard and Conservation and Protection Officers.](#)" *International Journal of Environmental Research and Public Health*, 19(15116).
2. Andrews, K. L., Jamshidi, L., Nisbet, J., Teckchandani, T. A., Price, J. A. B., Ricciardelli, R., Anderson, G. S., and Carleton, R. N. (2022). "[Mental Health Training, Attitudes Toward Support, and Screening Positive for Mental Disorders Among Canadian Coast Guard and Conservation and Protection Officers.](#)" *International Journal of Environmental Research and Public Health*, 19(15734).
3. Bonde, J. P., et al. (2016). "[Risk of Depressive Disorder Following Disasters and Military Deployment: Systematic Review With Meta-Analysis.](#)" *British Journal of Psychiatry*, 208(4):330–336.
4. Burns, C. M., et al. (2008). "[The Emotional Impact On and Coping Strategies Employed By Police Teams Investigating Internet Child Exploitation.](#)" *Traumatology*, 14(2):20–31.
5. Bywood, P., and Costa, B. (2018). "[Vicarious Exposure to Trauma at Work: A Rapid Review of the Prevalence and Impact of Vicarious Exposure to Trauma Within the Workplace.](#)" Institute for Safety, Compensation and Recovery Research. *Evidence Review*, 226:1–18.
6. Carleton, R. N., et al. (2018). "*Sy / Psychologie canadienne*, 59(3):220–231.
7. Carleton, R. N., Afifi, T. O., Turner, S., et al. (2018). "[Mental Disorder Symptoms Among Public Safety Personnel in Canada.](#)" *The Canadian Journal of Psychiatry*, 63(1):54-64.
8. Duran, F., and Woodhams, J. (2022). "[Impact of Traumatic Material on Professionals in Analytical and Secondary Investigative Roles Working in Criminal Justice Settings: A Qualitative Approach.](#)" *Journal of Police and Criminal Psychology*, 37:904–917.
9. Flannery, R. B. (2022). "[News Journalists and Posttraumatic Stress Disorder: A Review of Literature, 2011–2020.](#)" *Psychiatric Quarterly*, 93:151–159.
10. Knodel, R. (2018). "[Coping with Vicarious Trauma in Mental Health Interpreting.](#)" *Journal of Interpretation*, 26(1).
11. Lentz, L., Silverstone, P. H., and Krameddine, Y. I. (2020). "[High Rates of Mental Health Disorders in Civilian Employees Working in Police Organizations.](#)" *Frontiers in Psychology*, 11.

12. McCann, I. L., and Pearlman, L. A. (1990). "[Vicarious Traumatization: A Framework for Understanding the Psychological Effects of Working With Victims.](#)" *Journal of Traumatic Stress*, 3(1):131–149.
13. Perron, B. E., and Hiltz, B. S. (2006). "[Burnout and Secondary Trauma Among Forensic Interviewers of Abused Children.](#)" *Child and Adolescent Social Work Journal*, 23(2):216–234.
14. Rønning, L., Blumberg, J., and Dammeyer, J. (2020). "[Vicarious Traumatization In Lawyers Working With Traumatised Asylum Seekers: A Pilot Study.](#)" *Psychiatry, Psychology and Law*, 27(4):665–677.
15. Servatius, R. J., Handy, J. D., Doria, M. J., Myers, C. E., Marx, C. E., Lipsky, R., Ko, N., Avcu, P., Wright, W. G., and Tsao, J. W. (2017). "[Stress-Related Mental Health Symptoms in Coast Guard: Incidence, Vulnerability, and Neurocognitive Performance.](#)" *Frontiers in Psychology*, 8(1513).
16. Severson, M., and Pettus-Davis, C. (2013). "[Parole Officers' Experiences of the Symptoms of Secondary Trauma in the Supervision of Sex Offenders.](#)" *International Journal of Offender Therapy and Comparative Criminology*, 57(1):5–24.
17. Slade, J., and Alleyne, E. (2023). "[The Psychological Impact of Slaughterhouse Employment: A Systematic Literature Review.](#)" *Trauma, Violence, and Abuse*, 24(2):429–440.
18. Union of Solicitor General Employees. (2017). [Moving Forward: A Report on the Invisible Toll of Psychological Trauma on Federal Public Safety Workers.](#)
19. Vrkleviski, L. P., and Franklin, J. (2008). "[Vicarious Trauma: The Impact on Solicitors of Exposure to Traumatic Material.](#)" *Traumatology*, 14(1):106–118.

### Risk Factors, Protective Factors

1. Bakhshi, J., Wesley, M. S., and Reddy, K. J. (2021). "[Vicarious Trauma in Law Students: Role of Gender, Personality, and Social Support.](#)" *International Journal of Criminal Justice Sciences*, 16(1):34–50.
2. Baum, N., Rahav, G., and Sharon, M. (2014). "[Heightened Susceptibility to Secondary Traumatization: A Meta-Analysis of Gender Differences.](#)" *American Journal of Orthopsychiatry*, 84(2):111–122.
3. Bell, H., Kulkarni, S., and Dalton, L. (2003). "[Organizational Prevention of Vicarious Trauma.](#)" *Families in Society: The Journal of Contemporary Social Services*, 84(4):463–470.
4. Brewin, C. R., Andrews, B., and Valentine, J. D. (2000). "[Meta-Analysis of Risk Factors for Posttraumatic Stress Disorder in Trauma-Exposed Adults.](#)" *Journal of Consulting and Clinical Psychology*, 68(5):748–766.

5. Cherry, N., Galarneau, J. M., Haynes, W., and Sluggett, B. (2021). [The Role of Organizational Supports in Mitigating Mental Ill Health in Firefighters: A Cohort Study in Alberta, Canada.](#) *American Journal of Industrial Medicine*, 64(7):593-601.
6. Choi, G.-Y. (2011). [“Organizational Impacts on the Secondary Traumatic Stress of Social Workers Assisting Family Violence or Sexual Assault Survivors.”](#) *Administration in Social Work*, 35:225–242.
7. Di Nota, P. M., et al. (2021). [“Proactive Psychological Programs Designed to Mitigate Posttraumatic Stress Injuries Among At-Risk Workers: A Systematic Review and Meta-Analysis.”](#) *Systematic Reviews*, 10(126).
8. Donnelly, E. A., et al. (2016). [“Predictors of Posttraumatic Stress and Preferred Sources of Social Support Among Canadian Paramedics.”](#) *Canadian Journal of Emergency Medicine*, 18(3):205–212.
9. Harrison, R. L., and Westwood, M. J. (2009). [“Preventing Vicarious Traumatization of Mental Health Therapists: Identifying Protective Practices.”](#) *Psychotherapy*, 46(2):203–219.
10. Kindermann, D., Schmid, C., Derreza-Greeven, C., Huhn, D., Kohl, R., Junne, F., Schleyer, M., Daniels, J., Ditzen, B., Herzog, W., and Nikendei, C. (2017). [“Prevalence of and Risk Factors for Secondary Traumatization in Interpreters for Refugees: A Cross-Sectional Study.”](#) *Psychopathology*, 50(4):262-272.
11. Leys, C., Kotsou, I., Shankland, R., Firmin, M., Péneau, S., and Fossion, P. (2021). [“Resilience Predicts Lower Anxiety and Depression and Greater Recovery After a Vicarious Trauma.”](#) *International Journal of Environmental Research and Public Health*, 18(12608).
12. Substance Abuse and Mental Health Services Administration. (2014). [SAMHSA’s Concept of Trauma and Guidance for a Trauma-Informed Approach](#), 1–27.

### Prevention and Intervention

1. Antony, J., Brar, R., Khan, P. A., Ghassemi, M., Nincic, V., Sharpe, J. P., Straus, S. E., and Tricco. (2020). [“Interventions for the Prevention And Management of Occupational Stress Injury in First Responders: A Rapid Overview of Reviews.”](#) *Systematic Reviews*, 9(121).
2. Bercier, M. L., and Maynard, B. R. (2015). [“Interventions for Secondary Traumatic Stress with Mental Health Workers: A Systematic Review.”](#) *Research on Social Work Practice*, 25(1):81–89.
3. Berger, R., Abu-Raiya, H., and Benatov, J. (2016). [“Reducing Primary and Secondary Traumatic Stress Symptoms Among Educators by Training Them to Deliver a Resiliency](#)

[Program \(ERASE-Stress\) Following the Christchurch Earthquake in New Zealand.](#)  
*American Journal of Orthopsychiatry*, 86(2):236–251.

4. Galatzer-Levy, I., Huang, S., and Bonanno, G. (2018). [“Trajectories of Resilience and Dysfunction Following Potential Trauma: A Review and Statistical Evaluation.”](#) *Clinical Psychology Review*, 63:41-55.
5. Gerbrandt, N. [“5 Principles of Trauma-Informed Workplaces.”](#) Crisis and Trauma Resource Institute.
6. Gerbrandt, N., Grieser, R., and Enns, V. (2021). [A Little Book About Trauma-Informed Workplaces.](#) Crisis and Trauma Resource Institute.
7. Greenberg, N., et al. (2010). [“A Cluster Randomized Controlled Trial to Determine the Efficacy of Trauma Risk Management \(TRiM\) in a Military Population.”](#) *Journal of Trauma Stress*, 23(4):430–436.
8. Kim, J., et al. (2021). [“A Scoping Review of Vicarious Trauma Interventions for Service Providers Working with People Who Have Experienced Traumatic Events.”](#) *Trauma, Violence, and Abuse*, 23(5):1437-1460.
9. Regel, S., and Dyregrov, A. (2012). “Commonalities and New Directions in Post-Trauma Support Interventions: From Pathology to the Promotion of Post-traumatic Growth.” In R. Hughes, A. Kinder, and C. L. Cooper (Eds.). [International Handbook of Workplace Trauma Support](#), 48–67.
10. Richins, M. T., et al. (2020). [“Early Post-Trauma Interventions in Organizations: A Scoping Review.”](#) *Frontiers in Psychology*, 11(1176).
11. Stelnicki, A. M., Jamshidi, L., Fletcher, A. J., and Carleton, R. N. (2021). [“Evaluation of Before Operational Stress: A Program to Support Mental Health and Proactive Psychological Protection in Public Safety Personnel.”](#) *Frontiers in Psychology*, 12(511755).

## Treatment

1. Beahm, J. D., McCall, H. C., Carleton, R. N., Titov, N., Dear, B., and Hadjistavropoulos, H. D. (2021). [“Insights Into Internet-Delivered Cognitive Behavioral Therapy for Public Safety Personnel: Exploration of client Experiences During and After Treatment.”](#) *Internet Interventions*, 26(100481).
2. Fisher, N. (2021). [“Using EMDR Therapy to Treat Clients Remotely.”](#) *Journal of EMDR Practice and Research*, 15(1):73–84.
3. Hadjistavropoulos, H. D., McCall, H. C., Thiessen, D. L., Huang, Z., Carleton, R. N., Dear, B. F., and Titov, N. (2021). [“Initial Outcomes of Transdiagnostic Internet-Delivered Cognitive Behavioral Therapy Tailored to Public Safety Personnel: Longitudinal Observational Study.”](#) *Journal of Medical Internet Research*, 23(5):e27610.

4. Jericho, B., Luo, A., and Berle, D. (2022). "[Trauma-Focused Psychotherapies for Post-Traumatic Stress Disorder: A systematic Review and Network Meta-Analysis.](#)" *Acta Psychiatrica Scandinavica*, 145(2):132–155.
5. Kumar, V., Sattar, Y., Bseiso, A., Khan, S., and Rutkofsky, I. H. (2017). "[The Effectiveness of Internet-Based Cognitive Behavioral Therapy in Treatment of Psychiatric Disorders.](#)" *Cureus*, 9(8):e1626.
6. Lewis, C., Roberts, N. P., Andrew, M., Starling, E., and Bisson, J. I. (2020). "[Psychological Therapies for Post-Traumatic Stress Disorder in Adults: Systematic Review and Meta-Analysis.](#)" *European Journal of Psychotraumatology*, 11(1):1729633.
7. Martin, A., et al. (2021). "[Treatment Guidelines for PTSD: A Systematic Review.](#)" *Journal of Clinical Medicine*, 10(18):4175.
8. Parikh, S. V., Quilty, L. C., Ravitz, P., Rosenbluth, M., Pavlova, B., Grigoriadis, S., Velyvis, V., Kennedy, S. H., Lam, R. W., MacQueen, G. M., Milev, R. V., Ravindran, A. V., Uher, R., and the CANMAT Depression Work Group (2016). "[Canadian Network for Mood and Anxiety Treatments \(CANMAT\) 2016 Clinical Guidelines for the Management of Adults with Major Depressive Disorder.](#)" *Section 2: Psychological Treatments.* *Canadian Journal of Psychiatry*, 61(9):524–539.
9. Rodriguez, K.E., LaFollette, M.R., Hediger, K., Ogata, N. and O'Haire, M.E. (2020). "[Defining the PTSD Service Dog Intervention: Perceived Importance, Usage, and Symptom Specificity of Psychiatric Service Dogs for Military Veterans.](#)" *Frontiers in Psychology*, 11.
10. Watkins, L. E., Sprang, K. R., and Rothbaum, B. O. (2018). "[Treating PTSD: A Review of Evidence-Based Psychotherapy Interventions.](#)" *Frontiers in Behavioral Neuroscience*, 12(258).

### PTSD and Other Disorders

1. Cénat, J. M. (2022). "[Complex Racial Trauma: Evidence, Theory, Assessment, and Treatment.](#)" *Perspectives on Psychological Science*, 18(3):675–687.
2. Fetzner, et al. (2011). "[What is the Association Between Traumatic Life Events and Alcohol Abuse/Dependence in People With and Without PTSD? Findings From a Nationally Representative Sample.](#)" *Depression and Anxiety*, 28(8):632–638.
3. Hogg, B. M., et al. (2022). "[Psychological Trauma as a Transdiagnostic Risk Factor for Mental Disorder: An Umbrella Meta-Analysis.](#)" *European Psychiatry*, 66(S1):S982–S983.
4. Maercker, A., et al. (2022). "[Complex Post-Traumatic Stress Disorder.](#)" *The Lancet*, 400(10345):60–72.

5. Mauritz, M. W., et al. (2013). "[Prevalence of Interpersonal Trauma Exposure and Trauma-Related Disorders in Severe Mental Illness.](#)" *European Journal of Psychotraumatology*, 4(19985).
6. Torquati, L., Mielke, G. I., Brown, W. J., Burton, N. W., and Kolbe-Alexander, T. L. (2019). "[Shift Work and Poor Mental Health: A Meta-Analysis of Longitudinal Studies.](#)" *American Journal of Public Health*, 109(11):e1–e8.
7. TEND Academy. (2017). [Warning Signs of Secondary Trauma and Compassion Fatigue.](#)
8. Weiss, L. (2020). "[Burnout from an Organizational Perspective.](#)" *Stanford Social Innovation Review*.
9. Williamson, J. B., Jaffee, M. S., and Jorge, R. E. (2021). "[Posttraumatic Stress Disorder and Anxiety-Related Conditions.](#)" *Continuum*, 27(6):1738–1763.
10. World Health Organization. (2019). [Burn-Out an "Occupational Phenomenon": International Classification of Diseases.](#)
11. Yuan, K., et al. (2021). "[Prevalence Of Posttraumatic Stress Disorder After Infectious Disease Pandemics in the Twenty-First Century, Including COVID-19: A Meta-Analysis and Systematic Review.](#)" *Molecular Psychiatry*, 26:4982–4998.

## Other

1. Canadian Institute for Public Safety Research and Treatment. (2019). "[Glossary of Terms: A Shared Understanding of the Common Terms Used to Describe Psychological Trauma.](#)"
2. Chapman, S., et al. (2019). "[The ROI in Workplace Mental Health Programs: Good for People, Good for Business. A Blueprint for workplace Mental Health Programs.](#)" Deloitte Insights.
3. [National Joint Council \(2023\). Disability Insurance Plan Board of Management. Annual Report 2022.](#)