



Preventing PTSD work disability at first responder organizations: a field knowledge scan

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Legacy Place Society

Edmonton Police Services

Red Deer Emergency Services

Bonneyville Regional Fire Authority

Edmonton Fire Rescue Services

Rocky View County Fire Service

Calgary Police Services

Health Sciences Association of Alberta

Public Services Health and Safety Association (Ontario)

Presentation overview

1. Background
2. Research project goals and methods
3. Findings from the field knowledge scan
4. Summary of a scoping review
5. CSA Paramedic Standard



Project background

- Occupational injuries are common for first responders (paramedics, fire fighters, police officers). A particular challenge for this group of workers is post-traumatic stress injuries (PTSI) or occupational stress injuries (OSI).
- PTSI is a burden for first responders, their families, their workplaces, and society at large. Recent studies have shown that organizational policies and practices have an important impact on PTSI prevention.
- The scientific evidence about the effectiveness of PTSI interventions is modest at best. Regardless of the state of the scientific evidence, first responder organizations must develop ways to protect workers.

Conceptual definition of PTSI

- PTSI is a non-clinical term that refers to the manifestation of a range of mental health injuries, such as operational stress injuries (OSI), clinically diagnosed post-traumatic stress disorder (PTSD), anxiety, and depression.
- Term refers to the valid psychological and physiological adaptations that develop when a person is exposed to potentially traumatic events (Shay, 2003).
- PTSD is a clinical term referring to the set of psychological symptoms experienced by an individual resulting from exposure to situations of actual or threatened death, serious injury or sexual violence and which cause significant functional impairment (American Psychiatric Association, 2013).
- According to the Canadian Action Plan, public safety personnel have advocated for the use of PTSI instead of PTSD due to the stigma that is typically associated with clinically diagnosed PTSD.

Project objective and research question

Broad Project Objective

To gather and synthesize evidence about PTSD work disability prevention from current practices and the scientific evidence.

Overarching Research Question

How can the evidence from literature and internationally based field experience, in conjunction with current practices of first responder organizations in Alberta, be used to inform policies and practices for the prevention of PTSD work disability?

Model used to guide project

Evidence Based Practice (EBP)

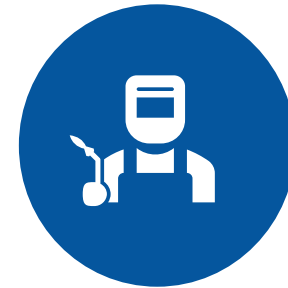
Evidence from:



Practitioner expertise,
e.g., OHS, work
disability prevention



Best available
research evidence



Stakeholder
experience, e.g.,
worker, manager

Adapted from Sackett et al. (1996) *Evidence based medicine: what it is and what it isn't*.

Methods

The study included three stages:

- **Stage 1: A field knowledge scan of international first responder organizations' policies and practices for the prevention of PTSI work disability.**
- Stage 2: A summary of the scientific evidence.
- Stage 3: Semi-structured interviews with Occupational Health and Safety (OHS) practitioners, managers/supervisors, and workers within Alberta first responder organizations to gather detailed information about current PTSI work disability prevention and management practices, and needs in Alberta.

Field knowledge scan details

Research Questions

1. What are the organizational level programs, services, and practices at a primary, secondary, and tertiary prevention level available and accessible for first responders?
2. What contextual factors, such as key actors, relevant process, barriers, and facilitators, have a positive or negative impact in PTSI programs, services, and practices?

Data Collection

- In-depth qualitative interviews with professionals and experts in emergency organizations
- English-speaking jurisdictions including Canada, the United States, the United Kingdom, and Australia

Analysis

Inductive thematic analysis of informant interviews

Key questions asked

1. What initiatives does your organization have in place related to the prevention and management of PTSI and related work disability? These could be policies, programs, and practices, either recently implemented or longstanding. (probes)
2. What is the effectiveness of these initiatives? (probes)
3. What makes the initiative effective or not effective? (probes)
4. Are there any other ideas you would like to share about initiatives for the prevention and management of PTSI and related work disability? (probes)
5. What do you see as some key gaps in supporting first responders in the prevention of PTSI and related work disability at your organization? (probes)
6. Are there any other ideas you would like to share about unmet needs at your organization? (probes)

Field knowledge scan sample

- Scan of international first responder organizations' programs, services and practices for the prevention of PTSI work disability

	Location			
	International	Alberta	Other Canadian Provinces / Territories	Total
Firefighters	4	1	7	12
Paramedics	1	6	4	11
Police	3	1	4	8
Other*	2	1	1	4
Total	10	9	16	35

*Other includes participants who worked with more than one group of first responders

Inductive thematic analysis (10 themes)

1. Specialized programs and services

- Need to recognize unique experiences of first responders
- Multiple programs developed to provide customized support
- Generic programs such EAP/EAFP not as effective

2. Stigma associated mental health

- Tough, hero, macho image often mentioned as major barrier to support seeking
- Challenges associated with expressing feelings, acknowledging need for support

3. Confidentiality/anonymity

- Lack of trust with in-house services – career concerns often mentioned
- Related to stigma (#2) and addressed through multiple pathways for support seeking (#7)

4. Training

- Onboarding programs (screening and training) for mental health resilience (e.g., R2MR)
- Training required at all levels and on an ongoing basis, including leaders (e.g., Mental Health First Aid)
- Refresher courses and workshop on mental health, nutrition, exercise
- Training for spouses and family to better understand and provide support

Thematic analysis (10 themes) cont'd

5. Communication

- Ensuring awareness of supports
- Information sessions on mental health, nutrition, exercise
- Posters to encourage being mindful of own mental health, peer support, and available support

6. Whole person approach

- Like Total Worker Health (NIOSH)
- Include nutrition, exercise, work-life balance and wellness, in addition to mental health
- Family health and wellbeing needs
- Community building and social cohesion through group events

7. Multiple avenues for support seeking

- Allow for different needs and preferences, and ability to maintain privacy and confidentiality
- Provision of internally funded and provided programs and supports
- Availability of externally provided programs through labour/unions, workers' compensation, public health systems

Thematic analysis (10 themes) cont'd

8. Continuum of services

- Services need to be available across the employment journey, including at onboarding, maintenance, during absences and return to work, and also through career advancement
- Importance of including supports even after exits, due to possibility of late onset
- Continuum of supports from primary, secondary, tertiary prevention and intervention
- Whole person approach, including family and community

9. Research

- In-house assessment through surveys, audits, monitoring and evaluation
- Many key informants spoke about ties to academics and importance of rigorous research evidence
- Emphasis on evidence-informed programs, services and practices
- Noted need for continual improvement approach through ongoing assessment, scanning, research

10. Resource constraints

- Noted by almost everyone we spoke to – can take different forms
- People time constraints due to extensive demands, particularly during COVID – little time available to decompress
- Funding cuts lead to staff shortages and make it difficult to provide full suite of services and support
- Smaller and regional services where first responders are volunteers were particularly constrained
- Availability of services in some regions also an issue

Field knowledge scan summary of promising practices

- Focus on total worker health (including family) across the employment journey
- Leadership training to improve how to care for employees
- Top-down support championing worker health and well-being
- Relationship building across the organization
- Diversity and inclusion initiatives to ensure that everyone feels welcome
- Conducting research to determine best practices and support continual improvement
- Royal Foundation (UK) six voluntary standards:
 1. Prioritizing mental health in the workplace and developing and delivering a systematic program of activity;
 2. Ensure work design and organizational culture to drive positive mental health;
 3. Promote open culture around mental health;
 4. Increase organizational competence and capability;
 5. Provide mental health tools and support; and
 6. Increased transparency and accountability through internal and external reporting.

Field knowledge scan summary of barriers and challenges

- Culture where seeking mental health support is considered a sign of weakness is a barrier
- Lack of trust and confidence in the management particularly with use of in-house services
- Concerns about potential short or long-term impact on one's career
- Service providers not having knowledge of first responder experiences
- Programs not customized to context of first responder experiences
- Lack of funding – this is especially a barrier for rural volunteer departments
- Lack of service availability in rural areas
- Lack of leadership buy-in and leading by example
- Long shift hours and long commutes that restrict time to seek support
- Lack of quantified measure of the overall effectiveness of the programs
- Gap between research and its translation into an evidence-informed decisions

High-level summary from a scoping review

- Through academic online databases identified a total of 50 studies.
- Included studies of army personnel, police, firefighters, paramedics, navy, and mixed populations.
- Categorized PTSI programs and services into individual-, peer-, supervisory-, and population-directed interventions.
 1. **Individual-directed interventions:** Focus on skills in self-efficacy, self-regulation, proactive coping, and a sense of coherence to reduce and manage PTSI.
 2. **Peer-directed interventions:** Focus on peer support immediately after exposure to a traumatic event and also on creating a supportive work environment.
 3. **Supervisory-directed interventions:** Focus on enhancing ability of supervisors to communicate with employees on issues related to mental health and creating a work environment that is supportive and non-stigmatizing of mental health issues.
 4. **Population-directed interventions:** Combined individual, peer and supervisor-directed interventions to deliver a comprehensive program aimed at reducing PTSI within a specific population of emergency responders or military personnel.

Cluster 1: Individual-directed interventions

- **Emotional self-regulation**

- Training interventions aimed to change the emotional response of individuals
- Mix of psycho-education, directed exercises, mental focus and awareness, cognitive behavioral therapy, meditation self-practice, mobile games
- Examples – Road to Mental Readiness (R2MR), Coherence Advantage Program (CAP), Biofeedback-Assisted Resilience Training (BART), Mindfulness Based Resilience Training (MBRT), Mental Health First Aid, O2X (eat, sweat, thrive), Resilience at Work Program (RAW), Systematic Self Reflection Training (SRT)

- **Cognitive self-regulation**

- Training interventions aimed to change the cognitive response of individuals
- Mix of stress response, psycho-education, exercises in strengths, adaptive coping strategies, self-efficacy, social-support, self-reflection
- Examples – Mindfulness Based Resilience Training (MBRT), Mental Agility and Psychological Strength Training (MAPS), Master Resilience Training (MRT), Resilience at Work Program (RAW), Systematic Self Reflection Training (SRT)

Cluster 2: Peer-directed interventions

- Peer trauma risk management training for early identification of high-risk individuals and group sessions to understand cognitive and emotional response to exposure
- Education sessions that increase peers' awareness of symptomatology and treatment for mental health conditions; enhance ability to support others; practice in facilitating supportive conversations
- Examples – Mindfulness Based Resilience Training (MBRT), Resilience at Work Program (RAW), Critical Incident Stress Management (CISM); Trauma Risk Management (TRiM); Schwartz Round; Group Counselling

Cluster 3: Supervisor-directed interventions

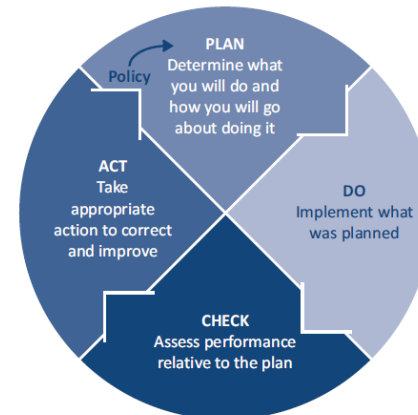
- Supervisor-directed training interventions through education
- Include mix of psycho-education, workplace mental health risks, supervisor roles and responsibilities, communication skills
- Similar to peer training interventions – increase ability to recognize symptomatology of mental health conditions; ability to support subordinates experiencing psychological challenges; facilitating supportive conversations; increase awareness about mental health risks specific to the workplace and occupation, awareness of responsibilities for creating a supportive work environment
- Examples – RESPECT, HeadCoach

Cluster 4: Population-directed interventions

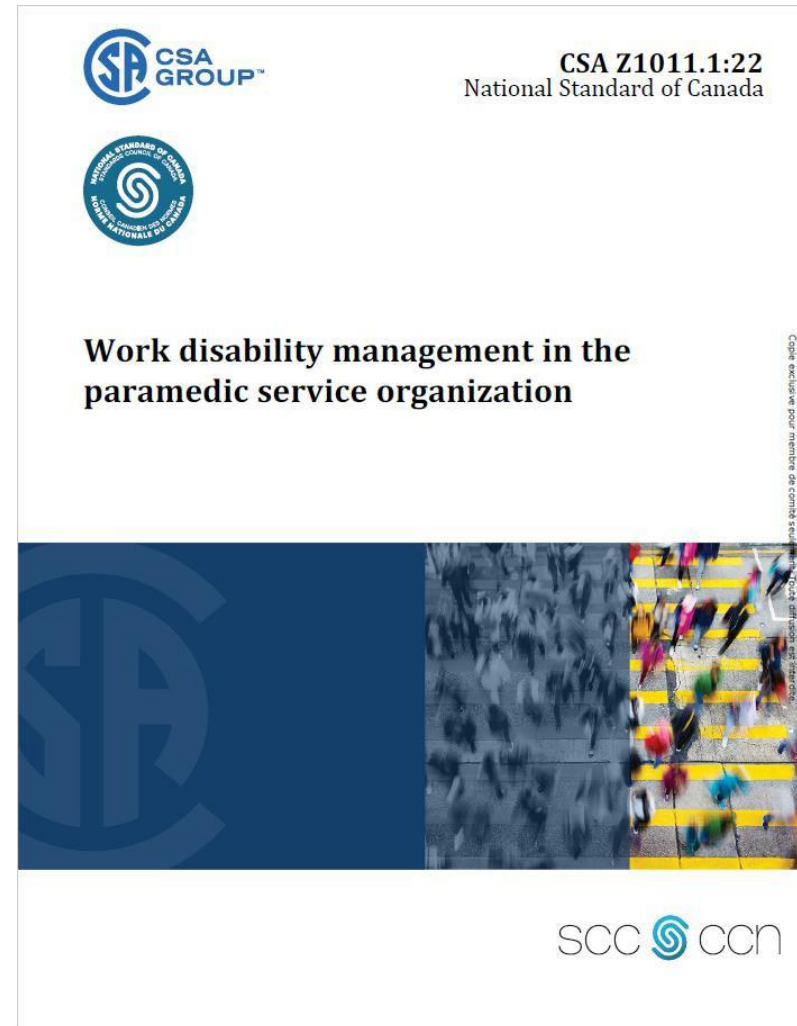
- Population-directed multi-component interventions combining individual directed education, peer and supervisor-directed early intervention, crisis-management and resource access, and organization-directed new administrative units
- Example – Together for Life

CSA Z1011.1:22 Work disability management in the paramedic service organization

- This Standard applies to the requirements for a WDM system which can be used in paramedic service organizations to address the health needs of workers to prevent and/or manage work disability.
- Includes specific requirements and guidance related to the management work disabilities associated with operational stress injuries (OSI) and other mental health conditions that could be due to work related exposure(s) and non-work-related exposure(s).
- Includes a general framework that applies to any types of disability.
- Takes a management systems framework and is framed around a continual improvement process
- Available at <https://www.csagroup.org/store/product/2429756/?srsltid=AfmBOopvCojyfkCjMA-xA-Lf-l4eCZCKXBVoEKV-6Rkqp77bPwRAGVzn>



Overview of the standard



Z1011.1:22 Work disability management in the paramedic service organization

Clause 4 describes roles and responsibilities of key stakeholders

1. Top management;
2. Front line managers and supervisors;
3. Internal subject matter experts/disability management specialists;
4. Healthcare professionals; and
5. Workers and their representatives/unions in the paramedic community.

Roles and Responsibilities

Steps towards WDM implementation using Plan-Do-Check- Act (PDCA) model

Clause 5 Planning

- Review internal and external practices
- Identify gaps (gap analysis);
- Establish objectives and targets (benchmarking)
- Commitment to continual improvement

Clause 6 Implementation

- Competent person tasked with this function;
- As organizational change occurs, the system is reviewed to determine if accommodation needs to be made.
- Preventive and protective measures

Clause 7 Performance monitoring, evaluation and continual improvement

- Scalable to the size of the PSO and its WDM system
- Qualitative and quantitative methods should be used;
- Acts as a checkpoint

Z1011.1:22 Annexes (informative)

Annex A	Annex B	Annex C	Annex D
Wellness checks during a medical leave	Mental health literacy — Training and education	Work-focused exposure program	Bibliography

Publication and Presentation List

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Questions or comments?



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Thank you

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