



Arjmand, H-A, Jones, K., Metcalf, O., & O'Donnell, M. (2021). [A review of the literature on emergency service worker mental health: Development of a research agenda for the Centre of Excellence in Emergency Worker Mental Health](#). Report prepared for the Centre of Excellence in Emergency Service Worker Mental Health. Phoenix Australia – Centre for Posttraumatic Mental Health: Melbourne

## Background

A variety of populations where PTSD is higher than average have benefited from a range of treatments. Yet still, a significant proportion of individuals do not complete treatment, and not all treatment is successful.

This literature review was conducted to inform *the development of a research agenda* for improved mental health outcomes among emergency service workers (ESWs) at the Centre of Excellence in Emergency Worker Mental Health (CoE).

*Research problem:* Are guideline-recommended interventions for high PTSD prevalent populations appropriate and effective for ESWs (including volunteers and retired)? Given that their issues and experiences are different to other cohorts, how can we best meet their needs for improved mental health outcomes? For example, unlike military veterans and trauma exposed adults, ESW's often have continued exposure to traumatic events and organizational stress from their work and so, will need a tailored and specialized treatment approaches to optimize effectiveness

By assessing what we know, and the gaps in in knowledge (findings), this report generated insights into what we need to do (actions) and future research opportunities.

## Methodology

A total of 112 studies were successfully categorised according to the parameters of the literature review. These parameters were guided by CoE priorities, specifically:

- mental health condition types (including comorbidities) as experienced by emergency service workers (ESWs)
- the treatments that ESW tend to use
- practitioner-related research interests

For further details regarding study methods, refer to Appendix A and see Appendix B for the flow of study categorisation.

## Key Findings

1. *Posttraumatic stress (PTSD), depression, and anxiety are the primary mental health symptoms experienced by ESWs*
  - Prevalence studies revealed these three conditions were the most common in ESW populations.
  - A range of comorbid symptoms were also common, including alcohol misuse, pain, sleep disturbance, and suicidality and problem anger.



2. *Limited ways of measuring treatment approaches and outcomes*

- Approaches used in treatment studies include several first-line PTSD treatments, adjunctive treatments, and mixed treatment approaches. This overlooks other approaches, such as personalised treatment approaches (e.g., measurement-based care) or use of contemporary digital technology to support clinical treatment in ESW populations.
- Mental health indices for treatment overlook other ways of measuring good outcomes (e.g. occupational health or individual capacities to return to work)
- Not enough investigative focus on the interactions of multiple factors (e.g. comorbid symptom experience) may have on treatment response.

3. *There is potential to work with practitioners to develop new and innovative ways to improve treatments.*

- Practitioners possess a wealth of information and first-hand experience providing clinical treatment, yet no practitioner-related research was found that identifies ways to improve treatment.
- A lack of understanding about how the cultural competency of mental health practitioners' impact ESW treatment outcomes.

Recommended actions related to findings

**Finding one:**

- Given the high prevalence of PTSD, depression, and anxiety observed in ESWs, a key part of quality improvement outcome assessments should include coverage across these symptom experiences for the Specialist Network of Clinicians (SNC).
- Assessment of associated comorbid conditions should also be included, covering a range of symptom experiences including alcohol misuse, pain, sleep disturbance, suicidality, and anger.

**Finding two:**

- The utility of personalised treatments should be examined in future CoE research (via adopting measurement-based care as part of treatment delivery and quality improvement processes).
- Investigating the potential of digital technology as treatment tools for practitioners and patients.
- SNC outcome assessments need to also cover ESWs occupational health during, and after, treatment and assess return to work as a treatment outcome.
- CoE research needs to better understand mechanisms of symptom change across time by closer attention to the range of individual factors which influence treatment

**Finding Three:**

Future CoE research needs to:

- conduct experiencebased co-design studies to examine effective means to improve treatment
- investigate the relationship of practitioner cultural competency and treating ESWs.



#### Questions for future research

- What are the primary symptom profiles of ESWs seeking treatment through the SNC?
- Do we see improvements in PTSD, depression, and anxiety, in ESWs receiving treatment through the SNC?
- In addition to primary symptoms, is there resolution of comorbid symptom experiences in ESWs receiving treatment from the SNC?
- What is the feasibility and acceptability of digital health tools to assist with treatment delivery (e.g., via digital measurement-based care or digitised homework tasks)?
- What are the rates of return to work in ESWs receiving treatment through the SNC?
- How do comorbid conditions impact treatment and influence treatment outcomes?
- How do practitioners' cultural competency influence ESW treatment outcomes?
- Can we devise an assessment of cultural competency of practitioners working with ESWs?