

PTSD in emergency service workers

When rescuers need rescuing

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The prevalence of post-traumatic stress disorder (PTSD) among emergency service workers is more than twice that in the general population, yet diagnosis is often delayed. GPs can ensure patients with PTSD receive best-practice clinical care by being aware of how they can present, knowing how to enquire about symptoms among those who have been exposed to trauma and following new expert guidelines.



KEY POINTS

- One in 10 currently active emergency service workers will have symptoms suggestive of post-traumatic stress disorder (PTSD). Rates may be even higher among retired workers.
- An emergency worker with PTSD may present with typical symptoms or other related problems, such as anger, relationship problems, sleep difficulty, substance abuse or a more general mental health crisis.
- Repeated nonspecific presentations by current or former emergency service workers should raise suspicion of PTSD and prompt questions about trauma exposure.
- Use of appropriate screening tools can increase the likelihood of PTSD being recognised.
- It is often beneficial to obtain a second opinion from a mental health professional who has experience in managing emergency service workers or military personnel.
- Gold-standard treatment is one of the trauma-focused psychological treatments such as trauma-focused cognitive behavioural therapy or eye-movement desensitisation and reprocessing.
- Australian guidelines outline circumstances in which medication should be considered as a treatment option for an emergency service worker with PTSD.
- Awareness of the increased risk of suicide associated with PTSD, especially among emergency service workers, is crucial.

When people are exposed to potentially traumatic events (PTEs), most demonstrate resilience; however, a minority can develop significant mental health problems. Posttraumatic stress disorder (PTSD) is the 'signature' mental health disorder that can occur after exposure to traumatic stress, yet other disorders including depression, anxiety disorders and substance abuse occur just as often. The most recent edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* has separated PTSD from anxiety disorders into a separate category, trauma- and stressor-related disorders.¹

PTSD and trauma

PTEs can be directly experienced or witnessed, or indirectly experienced by learning about a PTE having happened to a loved one. They include actual or threatened death, serious injury and sexual violence. Repeated occupational exposures to aversive details that regularly confront emergency service workers

MedicineToday 2018; 19(9): 24-28

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(e.g. collecting body parts or being exposed to the details of child abuse) are now also recognised as PTEs in the *DSM-5* diagnostic criteria for PTSD.¹

Although PTSD can affect anyone exposed to trauma, it is not surprising that particularly high rates of PTSD occur among workers such as military personnel and emergency service workers in occupations with regular exposure to PTEs. Studies examining prevalence rates are usually difficult to compare as they often use different methods of recruiting participants or measuring symptom levels. With this caveat, the estimated 12-month prevalence rate for PTSD in the Australian general population is 4.4%.² The 12-month rate for Australian defence force personnel is 8.3%.³ An insight into rates of PTSD among emergency service workers can be gleaned from a recent systematic review and meta-analysis that estimated the prevalence of PTSD in first responders worldwide to be 10%.⁴ A recent study of Australian emergency service workers found even higher rates for retired first responders and those who undertake the types of emergency service work that

involves regular exposure to fatalities.⁵

There are four symptom clusters that make up the diagnosis of PTSD. These are:

- distressing re-experiencing of the trauma through memories, nightmares, flashbacks and triggered reactions
- avoidance of distressing memories or external reminders
- a range of negative cognitions and mood symptoms such as concerns about safety, guilt and anhedonia
- hyperarousal symptoms such as hypervigilance and increased startle reactions.

The *DSM-5* also highlights an additional specification for a dissociative subtype of PTSD if symptoms such as depersonalisation or derealisation are present.

The current diagnostic criteria for PTSD outlined in the *WHO International Classification of Diseases 10th revision* parallel the *DSM-5* criteria.⁶ However, it is worth noting that the 11th revision, scheduled for release in 2018, will have a pared-down and simplified description of PTSD with only six qualifying symptoms – two related to re-experiencing, two to avoidance and two to hyperarousal. Having two contemporaneous standards for diagnosing PTSD will have interesting implications for research, insurance and compensation and may have an impact on treatment decisions.

PTSD presentations in emergency service workers

The impact of PTSD on the life of any individual is great, but among emergency workers the consequences of untreated PTSD can be particularly problematic. Many will lose their career and experience lasting damage to their relationships and family situation. These personal and financial costs tend to be greater if there is a delay in accessing good-quality treatment, which is a common problem. Tragically, many emergency service workers commit suicide each year.⁷

In the acute aftermath of a particularly distressing trauma exposure an emergency

service worker may present for assistance, describing classic symptoms of PTSD. However, it is not uncommon for there to be a delay in presentation due to a gradual onset of symptoms, avoidance, denial or a lack of understanding of the significance of symptoms. Often, the initial presentation is for a related problem such as anger and relationship issues, substance abuse, deterioration in work performance or a mental health crisis that raises concerns about self-harm and safety. Repeated non-specific presentations to GPs by current or former emergency service workers should raise suspicion about PTSD and prompt questions about trauma exposure. It is also worth noting that many emergency service workers with PTSD have a gradual onset of symptoms over many years of cumulative trauma exposure, rather than a sudden onset after one event.

Given the range of possible presentations and the concern that some emergency service workers have about seeking help, it is not surprising that the presence of PTSD is often missed by medical professionals. The use of screening tools by GPs, especially in at-risk populations such as emergency service workers, can increase the likelihood of PTSD being recognised, although care is needed in how these tools are used and a detailed clinical assessment is required after screening.^{8,9} An example of a simple screening tool that can be used in general practice is provided in Box 1.

Diagnosing emergency service workers with PTSD can be complicated. As such, it is often beneficial to obtain a second opinion from a mental health professional who has experience in managing emergency service workers or military personnel. This type of specialist assessment will include a developmental history that may identify individual risk factors such as developmental trauma or significant past psychiatric problems. A psychiatric assessment may also help to uncover comorbid conditions. If PTSD has become chronic, it is common for the person to have comorbid depression, anxiety or substance abuse. These conditions need careful assessment to determine

1. A PRIMARY CARE SCREENING TOOL FOR POST-TRAUMATIC STRESS DISORDER^a

In your life, have you ever had any experience that was so frightening, horrible or upsetting that, in the past month:

- you have had nightmares about it or thought about it when you did not want to?
- you tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
- you were constantly on guard, watchful, or easily startled?
- you felt numb or detached from others, activities or your surroundings?
- you felt guilty or were unable to stop blaming yourself or others for the event(s) or any problem the event(s) may have caused?

If the patient answers yes to three or more of the above questions, the possibility of a diagnosis of post-traumatic stress disorder should be considered in more detail.

the correct sequencing of treatment for multiple conditions, as described in the case in Box 2.

Expert guidelines for GPs

The general *Australian Guidelines for the Treatment of Acute Stress Disorder and Posttraumatic Stress Disorder* (endorsed by the RACGP) are complemented by the more recent *Expert Guidelines on the Diagnosis and Treatment of Post-Traumatic Stress Disorder in Emergency Service Workers*.^{10,11} These expert guidelines go beyond detailing the specific evidence-based treatments for PTSD and focus on issues of specific relevance to emergency service workers. A section of these guidelines is devoted to enhancing occupational functioning and guiding return to work. This has particular salience for this group, as many want to be able to return to their emergency service work, but this can be challenging because of the likelihood of further work-related

2. A HIGHWAY PATROLMAN WITH PTSD

Ian has worked in a state police force for 15 years. During the past five years he has worked as a highway patrolman. He has been married for 10 years and has two school-age children. Ian's GP first became aware of problems when asked for advice by Ian's wife. She reported that he had become increasingly morose and irritable, was avoiding the children and they were reluctant to spend time alone with him. He was staying up late, often consuming wine, and his sleep was disturbed. At night, he would often call out in distress, which would wake his wife, but he denied having nightmares. She dated the onset to a multi-fatal motor vehicle accident Ian had attended about six months earlier.

The GP provided Ian's wife with educational information about PTSD from Phoenix Australia (<http://phoenixaustralia.org/recovery/fact-sheets-and-booklets>) and the Black Dog Institute (www.blackdoginstitute.org.au/clinical-resources/post-traumatic-stress-disorder) to discuss with him and to help in encouraging him to attend for an appointment.

Ian was initially reticent with the GP and minimised his problems. He dismissed the accident six months earlier as being no different from scores of other accidents he had attended. It was clear that he was defensive about providing any information that might prove detrimental to his career prospects. He was hoping to move from highway patrol into a management 'desk job'.

Ian agreed to visit the GP for two more sessions for further discussion and assessment. The PTSD screen strongly indicated a diagnosis of PTSD. He acknowledged having nightmares about several fatal accidents he had attended. His alcohol use appeared to be a way for Ian to block memories, numb distress and help him fall asleep. He was visibly distressed by his children's reactions, but did not appear to be depressed beyond his PTSD symptoms. He was reluctant to accept antidepressant medication, but agreed to see a clinical psychologist as long as there was no direct connection with the police force. The GP prepared a mental health plan with referral to the psychologist.

The psychologist assessed Ian over two sessions and confirmed the diagnoses of moderate PTSD and mild alcohol abuse. In exploring possible triggering events, it became apparent that the multi-fatal accident he had attended six months before presenting was significant. Ian was confused by nightmares where he saw his own son's body in a smashed car. At work he had read through the report he had prepared about the accident and realised one of the deceased had been a child of a similar age with the same striking red hair.

Ian underwent nine further sessions where he was treated using imaginal exposure techniques. Through a sustained focus on specific traumatic memories with the support of the psychologist, he increasingly desensitised, and the impact of the memories became much less distressing. He learned to use his breathing to reduce heightened arousal. His therapy 'homework' included deliberately spending more time with his son and addressing other avoidance behaviours such as not watching the evening news. He actively managed his alcohol consumption by planning how much he would drink according to a reducing schedule, and he undertook to have at least two alcohol-free days each week.

Towards the end of the treatment, Ian increasingly discussed his career plans. He worried about how he would cope if confronted by another severe trauma. He was adamant that he wanted to stay in the police force. His decision was to sit his sergeant's examination and apply for a job with less exposure to motor vehicle accidents or other trauma.

exposure to trauma. Copies of the guidelines can be freely downloaded from the websites of the Black Dog Institute (www.blackdoginstitute.org.au/research/key-research-areas/workplace-mental-health) and Phoenix Australia (<http://phoenixaustralia.org/resources/ptsd-guidelines>).

The key steps in treating an emergency service worker with PTSD outlined in the new expert guidelines are shown in the Figure.^{11,12} Despite the availability of a range of evidence-based treatments, too many emergency service workers with PTSD do not receive best-practice clinical care.

Psychological treatment

Gold-standard treatment is one of the trauma-focused psychological treatments such as trauma-focused CBT or eye-movement desensitisation and reprocessing. The active phase of treatment usually takes between eight and 12 sessions, ideally with longer-than-usual sessions of 90 minutes for patients with PTSD. In-session trauma-focused therapy is usually enhanced with in vivo exposure that is undertaken between sessions as homework. Australian research is currently underway in military and veteran populations to examine whether these therapies can be administered in a more condensed daily regimen over two weeks, rather than the traditional weekly format, and produce similar results.

Although GPs will usually refer patients to a psychologist or psychiatrist for treatment, it is important they understand what constitutes evidence-based treatment so they can ensure their patients are given the best chance of recovery. Trauma-focused CBT and eye-movement desensitisation and reprocessing can be challenging and require an experienced clinician, but there is good evidence that the results are much better than with more standard supportive counselling.¹⁰

Pharmacotherapy

The Australian guidelines recommend that medication not be used in preference to evidence-based psychological treatments, assuming the psychological treatment is available. Unfortunately, even with best-practice treatment, a significant minority of emergency service workers will not recover using psychological treatments alone. This circumstance is leading to further research endeavours; however, in the meantime clinicians need to consider and provide second-line psychological treatments and/or pharmacotherapy. The expert guidelines outline a number of circumstances in which medication should be considered as a treatment option for an emergency service worker who has PTSD:¹¹

- The emergency service worker has a comorbid mental health condition or

Suggested steps for the treatment of PTSD in emergency service workers

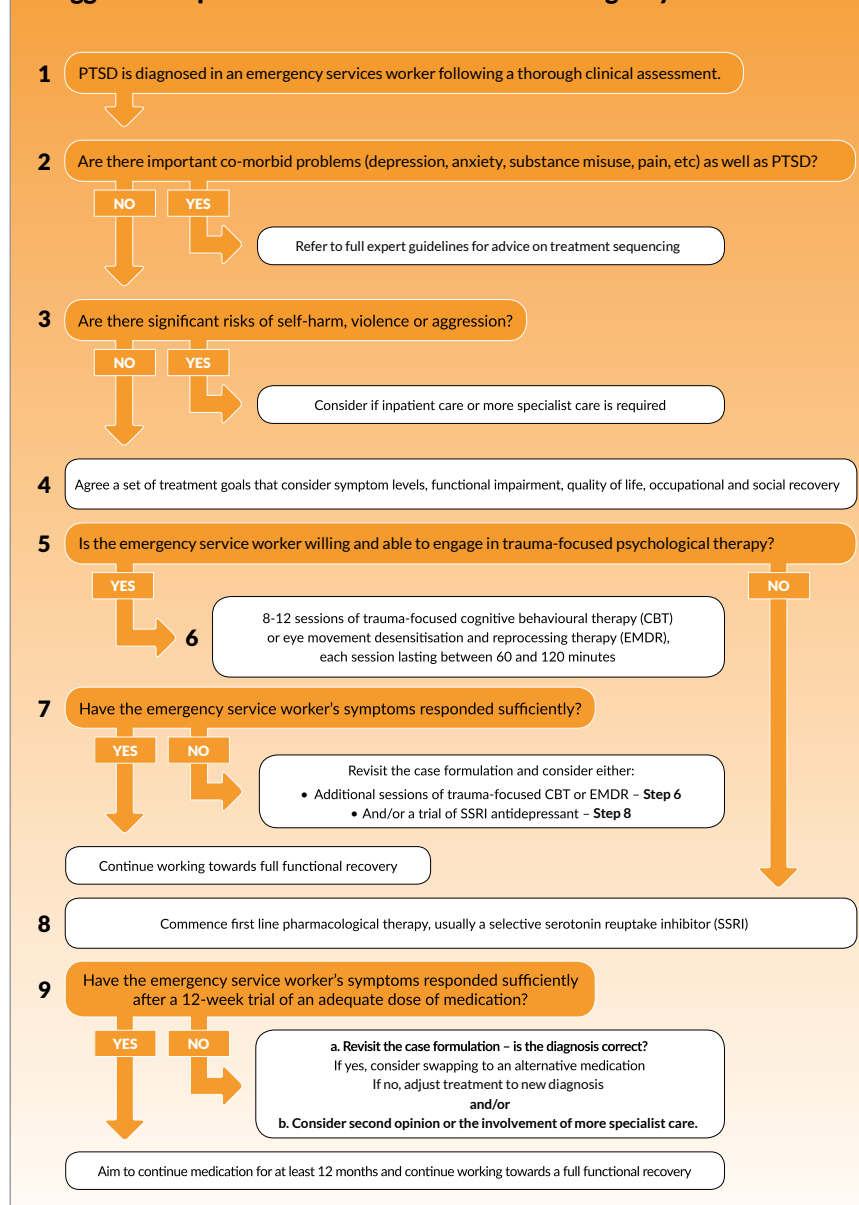


Figure 1. Flowchart explaining key steps in treating an emergency service worker with PTSD. Reproduced with permission from the Black Dog Institute. From *A clinician's summary of the expert guidelines on the diagnosis and treatment of post-traumatic stress disorder in emergency service workers*.¹²

symptoms where medication may be indicated.

- The emergency service worker's circumstances are not sufficiently stable to commence trauma-focused psychological therapy.
- The emergency service worker has not gained sufficient benefit from

trauma-focused psychological therapy.

- The emergency service worker is unable or unwilling to engage in trauma-focused psychological therapy.
- There is no immediate access to a trained professional who can deliver

trauma-focused psychological therapy.

Selective serotonin reuptake inhibitors are the medications that have the strongest evidence base as treatment for PTSD, although other types of antidepressants such as serotonin-noradrenaline reuptake inhibitors and mirtazapine have also been found to be effective off-label treatments.¹³ Second-line medications are usually considered as augmentation agents additional to an antidepressant. The augmentation options supported by some evidence from research trials include prazosin (an alpha adrenoceptor antagonist that appears to have a particular effect on symptoms of traumatic nightmares and insomnia) and various atypical antipsychotic medications such as risperidone, quetiapine or olanzapine.^{13,14} Antipsychotics should be used sparingly and with active consideration of their short- and long-term side effects.

There is no evidence that benzodiazepines can specifically treat or prevent PTSD. They may have a short-term role in emergency service workers who have severe anxiety, agitation and insomnia, and long-acting forms such as diazepam have a central role in medically assisted alcohol withdrawal. When prescribing benzodiazepines to emergency service workers, the usual information about risks for dependency and misuse must be provided. Benzodiazepines should be avoided once trauma-focused psychological treatment has begun because they disrupt the process of habituation that is a central mechanism of effective therapy.

Access to services

The healthcare options available to emergency service workers with PTSD can be complex and confusing for patients. Ideally, the GP can facilitate early diagnosis and assist patients to find effective evidence-based treatment. Emergency service workers may be able to access mental health services provided through their workplace or employee assistance programs. Injured workers may also access

the relevant workers compensation options that can pay for treatment of work injuries and provide occupational rehabilitation and return-to-work programs as well as income support and compensation. Emergency service workers may also access treatment in the generic public or private healthcare system. As outlined in the case vignette (Box 2), this may be the person's choice to avoid stigma and negative consequences for their career, or it may be due to necessity when a patient has acute and severe mental health problems and is at high risk in terms of safety.

Conclusion

The GP is often the emergency service worker's first point of contact when seeking care. GPs have a key role in ensuring that the patient, when indicated, is referred to mental health practitioners and rehabilitation providers with the appropriate training and skills to optimise symptomatic and functional outcomes. It is helpful for GPs to be aware that many emergency service workers, used to being the providers of help, find it difficult to ask for help for themselves. As with any mental health presentation, awareness of the increased risk of suicide associated with PTSD, especially among emergency service workers, is crucial, as well as knowledge of how to access emergency support services if needed.¹⁵ The availability of new expert guidelines specifically focused on this group should allow GPs to instil a sense of hope in emergency service workers seeking help.¹¹ The range of evidence-based treatments now available, both pharmacological and nonpharmacological, means having PTSD does not have to end an emergency service worker's career. **MT**

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COMPETING INTERESTS: None.