



# Policy evidence summary:

## Development of a whole-of-government Trauma Strategy for Queensland

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### Prevalence and impact of trauma in high-risk professions

By Phoenix Australia – Centre for Posttraumatic Mental Health

#### What is this research about

This paper focuses on **trauma in high-risk professions** and examines current research evidence about **types of trauma** among adults in high-risk professions, its **prevalence** (how common it is), the **potential impacts of trauma** on workers and volunteers in high-risk organisations, as well as **trauma-informed best-practice** and **strategies** that are effective in preventing and minimising the impact of trauma on workers and their family members. Emphasis is on research conducted in Australia, and where available, Queensland.

#### The context for this research

##### High-risk professions

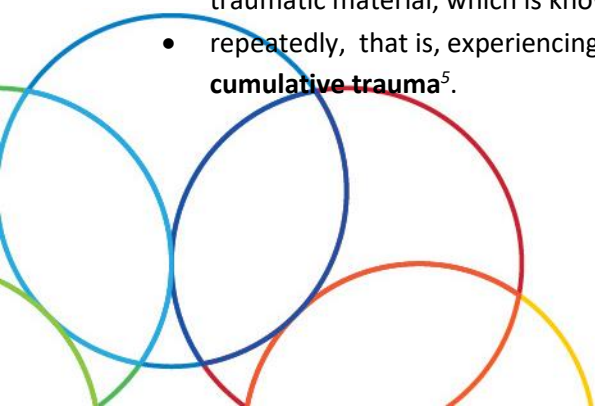
High-risk professions place workers at increased risk of exposure to psychological hazards, that is, activities in the course of their work role, particularly traumatic experiences, that could potentially harm their mental health. Some professions are clearly identified as high-risk, including the military, police and emergency services (ambulance, fire and rescue, life saving, and state emergency services), and these can include a high percentage of volunteers. Other professions can also be considered high-risk because of the risk of serious accidents and indirect trauma exposure, including healthcare, journalism, the legal and justice system, rail workers, truck drivers, the resources (e.g., mining) sector, construction industry, work health and safety inspection and enforcement regulators, and compensation authorities<sup>1</sup>.

##### Trauma and types of events that are potentially traumatic for workers in high-risk professions

In mental health terms, **trauma** means damage to a person's emotional or psychological health and wellbeing<sup>2</sup>. Trauma can occur when a person experiences a **potentially traumatic event** (PTE)<sup>3</sup>, which is any threat (actual or perceived) to the life or physical safety of the person, their loved ones, or those around them. Commonly-occurring PTEs in high-risk occupations include witnessing, attending the scene of, or investigating a death, recovering the bodies of deceased people, serious workplace accidents, being assaulted or personally endangered, attending the aftermath of accidents, large-scale disasters, or terrorist attacks, exposure to objectionable materials such as child exploitation content, and supporting victims of painful and traumatic events.

High-risk workers may be exposed to trauma in the following ways:

- *directly*, whereby they experience the event themselves or observe the event as it happens to others;
- indirectly, by learning about what happened to someone else through reading, hearing, or viewing traumatic material, which is known as **vicarious trauma**<sup>4</sup>; or
- repeatedly, that is, experiencing a series of repeated exposure events over time, which is called **cumulative trauma**<sup>5</sup>.



Importantly, because of the nature of their work, high-risk workers are more likely to experience cumulative trauma than workers in other occupations and the general public<sup>6</sup>. Direct, vicarious and cumulative trauma can all have harmful effects on mental health and wellbeing, which are described in a later section of this paper.

### **How common is trauma in high-risk professions in Australia?**

Trauma is highly prevalent (very common) in some high-risk professions, which means high-risk workers can expect to experience trauma in their day-to-day work. In the course of their careers, up to 90% of emergency services workers report experiencing workplace exposures to incidents which directly threaten their lives, and/or involve witnessing the deaths and horrific injuries of others<sup>7</sup>. Additionally, across international studies involving police, 60%-90% of participants have reported exposure to dead bodies, 50%-70% to sexually assaulted children, and 70%-80% to severely assaulted individuals<sup>8</sup>.

### **Common reactions to traumatic experiences and ongoing potential impacts**

In the initial aftermath of traumatic exposure, many workers experience some psychological distress. For example, approximately one quarter (24%) of Queensland Police Service members surveyed after attending the 2011 floods in Grantham, Queensland had elevated levels of general distress<sup>9</sup>. Similarly, Beyond Blue's *Answering the Call* national survey of mental health and wellbeing in Australian police and emergency services workers<sup>10</sup> found 39% of employees and 58% of volunteers experienced high or very high psychological distress. Common short-term impacts can include changes in emotions (e.g., fear, sadness, anxiety, anger and guilt), physical changes (e.g., nausea, vomiting), behavioural changes (e.g., problems with sleep and appetite), and changes in thinking (e.g., that the world is unsafe).

For most people, psychological symptoms of distress settle down in the initial days and weeks following the traumatic event as they come to terms with their experience using their usual coping strategies and support networks. For a significant minority of people however, the symptoms persist and develop into mental health conditions, including acute stress disorder, posttraumatic stress disorder (PTSD), depression, anxiety or alcohol and other drug misuse. Some may even contemplate or carry out suicide. Beyond Blue's *Answering the Call* survey (referred to earlier) found approximately one-third of workers (employees 38.5%, volunteers 33.1%) had been diagnosed with a mental health condition in their life, and 5.3% of employees reported having suicidal thoughts. According to WorkSafe Queensland<sup>11</sup>, workers in the defence force, firefighters, police, health and welfare support workers, and prison and security officers are more likely to be compensated for a mental health disorder and take longer to return to work compared to workers in other occupations. Furthermore, mental health conditions may persist after high-risk workers leave their work role and/or beyond retirement<sup>12</sup>.

### **Family impact**

Trauma exposure and posttraumatic mental health conditions can have broad-reaching effects on workers' family members and family functioning including emotional, social, and economic impacts<sup>13</sup>. This is illuminated through evidence of "work-related traumatic stress spillover" (when trauma-related stress 'spills over' to a workers' family life) in high-risk occupations<sup>14</sup>. It can impact the mental health of spouses/partners and children and couple relationships<sup>15</sup>, and may increase family distress<sup>16</sup>, vicarious trauma among family members<sup>17</sup>, and the occurrence of domestic violence<sup>18</sup>.

### Why do high-risk workers respond differently to traumatic events?

Individual responses to trauma are difficult to predict, as trauma is experienced in a variety of ways. Workers who have witnessed the same incident may respond differently, and their support needs and pathways to recovery may differ. Factors that can influence a worker's response include individual characteristics (e.g., previous trauma exposure, difficulties in their personal life, age and gender - for more information on these characteristics, refer to the paper in this series titled *The prevalence and impact of trauma in adults*), organisational factors such as shift work, working alone, low job control, and poor workplace practices and culture<sup>19</sup>, and occupational factors including working away from home and being separated from family and other supports<sup>20</sup>. Therefore, approaches to preventing or minimising harm from exposure to traumatic events must consider these additional risk factors.

### The key findings

Given the high prevalence of trauma exposure in high-risk professions and the potential for short-term and ongoing mental health problems following exposure, it is crucial to understand and provide strategies aimed at preventing or minimising the negative potential impacts of trauma. The following evidence summary draws from the literature key **evidence-informed and best-practice approaches to preventing and reducing the impact of trauma exposure for workers in high-risk occupations and their family members**. It is important to note that these are general approaches across professions/sectors, however there are specific considerations and strategies that are beyond the scope of this paper. Also important is that the research is from the clearly identifiable high-risk professions (military, police, emergency services), however this paper serves as guidance to other professions. Key findings are organised according to four interactive and complementary approaches: **promotion, prevention, early response and support, and treatment**.

#### Mental health promotion

Embedding mental health promotion initiatives in the culture and day-to-day operations of high-risk organisations can contribute to protecting workers from adverse effects of trauma exposure. Initiatives include developing workers' mental health literacy, reducing mental health stigma, and monitoring worker wellbeing.

Developing workers' **mental health literacy** equips workers to recognise signs of their own emerging mental health problems, increasing the likelihood of seeking support when necessary. Evidence-informed mental health literacy programs, including psychological first aid and mental health first aid training, have been shown to increase awareness of mental health issues, encourage support-seeking, and may improve mental health of high-risk workers<sup>21</sup>. Research suggests it is particularly important to provide this literacy and skills-based training to supervisors and leaders<sup>22</sup>. Additionally, reducing mental health **stigma** in the workplace is an effective strategy for encouraging high-risk workers to seek mental health support when necessary, since stigma is a key barrier to support-seeking in this population<sup>23</sup>. Reducing stigma can increase the likelihood that a person will disclose that they are having problems, which can help them gain timely support. Finally, organisations should **monitor the** mental wellbeing of workers in order to identify emerging mental health problems. Routine monitoring (e.g., psychological screening, training leaders and supervisors) of worker mental health may assist in identifying emerging problems and promote self-care and support-seeking<sup>24</sup>.

#### Prevention

Preventative initiatives aim to both **minimise workers' exposure** to PTEs and other trauma-related stressors, and prevent or minimise adverse impacts should exposure occur. Regarding the latter aim, initiatives include **enhancing protective factors** and **promoting pre-incident preparedness**.

To minimise workers' exposure to PTEs, organisations can implement policies and procedures that limit unnecessary or unexpected exposures, for example, rotating individuals through high-trauma roles where possible<sup>25</sup>. Furthermore, to minimise cumulative exposure, a good practice strategy is having a formal incident-reporting system (documented in policy and procedures) with which to monitor workers' exposure to PTEs<sup>26</sup>.

In addition to minimising trauma exposure, there is strong evidence that **minimising trauma-related stressors**, including organisational and operational stressors, helps to prevent adverse impacts of trauma exposure. Organisational stressors relate to organisational administration, management, structure and processes (e.g., leadership style, worker conflict, workload), while operational stressors relate to the nature of the work (e.g., shift work, extreme weather conditions)<sup>27</sup>. It is good practice to develop policies and processes for identifying, monitoring, mitigating, and reporting these stressors. Conversely, initiatives that aim to **enhance protective factors**, for example, enhancing a sense of workplace belongingness and social support<sup>28</sup>, improving team cohesion<sup>29</sup>, and nurturing a sense of meaning and/or purpose<sup>30</sup>, can help to prevent adverse effects. The *Answering the Call* survey<sup>31</sup> found police and emergency services workplaces that provide higher levels of support and inclusiveness, regular discussions about workplace experiences, and effectively manage emotional demands on staff, have lower rates of probable PTSD and psychological distress.

*Pre-incident preparedness*, another prevention strategy, refers to enhancing a person's ability to cope with exposure to trauma, prior to a traumatic incident occurring<sup>32</sup>. Workplaces with high-risk operational environments commonly take an approach to trauma exposure preparedness which involves the idea of *role-readiness*. Role-readiness refers to the worker attaining a good fit between their capabilities (including psychological preparedness) and the requirements of their work role. Findings illuminate protective effects of role readiness, suggesting that increasing worker awareness of the potential risks, likelihood of exposure, and impacts associated with their roles may reduce stigma and have a positive impact on help-seeking. Key evidence-informed strategies to promote role-readiness include *recruitment processes* (e.g., pre-employment psychological screening) and *targeted training* (e.g., resilience training and manager training for mental health).

Training that aims to support psychological readiness includes resilience training and leadership training. Although best practice for pre-incident preparedness training has yet to be determined, current trials of interventions for first responders show promise in preventing trauma-related mental health problems<sup>33</sup>. Resilience training for high-risk workers is an emerging field of research and there is yet to be solid evidence about the type and extent of training required to help mitigate the impact of exposure to traumatic events. In the last ten years, numerous innovative resilience interventions have been trialled with workers in Australian high-risk organisations including Queensland Police recruits<sup>34</sup>, Department of Fire and Emergency Services (DFES) recruits in Western Australia<sup>35</sup>, Australian Fire and Rescue workers<sup>36</sup> and emergency services personnel<sup>37</sup>, the Australian Federal Police<sup>38</sup>, emergency department nurses in South East Queensland hospitals<sup>39</sup>, and Queensland Healthcare Workers involved in disaster management<sup>40</sup>.

Overall, these interventions vary in efficacy, however a recent critique<sup>41</sup> of the available evidence for pre-incident training programs aimed at first responders concluded that, whilst well-intended, there was little evidence for interventions aimed at improving resilience to stress in high-risk workers. The same critique found line manager training, however, showed more promise, which is in line with the WHO guidelines on mental health at work<sup>42</sup> which recommend that training managers to support their workers' mental health should be delivered to improve managers' knowledge, attitudes and behaviours for mental health and to improve workers' help-seeking

behaviours. At a minimum, this should include self-care, recognising early signs of psychological ill-health, having conversations with workers who experience mental health issues, and how and when to facilitate referral for assessment and triage of workers with suspected mental health problems<sup>43</sup>.

### Early response and support

Early response strategies refer to evidence-based interventions delivered after trauma exposure, but before the development of mental health disorders. Following worker exposure to a PTE, best-practice recommendations include providing **an individually tailored (or matched) care response**<sup>44</sup> in order to help prevent adverse mental health outcomes. A matched care approach to supporting worker mental health recognises that interventions are most effective when the level of mental health support is matched to the individual's needs at that particular point in time (see Evidence Summary Paper titled the *Prevalence and impact of trauma in adults* for further details about matched care).

Best-practice early response and support also requires that a range of internally or externally delivered and timely low intensity evidence-informed approaches are available to support individuals showing early signs of mental health issues. Early support and response may include informal or formal support by peers, managers, or chaplains, or short-term supportive counselling delivered through employee assistance programs (EAPs) or other internal or external services. **Psychological First Aid (PFA)** is an appropriate evidence-informed Level 1 approach to be delivered in the immediate aftermath of workplace traumatic events with high-risk workers<sup>45</sup>. Peer support programs vary across organisations but can include delivering PFA, identifying those in need, providing confidential mental health and wellbeing support and facilitating pathways to further support and/or providing brief low-level intervention. Level 2 interventions are brief, low intensity early interventions for those with emerging mental health issues or who “don't bounce back”. With appropriate training and supervision, Level 2 interventions can be delivered by EAPs, other counsellors or peer supporters if appropriately trained. **Skills for Psychological Recovery**<sup>46</sup> and **Skills for Life Adjustment and Resilience**<sup>47</sup> are two examples of evidence-informed level 2 interventions.

### Treatment

Evidence-based mental health treatment should be made available to high-risk workers once mental health problems have been identified. **The Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder (ASD), Posttraumatic Stress Disorder (PTSD) and Complex PTSD**<sup>48</sup> state that once posttraumatic stress disorder has been identified in high-risk workers, standard **evidence-based treatments (e.g., trauma-focussed cognitive behavioural therapy, cognitive processing therapy, prolonged exposure**<sup>49</sup>) **apply**. There are important issues to consider, however, when providing treatment to this population<sup>50</sup>, including the multiplicity of traumatic exposures workers have had to deal with. Additionally, it is optimal that while an individual is receiving treatment, they are not continuing to be exposed to traumatic events. Wherever possible, the person should remain working in a meaningful role in the organisation that does not expose them to traumatic events that disrupt the treatment process.

In summary, a critical aspect of supporting high-risk workers is ensuring they can access a variety of evidence-based, **trauma-informed**, and culturally appropriate mental health and wellbeing support options that are well-integrated and coordinated, as this is critical to ensuring workers are provided with consistent mental health and wellbeing information and timely access to support.

### Supporting family and other significant supports of high-risk workers

Families play a vital role in supporting the wellbeing of high risk workers<sup>51</sup>, and are often the first to notice changes in someone's mental health, therefore family members need the necessary knowledge and skills to provide support, and facilitate appropriate help-seeking<sup>52</sup>. Conversely, family members' wellbeing may be impacted by workers' stress, which means family members of high-risk workers have support needs, not just as carers, but also as care-seekers<sup>53</sup>. Despite the documented impact of workers' trauma exposure on their families, a recent review of the mental health and wellbeing of families of emergency services workers found a general lack of organisational support for families<sup>54</sup>. Recommendations for developing models of care for high-risk workers include: the inclusion of spouses or family members in support programs (including peer support) across the worker's career span to enable effective prevention, monitoring, and early treatment for the worker, their children, and other family members as required<sup>55</sup>.

For interested readers, a variety of family support initiatives developed by high-risk organisations in Australia and internationally are available in the public domain<sup>56</sup>.

Overall, the key findings above demonstrate the importance of strategies aimed at preventing and minimising adverse mental health outcomes in high-risk workers and their family members following exposure to traumatic events.

### What does this research mean for policymakers

To protect high-risk workers and their families from adverse effects of trauma exposure, there are multiple complementary best-practice approaches that should be considered, including **mental health promotion, prevention, early response, treatment, and family support**. Implications of the findings include the importance of **trauma awareness** across and within high-risk organisations, as well as having **best-practice, evidence-informed strategies** embedded to support individual workers, teams and supervisors **before, during and after exposure to PTEs**, and designed to enhance the protective aspects of these roles. Furthermore, it is important to understand how direct, indirect, and cumulative trauma exposure and other personal, cultural, occupational and organisational factors can influence mental health and wellbeing, functioning and help-seeking.

A **whole-of-government effective trauma management approach** for high-risk professions requires the provision of **trauma-informed service delivery** to promote wellbeing at both the individual and organisation level. For interested readers, a variety of **mental health frameworks developed for high-risk workers in Australia**<sup>57</sup> are available in the public domain. Key principles that underpin effective trauma management include: the importance of establishing mentally healthy workplaces<sup>58</sup>; managing psychosocial risks; taking a whole-of-career approach from recruitment through to transitioning out of a high-risk workforce; pre-incident preparedness, incident response and post-incident response which enable a matched care approach; the use of effective peer support programs; supporting workers who are returning to work following adverse trauma impacts; and engaging workers' family members with education and support.

Being trauma-informed needs to become routine practice across and within high-risk organisations - top-down from senior leadership, management, and peer support through to front line and other workers. Trauma-informed best-practice also needs to be incorporated into high-risk workplace environments via policies, procedures, and resources; training and workforce development with education and training available to all staff, with additional

workforce development programs for managers, peer support roles and specific roles that are at increased risk of exposure to trauma; incident record keeping of PTEs; clear pathways to appropriate and sufficient mental health services, including for those in rural and remote areas; and review, evaluation and continuous improvement.

Based on the findings presented in this paper, it is also reasonable to suggest that unsupported high-risk workers can adversely impact on the delivery of government services to members of the public and that there would be economic, resourcing and productivity costs associated with this. One group at particular risk of being unsupported are workers who have transitioned out of their high-risk roles to other roles, workforces or retirement. There is emerging evidence of increasing risk among these workers, and it can be difficult to firstly, identify them and their needs once they have transitioned from the organisation, and secondly, to provide them with appropriate treatment that is culturally appropriate in the context of their high-risk role background.

In terms of supporting the workforce, it is important that both workers and employers have awareness of trauma and impacts. Additionally, the diverse needs of all workers across the organisation must be addressed, taking into consideration variable risk of exposure to operational and organisational stressors and trauma, different physical and psychological fitness requirements according to role, and, where applicable, access to different support systems (e.g., uniformed versus non-uniformed staff). Thus, a supportive workplace culture, and strategies to facilitate early identification, such as screening and addressing workplace stigma, are of particular importance.

Evidence-informed support such as **Psychological First Aid (PFA)** should be made available to all workers immediately following potentially traumatic workplace incidents. Delivering these supports before people develop mental health disorders can lead to improved mental and physical health, less time spent accessing support services and earlier return to work and a pathway into evidence-based treatment if needed.

Organisations engaging in high-risk work should ensure they adopt a whole-of-organisation approach to supporting worker mental health, a proactive and holistic approach to the management of trauma exposure, and that their organisational culture and leadership demonstrates that the mental health and wellbeing of workers is valued. To **address barriers to help-seeking and promote early access to appropriate care**, it is important that organisations develop workers' and leaders' awareness and understanding of mental health issues, communicate and demonstrate the organisation's commitment to mental health, and monitor workers' wellbeing. For workers undertaking high risk roles, psychological readiness and preparation to undertake the role are also important factors.

These principles accord with organisations' legislative requirements. WorkSafe Queensland state **that everyone at work has a responsibility for psychological health and safety**<sup>59</sup>. Workers must take reasonable care of their own health and safety in their place of work, and the health and safety of others who may be affected by their actions. Additionally, a person conducting a business has a primary duty of care to ensure the health and safety of their workers and others in their workplace. Managing psychosocial risks (psychological and social factors) is a nationally legislated requirement (WHS legislation). The Work Health and Safety (Psychosocial Risks) Amendment Regulation 2022 which commenced on 1 April 2023<sup>60</sup> includes a code of practice for managing the risk of psychosocial hazards at work (Code of Practice 2022<sup>61</sup>).

Of note, in August 2023 the National Emergency Management Ministers endorsed the first *National Mental Health Plan for Emergency Services Workers: 2024-2027: A commitment to continued action*<sup>62</sup>, however it is not yet publicly available. The plan acknowledges the unique challenges faced by emergency services workers in supporting communities in the context of disasters, including impacts on their own health, and provides guidance on actions to better support their mental health. Once released, this plan may be a useful resource for Queensland departments working with high risk professions.

## Options for reform

This paper has provided evidence for the need for a **whole-of-government trauma strategy** to provide a **holistic and integrated approach** to support trauma-impacted high-risk workers in Queensland. Recommendations to strengthen the current approach include:

1. Identifying Queensland Government departments, teams, and roles that are considered high-risk, as defined by this paper.
2. Reviewing and updating policies, procedures and resources to align with best-practice in trauma management, including measures for before, during and after exposure to a PTE. Aligned with the principles of trauma-informed practice, these updated policies, procedures, as well as providing appropriate training and services should be implemented across and within high-risk workforces to address the risk and potential impacts of direct and indirect trauma exposures (such as vicarious trauma and burnout). This requires training and services not only for individual workers, but also their managers / supervisors so they are better equipped to support staff mental health and wellbeing.
3. The Government should genuinely involve high-risk workers with living and lived experience (LLE) of trauma, and their carers, through a robust co-design approach to inform updating documents and practices (see Recommendations 2 and 3 above).
4. Consideration must be given to whole of career planning as transition to new roles throughout a high-risk worker's career, and out of the organisation, can be challenging. Transitions can be periods of significant change, including to identity, community and residence, social networks and status, family roles, occupation, finances, routines, responsibilities, supports and culture. Emerging research highlights the longer term mental health risks for some individuals after they have left high-risk organisations. Transition considerations include appropriate acknowledgment of service, links into new support networks, support for employment seeking, and options for encouraging help seeking as required to appropriate treating providers who are culturally informed about the unique needs of high-risk workers.
5. Given the prevalence and wide-ranging impacts of trauma among high-risk workers, building capacity and capability to provide trauma-informed services for this population is needed across all government departments. At a minimum this should include an awareness of trauma and its potential impacts, how to respond, and increased knowledge about appropriate pathways to care for trauma impacted high-risk workers and their family members. Priority for more comprehensive capability building (such as Level 1 Psychological First Aid) should be given to those staff *most* likely to be directly engaging with high-risk workers impacted by trauma.
6. Health and mental health services aimed at high-risk workers need to offer trauma-informed care and provide best-practice treatment for posttraumatic mental health conditions. The goal is to make existing services at each of the matched care levels more trauma aware and, at the higher levels, to increase skills in evidence-based treatment for high-risk workers with posttraumatic mental health conditions. This not



only requires adequate funding, resourcing, training, and supervision within these services, but also appropriate monitoring and evaluation processes that ensure continuous improvement.

7. With accessibility and stigma key barriers for many trauma-impacted high-risk workers, strategies are required to ensure that services are available to those in need regardless of their geographical location, socioeconomic status, demographic profile, and cultural heritage. A significant injection of resources would be needed in order for mental health services to take on an increased role in specialist care for trauma-impacted high-risk workers. This will involve building capacity and capability across the sector (and possibly even consideration of a broader system redesign), not only by improving elements of the existing system but also, potentially, by adding further specialised elements for this population, for example specialist services including Blue Hub<sup>63</sup>, a trauma service for Victoria Police and Victorian-based members of the Australian Federal Police, and Responder Assist<sup>64</sup>, a trauma service for emergency services workers and veterans from several Victorian agencies. It is recommended that the Queensland Mental Health Commission and Government monitor the progress and outcomes of these services, and examine opportunities to implement similar components in Queensland.

<sup>1</sup> See: <https://www.phoenixaustralia.org/research-streams/occupational-trauma-and-stress/>

<sup>2</sup> See: <https://www.phoenixaustralia.org/wp-content/uploads/2022/07/Chapter-2-Trauma-and-trauma-reactions.pdf>

<sup>3</sup> Creamer, M. (2016). Is there something special about traumatic events? In B. Douglas & J. Wodak (Eds.), *Trauma-related stress in Australia. Essays by leading Australian thinkers and researchers* (pp. 15-17). Australia21 Ltd.

<https://opus.lib.uts.edu.au/bitstream/10453/90105/1/FINAL-Trauma-Related-Stress-2016-09-07.pdf#page=17>

<sup>4</sup> Bywood, P., & Costa, B. (2018). Vicarious exposure to trauma at work. Rapid review.

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<sup>5</sup> FBG Group (2021): Victorian Public Sector Cumulative Trauma Framework <https://vpsc.vic.gov.au/workforce-capability-leadership-and-management/workforce-management/ohs/>

<sup>6</sup> Varker, T., Metcalf, O., Forbes, D., Chisolm, K., Harvey, S., Van Hooff, M., McFarlane, A., Bryant, R., & Phelps, A. J. (2018). Research into Australian emergency services personnel mental health and wellbeing: An evidence map. *The Australian and New Zealand Journal of Psychiatry*, 52(2), 129–148. <https://doi.org/10.1177/0004867417738054>

<sup>7</sup> E.g., Skeffington, P. M., Rees, C. S., & Mazzucchelli, T. (2017). Trauma exposure and post-traumatic stress disorder within fire and emergency services in Western Australia. *Australian Journal of Psychology*, 69(1), 20–

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<sup>8</sup> Wagner, S. L., White, N., Fyfe, T., Matthews, L. R., Randall, C., Regehr, C., White, M., Alden, L. E., Buys, N., Carey, M. G., Corneil, W., Fraess-Phillips, A., Krutop, E., & Fleischmann, M. H. (2020). Systematic review of posttraumatic stress disorder in police officers following routine work-related critical incident exposure. *American Journal of Industrial Medicine*, 63(7), 600–615. <https://doi.org/10.1002/ajim.23120>

<sup>9</sup> Kerswell, N. L., Strodl, E., Johnson, L., & Konstantinou, E. (2020). Mental health outcomes following a large-scale potentially traumatic event involving police officers and civilian staff of the Queensland Police Service. *Journal of Police and Criminal Psychology*, 35(1), 64–74. <https://doi.org/10.1007/s11896-018-9310-0>

<sup>10</sup> Beyond Blue Ltd. (2018). Answering the call national survey, National Mental Health and Wellbeing Study of Police and Emergency Services – Final report. [https://www.beyondblue.org.au/docs/default-source/resources/bl1898-pes-full-report\\_final.pdf](https://www.beyondblue.org.au/docs/default-source/resources/bl1898-pes-full-report_final.pdf); see also Kyron, M. J., Ridders, W., Bartlett, J., Renehan, E., Hafekost, K., Baigent, M., Cunneen, R., & Lawrence, D. (2022). Mental health and wellbeing of Australian police and emergency services employees. *Archives of Environmental & Occupational Health*, 77(4), 282–292. <https://doi.org/10.1080/19338244.2021.1893631>

<sup>11</sup> See: [https://www.worksafe.qld.gov.au/\\_data/assets/pdf\\_file/0015/22137/profile-work-related-mental-disorders-qld.pdf](https://www.worksafe.qld.gov.au/_data/assets/pdf_file/0015/22137/profile-work-related-mental-disorders-qld.pdf)

<sup>12</sup> Beyond Blue Ltd. (2018). Answering the call national survey, National Mental Health and Wellbeing Study of Police and Emergency Services – Final report. [https://www.beyondblue.org.au/docs/default-source/resources/bl1898-pes-full-report\\_final.pdf](https://www.beyondblue.org.au/docs/default-source/resources/bl1898-pes-full-report_final.pdf); Van Hooff M, Lawrence-Wood E, Hodson S, Sadler N, Benassi H, Hansen C, Grace B, Avery J, Searle A, Iannos M, Abraham M, Baur J, McFarlane A. (2018). Mental Health Prevalence, Mental Health and Wellbeing Transition Study, the

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