- Not Government Policy -



Consultation paper:

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

The prevalence and impacts of trauma in adults

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What is this research about?

This paper examines evidence about **trauma**, its **prevalence** (how common it is) and the **impacts** of trauma in **adults**. This paper discusses the **implications of these findings** and makes **recommendations** about **options for change and improvement** aimed at prevention and reducing the adverse impacts of trauma in Queensland. Emphasis is on current research and evidence-informed best-practice (that is, strategies based on what we know is most likely to be effective) conducted in Australia, and where available, Queensland.

The context for this research

The Queensland Mental Health Commission engaged experts across Australia to prepare Consultation papers across the **life span**, **supporting diverse needs and experiences** and **specific contexts and environments** to inform the development of a whole-of-government trauma strategy. This will provide a comprehensive approach for dealing with trauma across the entire government. The current paper focuses on **trauma in adulthood** and presents findings on:

- 1. how commonly trauma is experienced by adults;
- 2. what factors influence risk of exposure to trauma and likelihood of experiencing ongoing difficulties;
- 3. common responses to traumatic experiences and differences in recovery;
- 4. the importance of support and accessing appropriate care matched to the needs of the individual; and
- 5. the importance of providing trauma-informed service delivery across government departments and related services.

For further information about specific at-risk communities or contexts that are relevant to adults, readers are encouraged to read other relevant papers in this series of Consultation papers.

In mental health terms, 'trauma' refers to a psychological wound or injury to a person's emotional or psychological health and wellbeing that can develop after exposure to certain experiences^{1,2}. A more useful term is 'potentially traumatic event' (PTE), which recognises that not everyone experiencing the same event will suffer an injury and describes the incident as distinct from the individual's response. A PTE encompasses exposure to an actual or perceived threatened event or situation that has the potential to create a significant risk of substantial or serious harm and/or trauma to physical or mental health, safety or wellbeing of individuals. A PTE can include:

- directly experiencing the traumatic event(s);
 - ——indirectly experiencing the traumatic event(s), commonly referred to vicarious trauma, for example:
 - i. witnessing in person, the events(s) as it occurred;
 - ii. learning that the traumatic events occurred to a close family member or close friend or close work colleague; and



iii. repeated or extreme exposure to adverse details (such as written or visual details) of the traumatic event(s) if it occurs through a work role.

Examples of PTEs are witnessing or being involved in an event that involves actual or threatened, serious injury, near misses, physical or sexual assaults and other aggressive behaviours, domestic and family violence, workplace injuries, disasters triggered by natural or person-made hazards, war, torture, terrorism, accidents, medical emergencies, perinatal trauma, as well as **vicarious trauma**. These events can be sudden or unexpected, prolonged or intense. Exposure can be a single event or multiple exposures of the same type of trauma or multiple different types of traumatic events (known as **cumulative trauma**)³.

The key findings

How commonly is trauma experienced by Australian adults and who is at greater risk of exposure to trauma?

PTEs are very common – approximately three-quarters of Australians will experience at least one PTE in their lifetime, with many experiencing two or more events, and more than two-thirds will experience a PTE by the age of 16 years⁴. The PTEs most commonly reported in Australia include:

- having someone close to you die unexpectedly (reported by about 35.4% of women)
- seeing someone badly injured or killed, or unexpectedly seeing a dead body (36.7% among men)
- experiencing family violence (just above 16% of women and men physically or sexually assaulted by an exor current partner; 25% of women have experienced emotional abuse)
- being sexually assaulted or threatened with sexual assault (about 20% of women; 5% in men)
- being in a life-threatening car accident (13%).

Exposure to trauma is more common in certain communities, including First Nations People, asylum seekers and refugees, people experiencing family and domestic violence, LGBTIQ+ people, in high-risk professions (including military, police and first responders), people who experience homelessness, people living in out-of-home care, people with serious mental ill health, disability, or who are engaged with the legal justice system^{5,6,7}.

What are the potential impacts of trauma for adults and what influences the type of responses experienced?

Everyone is impacted by PTEs in different ways and to different extents. For most adults, 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.

Common initial mental health responses to PTEs

There are a range of common reactions that might be seen in adults who have recently experienced a PTE. These have important implications for how trauma-impacted people can engage with government services, which will be discussed later. A summary of common responses is provided in Table 1.

Table 1. Common short-term impacts of trauma

Physical changes	Behavioural changes	Changes in thinking	Changes in emotions
Difficulty sleeping	Hypervigilance – jumpy, on	Poor concentration, difficulty	Feeling tense, easily
Muscle tension,	look-out for danger	making decisions or poor problem solving	startled, fearful or anxious
experiencing aches and pains	Avoid trauma-related reminders	Short-term memory problems	Angry or irritable
			<i>,</i>
Increased heart rate and breathing	Social withdrawal, isolation	Intrusive trauma memories – thoughts, images or nightmares	Sad, tearful, helpless or hopeless
Changes in	Poor motivation or loss of interest in normal activities	Worry or fear for safety of self	Guilt, shame, self-blame
appetite, digestive		and loved ones	
problems	Increased substance use or risk-taking behaviour	A change in the way people	Shock, numb or detached
Headaches or	Reduction in work	think about themselves, their	A sense of vulnerability or feeling out of control
teeth grinding	performance, or workplace	worldview such as perceiving the world as unsafe or others as	recining out of control
Inability to relax	conflict	untrustworthy	

Potential longer-term impacts of PTEs

For a significant minority of adults, their symptoms can persist and develop into mental health conditions, including acute stress disorder, posttraumatic stress disorder (PTSD), depression, anxiety or alcohol and other drug misuse, or other chronic psychological and social factors (psychosocial)^{8,9}. These symptoms can impair their day-to-day functioning, their capacity to carry out their normal roles or interferes with their relationships. Approximately 15 to 25% of people exposed to PTEs are diagnosed with PTSD, with higher rates in females than males, as women are more likely to experience interpersonal trauma (that is, trauma that occurs within relationships or social interactions^{10,11,12,13}. Comorbidity (the presence of multiple disorders) is very common, as is the presence of associated symptoms such as anger, interpersonal problems, dissociation (such as feeling detached from their surroundings), and physical health issues. The effects of trauma can also be transgenerational, where the impact of family violence, systematic torture, war, oppression or genocide may be seen in mental health problems in the next generation^{14,15,16}. This highlights the need to take an **intersectional approach** to understanding and supporting those impacted by trauma, that is, consider how different aspects of a person's identity(s) (such as gender, sexuality, religion, ethnicity) can expose them to overlapping forms of discrimination and marginalisation. We refer the reader to the other Consultation papers that consider specific population identities.

Several studies in recent years have examined the mental health impacts of PTEs over time, with most showing that the majority of people exposed to PTEs tend to fall into one of four or five **typical trajectories of long-term outcomes**. The four common trajectories for adults exposed to trauma, include:

- showing few or even no symptoms at any point (60 85 %)
- displaying high initial symptoms with recovery over time (20%)
- high symptoms and functional impairment that does not significantly improve over time (2 15%)
- few symptoms are experienced initially, but symptoms gradually develop over time (9%).

Concurrent to all these trajectories, some adults will experience post-traumatic growth, that is, improvement in some areas of functioning or sense of meaning.

What factors influence adults experiencing longer term impacts after a PTE?

By no means does everyone who experiences a PTE develop a mental health disorder or other ongoing negative impacts. The type, severity, and duration of reactions to a PTE can vary greatly, depending on the individual, and the circumstances in which they experience the PTE. Adults with high **pre-, peri- and post-trauma risk factors** are most likely to develop mental health problems¹⁷.

- Pre-trauma factors (what was the person like before the event): Higher mental functioning, more adaptive coping styles (such as tendencies towards more optimistic appraisals and problem solving rather than pessimism and rumination), good emotion regulation skills and strong social support lower the risk of a person developing mental health problems following experience of a PTE¹⁸. Research also indicates that the more a person has been exposed to traumatic experiences (either as children or adults), particularly of an interpersonal nature, the higher the risk of serious and long-term mental health problems with subsequent PTEs^{19,20,21,22}. Prior or pre-existing mental health problems also increase risk.
- Peri-trauma factors (what happened during the event): The frequency and duration of exposure to PTEs, the
 nature and intensity of the event and the perceived control over the exposure contribute to risk for developing
 ongoing mental health issues. For example, intentional acts of interpersonal violence and cumulative trauma are
 more likely than natural events or accidents to result in a traumatic response^{23,24,25}.
- Post-trauma risk factors (what happened after the event): The two strongest post-trauma factors associated with subsequent mental health adjustment are perceived post-incident social support and other life stressors (such as financial strain, accommodation factors or unemployment)^{26,27}.

Support and care options following exposure to trauma

While all efforts should be made to reduce exposure to PTEs in families, workplaces, communities and society at large, this section will focus on outlining evidence-informed support and care options for those who have been exposed. Research to date suggests that there are currently no interventions which can be applied immediately or soon after a traumatic event, which will reliably reduce the likelihood or severity of resulting mental illness^{28,29,30,31}. Research does however caution against individual and group psychological debriefing, which was previously considered best-practice and is still conducted in some sectors (note this differs from operational debriefing³²). This raises the question about what support should be provided to adults in the aftermath of trauma exposure. In Australia, and internationally, a trauma-informed matched care approach is considered best-practice. This approach is designed to offer trauma-impacted individuals (and, where appropriate, their families or other significant supports) the specific type and intensity of support matched to their needs at a given time³³. A matched care approach is often represented as a pyramid, with the least intensive intervention that can be provided to all at the bottom of the pyramid (Level 0) and the higher layers (up to Level 4) representing increasingly intensive interventions that are needed by the fewer people who develop more significant mental health disorders. Individuals can access support from more than one Level at a time, and it is likely that it will change over time as their symptoms change³⁴. The matched care approach not only has the benefit of ensuring support is matched to an individual's need, it also arguably reduces the burden on the limited health and mental health specialist services by having other less intensive avenues of support³⁵. A matched care approach includes:

- Level 0: Broad population-based general awareness messaging (websites, pod casts and mainstream media, community activities and so on) around psychological health and wellbeing, with a preventative focus on how to take care of yourself and your loved ones.
- Level 1: Self-care and community support (supportive individuals, peers, volunteer networks, community groups) that does not wait for adults to self-identify as having problems and is targeted more specifically

for trauma-impacted populations to promote and maintain wellness for high prevalence and low severity mental health difficulties.

- Level 2: Primary care workers (such as GP, community health care workers and low-key drug and alcohol counselling services) or e-health initiatives such as internet therapy, with low key interventions for moderate severity mental health difficulties to prevent a deterioration in mental health. In workplaces, this can also include internal psychological support or welfare/ wellbeing sections.
- Level 3: Specialist mental health providers (such as psychologists, psychiatrists, hospital outpatient mental health services) delivering specialist evidence-based treatment to trauma-impacted adults for serious mental health disorders.
- Level 4: Intensive support for more severe mental health difficulties or complex needs (such as acute hospital admission at times of crisis, specialist treatment programs, residential programs, or intensive outpatient care) using a multidisciplinary team approach (psychiatrists, clinical psychologists, mental health nurses and other specialists with appropriate skills)³⁶.

Examples of matched care interventions

There is international consensus that **Psychological First Aid** (PFA) is an appropriate evidence-informed Level 1 approach to use in the aftermath of traumatic events³⁷. PFA aims to help the person feel safe and secure; reduce immediate distress related reactions; attend to basic needs by providing information, practical assistance, comfort and support; encourages the person to ask for and/or accept help and support; and promote helpful coping strategies. It can be delivered by trained non-health professionals and in a flexible manner that is determined by the needs of the individual. While PFA has not been conclusively shown to prevent the development of a mental health disorder, it is a useful means for providing support and assistance to individuals in the aftermath of a PTE and "does no harm".

Once symptoms have started to appear (i.e., from Levels 2 to 4) there are evidence-based **clinical treatment guidelines or 'consensus guidelines'** (where evidence base is insufficient) available for a range of mental health conditions. We refer the reader to review the relevant clinical guidelines for more detailed information on best-practice psychological and pharmacological (medication) interventions.

Challenges with accessing care and support

The challenge for individuals in the initial (acute) phase following traumatic exposure is often one of accessing appropriate assessment and treatment. While some delays in accessing treatment are service-related (e.g., service provider eligibility criteria, waitlists, lack of adequate training or expertise by the treating professional), delays can also be trauma-related (e.g., psychological, social, legal and other reasons³⁸). Therefore, improving early recognition and facilitating early access to evidence-informed care is highly desirable. It is important to also recognise that there are some individuals with mental health disorders – as of course, there are physical health conditions – that do not respond well to even the best available treatments. These people are left with chronic

conditions that adversely affect their functioning and quality of life. They may require ongoing supportive therapy in order to maintain current functioning and quality of life, and to prevent costly relapses that may lead to self-harm, social disruption, emergency department presentations, and inpatient admissions³⁹.

What does this research mean for policymakers?

Prevention or reducing the prevalence of PTEs is the best way to prevent or minimise adverse psychosocial impacts of trauma. This is currently the focus of legislation across Australia regarding employer's responsibilities to limit staff exposure to workplace psychosocial hazards, including PTEs. We refer the reader to Safe Work Australia and other regulatory bodies for the latest information. Given however, we know that most Australian adults are exposed to a PTE at some stage in their life, the findings presented in this paper focus on the best-practice responses to trauma, including highlighting the importance of (i) trauma awareness (such as understanding how a trauma history influences how service users and workers engage with others) and (ii) best-practice strategies for adults before, during and after exposure to trauma, including providing matched care (described earlier). While most adults will experience at least some short-term negative impacts, we know that most will recover by drawing on their own coping strategies and supports. The best-practice matched care approach to posttraumatic mental health is vital to ensure that there are a range of appropriate and effective supports and systems in place to help adults across the different stages of their recovery following a PTE, according to their specific needs. Taking this matched care approach has implications for the planning and provision of appropriate care and other services to reduce the burden associated with exposure to trauma^{40,41}. Further, given the wide-ranging impacts of trauma, it is also important to have a 'wholistic approach' to supporting trauma impacted adults – particularly those at the more severe end of the spectrum – who are likely to require assistance with education, housing, transport, and other needs⁴².

In terms of the implications for the Queensland Government, findings suggest it is likely adults who have been negatively impacted by PTEs engage with a wide variety of services across different Government departments and sectors, as members of the public and/or as government staff members. Therefore, there needs to be a greater focus on creating environments and services that help facilitate recovery from trauma, or at the very least do not hinder recovery or retraumatise. Taking this focus is often referred to as being "trauma-informed". A **trauma-informed approach** promotes well-being at both the individual and service level by ensuring that the policies, procedures and environments are mindful of people's trauma histories and supports their physical, psychological and emotional safety, and that of the workforce.

Being trauma-informed should become a part of routine service provision across Government departments and needs to be incorporated into policies, procedures, resources, practices and service environments. Some key benefits of taking a whole-of-government trauma-informed approach are:

- Early recognition of trauma history as a potential contributor to an adult's presenting difficulties and how
 they interact with services can facilitate the provision of earlier support and appropriate treatment
 planning to help prevent the development of chronic and disabling conditions.
- If a trauma history is identified as a significant contributor to the adult's current mental health problems, that recognition increases the opportunity provide a clear pathway to accessing appropriate evidence-based treatment.

- A greater awareness of trauma and its effects may help to reduce the risk of adults being retraumatised by health, justice, social services and others that they are engaging with. Evidence suggests that major stressors after a PTE (such as financial strain, accommodation difficulties, managing compensation and insurance claims) are associated with poorer mental health outcomes⁴³. Therefore, whatever service is being provided, a better understanding of the role of trauma will hopefully result in increased sensitivity to potential triggers, improved efforts to minimise additional stress caused by interactions with the service, and better management of reactivity, which has the potential to contribute to more effective service delivery⁴⁴.
- It values collaboration and addresses power differences (e.g., between clients and service providers), and encourages a culture of learning and reflection and has processes for continued evaluation and learning.

This paper has shown that trauma can impact multiple different areas of a person's functioning. For a significant minority it can have considerable emotional, health, social and economic impacts on the individual, their family and friends, workplace, broader community and support systems⁴⁵. This highlights the importance of taking a flexible, yet whole-of-government approach to being trauma-informed.

Options for reform

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

- 1. For all reform activities, the Government should genuinely involve individuals with living and lived experience (LLE) of trauma, and their carers. This can be achieved through a robust co-design approach and implementation of LLE leadership roles, while ensuring representation of the diverse needs and different groups, which will be guided by other Consultation papers.
- 2. There needs to be a whole-of-government approach towards increasing mental health literacy and awareness of available services and supports, with a preventative focus on how to take care of oneself and loved ones and colleagues, and strategies to maximise resilience. This awareness raising should be tailored for the general Queensland public, as well as for government department workforces.
- 3. Queensland Government departments' policies, procedures, resources and practices that relate to staff wellbeing and/or the consumer experience should be reviewed and updated to align with best-practice in trauma management, including measures for before, during and after a PTE. This should include review of the current integration and coordination between government services, and consideration of how it can be optimised so that individuals are supported in trauma-informed ways that minimise secondary stressors as they move across service systems.
- 4. Given the prevalence and wide-ranging impacts of trauma, building capacity and capability to provide trauma-informed services 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 adults (that is, trauma-informed practices). 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 trauma-impacted individuals.
- 5. Health and mental health services 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 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 improvement⁴⁶.

- 6. With accessibility a key barrier for many trauma-impacted adults, actions are required to ensure that a range of trauma-informed services (not just mental health services) are available to support those considered "hard to reach" due to, for example, their geographical location, socioeconomic status, demographic profile, and cultural heritage⁴⁷.
- 7. Accessibility to trauma-informed and trauma specialist mental health services should be increased, and this would require a significant injection of resources. This would 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 population⁴⁸. A state-wide trauma service (known as Transforming Trauma Victoria) is being established in Victoria, and it is recommended that the Queensland Mental Health Commission and Government monitor its progress and outcomes, and examine opportunities to implement similar components in Queensland.
- 8. Aligned with the principles of trauma-informed practice, polices, procedures, training and services should be implemented for Government department staff and service delivery providers 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.

¹ Phoenix Australia Centre for Posttraumatic Mental Health. (2020). *Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex Posttraumatic Stress Disorder.* Melbourne, Victoria: Phoenix Australia.

² Varker, T., Creamer, M., Cooper, J., Forbes, D., Freijah, I. & M. O'Donnell. (2020) What is the link between trauma and mental illness? Report prepared for the Royal Commission into Victoria's Mental Health Services. Phoenix Australia – Centre for Posttraumatic Mental Health: Melbourne.

³ Phoenix Australia Centre for Posttraumatic Mental Health. (2020). *Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex Posttraumatic Stress Disorder.* Melbourne, Victoria: Phoenix Australia.

⁴ Ibid.

⁵ Bendall, S., Phelps, A., Browne, V., Metcalf, O., Cooper, J., Rose B et al. (2018). Trauma and young people. Moving toward trauma-informed services and systems. Melbourne Victoria: Orygen, The National Centre of Excellence in Youth Mental Health. ⁶ Phoenix Australia Centre for Posttraumatic Mental Health. (2020). *Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex Posttraumatic Stress Disorder.* Melbourne, Victoria: Phoenix Australia.

⁷ Australian Institute of Health and Welfare (2022) *Stress and Trauma, AIHW, Australian Government.*

⁸ Phoenix Australia Centre for Posttraumatic Mental Health. (2020). *Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex Posttraumatic Stress Disorder.* Melbourne, Victoria: Phoenix Australia.

⁹ Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, *59*(1), 20–28. https://doi.org/10.1037/0003-066X.59.1.20

¹⁰ Breslau, N. (2001). The epidemiology of posttraumatic stress disorder: What is the extent of the problem? *Journal of Clinical Psychiatry*. 62(Suppl17), 16-22.

¹¹ Phoenix Australia Centre for Posttraumatic Mental Health. (2020). *Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex Posttraumatic Stress Disorder.* Melbourne, Victoria: Phoenix Australia.

¹² Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, *52* (12), 1048-1061. https://doi.org/10.1001/archpsyc.1995.03950240066012

¹³ Silove, D., Baker, J. R., Mohsin, M., Teesson, M., Creamer, M., O'Donnell, M., Forbes, D., Carragher, N., Slade, T., Mills, K., Bryant, R., McFarlane, A., Steel, Z., Felmingham, K., & Rees, S. (2017). The contribution of gender-based violence and network trauma to gender differences in Post-Traumatic Stress Disorder. *PloS one*, *12*(2), e0171879. https://doi.org/10.1371/journal.pone.0171879

- ¹⁴ Yehuda, R., Bell, A., Bierer, L. M., & Schmeidler, J. (2008). Maternal, not paternal, PTSD is related to increased risk for PTSD in offspring of Holocaust survivors. *Journal of psychiatric research*, *42*(13), 1104–1111. https://doi.org/10.1016/j.jpsychires.2008.01.002
- ¹⁵ Yehuda, R., Halligan, S. L., & Bierer, L. M. (2001). Relationship of parental trauma exposure and PTSD to PTSD, depressive and anxiety disorders in offspring. *Journal of psychiatric research*, *35*(5), 261–270. https://doi.org/10.1016/s0022-3956(01)00032-2
 ¹⁶ Phoenix Australia Centre for Posttraumatic Mental Health. (2020). *Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex Posttraumatic Stress Disorder.* Melbourne, Victoria: Phoenix Australia.
- ¹⁷ Varker, T., Creamer, M., Cooper, J., Forbes, D., Freijah, I. & M. O'Donnell. (2020) What is the link between trauma and mental illness? Report prepared for the Royal Commission into Victoria's Mental Health Services. Phoenix Australia Centre for Posttraumatic Mental Health: Melbourne.

 ¹⁸ Ibid.
- ¹⁹ Brewin, C. R., Andrews, B., & 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. https://doi.org/10.1037//0022-006x.68.5.748
 ²⁰ Dohrenwend, B. P., Turner, J. B., Turse, N. A., Adams, B. G., Koenen, K. C., & Marshall, R. (2006). The psychological risks of Vietnam for U.S. veterans: a revisit with new data and methods. *Science (New York, N.Y.)*, *313*(5789), 979–982. https://doi.org/10.1126/science.1128944
- ²¹ Karam, E. G., Friedman, M. J., Hill, E. D., Kessler, R. C., McLaughlin, K. A., Petukhova, M., Sampson, L., Shahly, V., Angermeyer, M. C., Bromet, E. J., de Girolamo, G., de Graaf, R., Demyttenaere, K., Ferry, F., Florescu, S. E., Haro, J. M., He, Y., Karam, A. N., Kawakami, N., Kovess-Masfety, V., ... Koenen, K. C. (2014). Cumulative traumas and risk thresholds: 12-month PTSD in the World Mental Health (WMH) surveys. *Depression and Anxiety*, *31*(2), 130–142. https://doi.org/10.1002/da.22169
 ²² Hagenaars, M. A., Fisch, I., & van Minnen, A. (2011). The effect of trauma onset and frequency on PTSD-associated symptoms. *Journal of Affective Disorders*, *132*(1-2), 192–199. https://doi.org/10.1016/j.jad.2011.02.017
 ²³ Creamer, M. Burgess, P. & McFarlane, A. C. (2001). Post-traumatic stress disorder: findings from the Australian National.
- ²³ Creamer, M., Burgess, P., & McFarlane, A. C. (2001). Post-traumatic stress disorder: findings from the Australian National Survey of Mental Health and Well-being. *Psychological Medicine*, *31*(7), 1237–1247. https://doi.org/10.1017/s0033291701004287
- ²⁴ Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, *52*(12), 1048–1060. https://doi.org/10.1001/archpsyc.1995.03950240066012
- ²⁵ Phoenix Australia Centre for Posttraumatic Mental Health. (2020). *Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex Posttraumatic Stress Disorder.* Melbourne, Victoria: Phoenix Australia
- Brewin, C. R., Andrews, B., & 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. https://doi.org/10.1037//0022-006x.68.5.748
 Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Bulletin*, *129*(1), 52–73. https://doi.org/10.1037/0033-2909.129.1.52
- ²⁸ World Health Organization. *International Classification of Diseases and Related Health Problems.* 11th ed. Geneva: World Health Organization; 2019.
- ²⁹ Mills, K. L., McFarlane, A. C., Slade, T., Creamer, M., Silove, D., Teesson, M., & Bryant, R. (2011). Assessing the prevalence of trauma exposure in epidemiological surveys. *The Australian and New Zealand Journal of Psychiatry*, *45*(5), 407–415. https://doi.org/10.3109/00048674.2010.543654
- ³⁰ Phoenix Australia Centre for Posttraumatic Mental Health. (2020). *Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex Posttraumatic Stress Disorder.* Melbourne, Victoria: Phoenix Australia.
- ³¹ International Society for Traumatic Stress Studies. *Posttraumatic stress disorder prevention and treatment guidelines: Methodology and recommendations.* Oakbrook Terrace, IL: ISTSS; 2018.
- ³² Phoenix Australia Centre for Posttraumatic Mental Health. (2020). *Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex Posttraumatic Stress Disorder.* Melbourne, Victoria: Phoenix Australia.
- ³³ Varker, T., Creamer, M., Cooper, J., Forbes, D., Freijah, I. & M. O'Donnell. (2020) *What is the link between trauma and mental illness?* Report prepared for the Royal Commission into Victoria's Mental Health Services. Phoenix Australia Centre for Posttraumatic Mental Health: Melbourne.
- ³⁴ Ibid.
- 35 Ibid.

- ³⁶ Phoenix Australia Centre for Posttraumatic Mental Health. (2020). *Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder and Complex Posttraumatic Stress Disorder.* Melbourne, Victoria: Phoenix Australia.
- 37 Ibid.
- ³⁸ Varker, T., Creamer, M., Cooper, J., Forbes, D., Freijah, I. & M. O'Donnell. (2020) What is the link between trauma and mental illness? Report prepared for the Royal Commission into Victoria's Mental Health Services. Phoenix Australia Centre for Posttraumatic Mental Health: Melbourne.
- 39 Ibid.
- ⁴⁰ McFarlane A. (2004). The contribution of epidemiology to the study of traumatic stress. *Social Psychiatry and Psychiatric Epidemiology*, *39*(11), 874–882. https://doi.org/10.1007/s00127-004-0870-1
- ⁴¹ Mills, K. L., McFarlane, A. C., Slade, T., Creamer, M., Silove, D., Teesson, M., & Bryant, R. (2011). Assessing the prevalence of trauma exposure in epidemiological surveys. *The Australian and New Zealand Journal of Psychiatry*, *45*(5), 407–415. https://doi.org/10.3109/00048674.2010.543654
- ⁴² Varker, T., Creamer, M., Cooper, J., Forbes, D., Freijah, I. & M. O'Donnell. (2020) What is the link between trauma and mental illness? Report prepared for the Royal Commission into Victoria's Mental Health Services. Phoenix Australia Centre for Posttraumatic Mental Health: Melbourne.
- ⁴³ Gibbs, L., Molyneaux, R., Harms, L., Gallagher, H. C., Block, K., Richardson, J., Brandenburg, V., O'Donnell, M., Kellett, C., Quinn, P., Kosta, L., Brady, K., Ireton, G., MacDougall, C., Bryant, R. (2021). 10 Years Beyond Bushfires Report 2020. University of Melbourne, Melbourne, Australia.
- ⁴⁴ Varker, T., Creamer, M., Cooper, J., Forbes, D., Freijah, I. & M. O'Donnell. (2020) *What is the link between trauma and mental illness?* Report prepared for the Royal Commission into Victoria's Mental Health Services. Phoenix Australia Centre for Posttraumatic Mental Health: Melbourne.
- ⁴⁵ Herrera-Escobar, J. P., Osman, S. Y., Das, S., Toppo, A., Orlas, C. P., Castillo-Angeles, M., Rosario, A., Janjua, M. B., Arain, M. A., Reidy, E., Jarman, M. P., Nehra, D., Price, M. A., Bulger, E. M., Haider, A. H., & National Trauma Research Action Plan (NTRAP) Investigators Group (2021). Long-term patient-reported outcomes and patient-reported outcome measures after injury: the National Trauma Research Action Plan (NTRAP) scoping review. *The journal of Trauma and Acute Care Surgery*, *90*(5), 891–900. https://doi.org/10.1097/TA.000000000000003108
- ⁴⁶ Varker, T., Creamer, M., Cooper, J., Forbes, D., Freijah, I. & M. O'Donnell. (2020) *What is the link between trauma and mental illness?* Report prepared for the Royal Commission into Victoria's Mental Health Services. Phoenix Australia Centre for Posttraumatic Mental Health: Melbourne.
- ⁴⁷ Ibid.
- ⁴⁸ Ibid.