

Critical Incident Responses in Healthcare White Paper











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Introduction

In 2019 Peninsula Health received funding through WorkSafe Victoria's WorkWell Mental Health Improvement Fund to lead the Thriving in Health project on behalf of a consortium of Victorian health services. The Thriving in Health project aims to protect and promote healthcare worker mental health and wellbeing by addressing factors in the design or management of work that can increase the risk of mental illness and injury if left unmanaged. This Whitepaper examines critical incident responses in healthcare through a systemic prevention focused lens.

In recent years there has been increasing focus on supporting staff to manage the effects of exposure to critical incidents experienced by healthcare workers in day-to-day work. From potentially traumatic events involving patients, to staff being exposed to work-related violence, the healthcare environment exposes people to situations that can cause ongoing harm if not managed effectively.

FBG Group was engaged to lead the critical incident response project. In consultation with the sector, FBG was tasked to develop an evidence-based Critical Incident Response Model for consistent management of potentially traumatic events that may impact health service staff. This model was intended to be evidence based and prevention focused. It was aimed at protecting against mental health injury, especially relating to post traumatic stress, as well as aligning with processes to promote and enhance mental health and wellbeing.

In order to inform the consultation process and the foundation of the model, FBG undertook a comprehensive international literature review. This review was conducted during 2020 and early 2021. The review examined available research on the impacts of critical incidents in healthcare and evidence to support a leading practice approach to critical incident response. The literature review has culminated in this white paper. Published research until February 2021 was considered in scope for this review and significant new research may have since become available.

Critical incidents in healthcare

"Potentially traumatic events (PTEs) are powerful or distressing incidents that are life threatening or pose a significant threat to the physical or psychological wellbeing of an individual or group" (Australian Psychological Society). Critical incidents are one type of PTE and are broadly defined as events that cause individuals to experience strong emotional reactions that can overwhelm a person's usual coping strategies and can cause distress (Caine & Ter-Bagdasarian, 2003).

In healthcare settings, critical incidents may include, but are not limited to (de Boer et al., 2013):



Work-related violence



Disasters and major events with large scale casualties



Other incidents that may be less extreme, however, have personal significance to those involved (e.g., the death of a patient to whom a staff member identifies)

Clinical events involving death

Critical incidents can lead to the psychological experience of distress and trauma for those involved, and we know that many workers across a wide variety of industries have experienced significant medium- and long-term psychological impacts following critical incidents (Coenen & van der Molen 2021; Skogstad et al., 2013).

Healthcare professionals are not immune to the psychological impacts of critical incidents. According to De Boer et al. (2013), symptoms can include:

PHYSICAL Increased heart rate, restlessness, headache or abdominal discomfort

BEHAVIOURAL Rigidity, harshness, smoking or drinking excessively



EMOTIONAL Crying, irritation, panic, disempowerment



COGNITIVE Insecurity, forgetfulness, indecisiveness, loss of control or humourlessness

One study (Laposa & Alden, 2003) classified the most frequently endorsed symptoms of 53 emergency department staff following a critical incident. These were categorised as feeling emotionally upset when reminded of the event (80%), trying not to think about, talk about, or have feelings about the event (56%), and having upsetting intrusive thoughts or images about the event (52%). Of these emergency department staff, 6% reported no post-traumatic stress disorder (PTSD) symptoms, and 71% had mild, 20% had moderate, and 2% had moderate to severe symptoms.

The negative psychological impacts of critical incidents are also well documented in related fields. One study identified the change in psychological distress symptoms of ambulance staff before and after exposure to a critical incident (Regehr et al., 2002). It was reported that alcohol-related problems rose from 1.2% to 11.6% following exposure to an adverse event, mental health stress leave increased from 2.3% to 29.1% and the rate at which psychiatric medication was taken increased three-fold.

Whilst we know that these symptoms can present in people following a critical incident, it is important to note that regardless of the industry, the type, number and severity of symptoms can vary, even significantly, across any one group of people, even those who have experienced the same critical incident.

Whilst many healthcare workers will experience the type of symptoms described above and go on to recover without significant mental health problems, for some the emotional distress may be protracted and sustained following critical incidents. It is common for healthcare workers to recall individual adverse events well into their careers (Ullstrom et al., 2014). Significant mental health problems may include PTSD or a subset of the relevant symptoms that have a significant impact on functioning and enjoyment of life. Various studies have shown that, in general, healthcare workers may be at a higher risk of developing PTSD than the general population (Benedek et al., 2007; Laposa & Alden, 2003). In the study of 53 emergency department staff (Laposa & Alden, 2003), 12% of healthcare workers met the diagnostic criteria for PTSD (point prevalence). In a study among emergency medicine residents in four different stages of their training, 11.9% met the PTSD criteria (point prevalence; Mills & Mills, 2004). These figures are compared with the findings of the 2017–18 National Health Survey which reported that in Australia, 1.7% of women and 1.3% of men had been informed by a doctor, nurse, or health professional of their PTSD diagnosis (point prevalence; Australia Bureau of Statistics, 2018).

In some cases, negative psychological consequences may occur following a single critical incident, however, in healthcare the impact is often a result of cumulative experiences. Individuals are at a particularly heightened risk of developing longer term impacts from critical incidents when the exposure is intense, prolonged and repeated (Chesham & Dawber, 2019). As the recovery process can sometimes takes weeks or months, nurses who frequently encounter critical incidents have an increased risk of developing symptoms of PTSD when stress accumulates (Michael & Jenkins, 2001; Jonsson & Segesten, 2004; de Boer et al., 2011). Long-term staff appear at greater risk of the cumulative emotional load of repeated exposure to critical incidents, with the number of post-traumatic stress symptoms reported in resident emergency department doctors increasing with the number of years on the job (Mills & Mills, 2004).

Critical incidents and organisational responses

Organisations have for a long time taken an **event-centred approach** to their critical incident response. The scale and nature of the response has been driven by an assessment of the *prima facie* 'size and severity' of the incident. In addition, the activities associated with responding to a critical incident have tended to focus on the initial hours and days after the incident, at which point the organisation (and many staff) tend to move on, back to business as usual. Healthcare organisations have typically instigated a **rapid response** following a critical incident, whereby the response involves quickly getting together those exposed to acknowledge the incident and provide support before they disperse, e.g., end shift or move to different locations. Most organisations have instigated a rapid response with the intent to minimise harm.

Organisations have also tended to take an **organisation-led approach** that is both **formal** and **professional**. A critical incident response is often activated by a central point in an organisation such as Occupational Health and Safety or Human Resources. These functions often coordinate the response activities on the basis of the *prima facie* potential impact of the event. The incident is often formally recorded as an event and 'professional' responders such as the contracted Employee Assistance Program (EAP) provider or internal mental health staff brought on-site to provide counselling and debriefing.

Another common feature of the response to a critical incident has been the provision of a **group debrief** where impacted parties are invited to a group meeting that can vary in its format and content. Group debriefs can provide information to attending parties such as the nature and status of events, a review of what was done in practice, discussion of the refinement and improvement of future processes and practices, and/or allow for the ventilation of details and emotions in relation to the events.

The rationale behind this intervention is multi-factorial and implies that it is:

- more efficient to brief everyone at once rather than hold individual meetings
- important that everyone sees that the organisation is responding to all parties impacted
- beneficial for everyone impacted to come together to find comfort and bond with each other, and that this will help with the healing process
- well received by those involved

As a result of the above, the organisational response, or at least parts of it, can at times appear to be a **one-size-fitsall approach**. The response can play out as if there is a belief that all parties involved have been impacted in the same or similar way and have the same or similar psychological needs.

Healthcare organisations have long held to this model of response to critical incidents, in part because it aligns with a key part of their service delivery model. In hospital settings, an emergency event occurs and staff respond immediately. This rapid, practitioner-led response is in the DNA of healthcare workers, and so it makes sense that this mindset would be similarly applied to incidents that have the potential to impact on staff. However, industrial, economic and social factors have all combined with the above to ensure this model of response has been sustained even while several decades of research has pointed to the need for change. The need to be seen to be doing something in a crisis is very strong in organisations. Managers and supervisors, particularly those in healthcare, are time poor and are also under great demands, so the efficiencies of getting everyone together is appealing. Finally, staff often put pressure on management for a collective debrief on the assumption of it being beneficial to their mental health.

Evidence has shown that healthcare professionals are impacted both by the incident itself and their organisation's subsequent response to the event (Mantzouranis et al., 2015; Carlier et al., 2000). Past experience with an organisational response may hinder reporting and help-seeking. Some healthcare professionals may perceive there is little point reporting or seeking help following an incident, as some studies have found few staff report adequate responses from hospital management to incidents involving violence (Mantzouranis et al., 2015; Shea et al., 2017).

Although the majority of people want support from their organisation (Mantzouranis et al., 2015), they do not always feel their organisations have adequately supported them following a critical incident. Disparity is reported between the perceptions of hospital administrators and frontline staff when considering what supports are needed following a critical incident (Mantzouranis et al., 2015). Where support is provided by the organisation, it is not uncommon for frontline staff to perceive it as unorganised, unstructured and unsystematic (Mantzouranis et al., 2015).

Creating a mentally healthy and safe workplace

Employers have a legal responsibility under the Occupational Health and Safety Act 2004 to provide and maintain so far as reasonably practicable a working environment that is safe and without risk to physical and psychological health. This involves managing the risks posed by hazards, including work-related psychosocial hazards, so far as is reasonably practicable.

Psychosocial factors are elements that impact employees' psychological responses to work and work conditions. Psychosocial hazards are anything in the design or management of work that increases the risk of work-related stress (Safe Work Australia, 2022). Violent or traumatic events are one type of psychosocial hazard, which can be experienced directly (i.e., critical incidents), indirectly (i.e., vicariously experienced) and cumulatively (i.e., a build-up of repeated exposure to PTEs and other stressors).

While managing psychosocial risks is the law, it also makes good business sense. Workplaces that do not manage risks have been found to experience greater absenteeism, greater presenteeism, reduced performance and increased compensation claims (Productivity Commission, 2020). Furthermore, workplaces that do not consider psychosocial risks can exacerbate mental health symptoms experienced by staff (Harvey et al., 2014).

Many organisations have taken important steps to create mentally healthy workplaces, not because they must, but because it is the right thing to do. The Black Dog institute define a mentally healthy workplace as "one in which risk factors are acknowledged and addressed, and protective factors are fostered and maximised" (Black Dog Institute, 2020).

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Psychosocial hazards rarely occur in isolation and are often combined with other hazards (Safe Work Australia, 2022). Workers themselves must be, as far as reasonably practicable, consulted in the process of identifying and managing hazards, to understand the extent to which a single hazard (e.g., a PTE) or a combination of hazards, are likely to impact health and safety.

To comprehensively and proactively manage the work-related psychosocial factors that surround a critical incident response, organisations should consider opportunities to remove exposure to situations that can lead to work-related stress. Where the removal or redesign of these factors is not possible, a proactive approach can involve preparing employees to manage the risk, empower employees to have control over their recovery and create emotionally safe environments where help-seeking is encouraged (Bywood & McMillan, 2019). Prevention of the event itself is one component of the approach, the second is the prevention against the experience of ongoing psychological distress.

Contemporary research on trauma and the implications for a critical incident response

There has been a proliferation of research in the field of trauma in the last two decades. This has resulted in greater recognition of the surrounding workplace factors that can influence the experience of exposure to PTEs, outside of the exposure itself. This research has led to many people, including some within healthcare, to question the merits of several aspects of the typical organisational critical incident response. The following is a summary of the research and its implications for organisational responses to PTEs.

VARYING PSYCHOLOGICAL TRAJECTORIES

Whilst many people experience significant and/or enduring psychological impacts following critical incidents, research has continued to indicate that it is only the minority that experience such impact. Research involving participants from a variety of industries, including healthcare has demonstrated that we can expect varied psychological trajectories amongst workers exposed to critical incidents.

Bonanno (2004) states: "A review of the available research on loss and violent or life-threatening events clearly indicates that the vast majority of individuals exposed to such events do not exhibit chronic symptom profiles and that many and, in some cases, the majority show the type of healthy functioning suggestive of the resilience trajectory" (p. 104).

Where people do not follow the path of resilience or recovery, they tend to follow dysfunctional patterns of (Bonanno & Mancini, 2012):

- chronic ongoing symptoms
- delayed (late onset) dysfunction, or delayed (extended) recovery.



Figure 1: Prototypical patterns of disruption in normal functioning across time following potentially traumatic events (Bonanno, 2004)

According to Benedek et al. (2007), three categories of response and their needed interventions have been described (p.57):

Most people may experience mild, transient distress such as sleep disturbance, fear, worry, anger, or sadness or increased use of tobacco or alcohol. Persons experiencing such responses may return to normal function without treatment but might benefit from community-wide support and educational interventions.

A smaller group may experience moderate symptoms such as persistent insomnia or anxiety or changes in travel patterns or workplace behavior. Although these changes would not necessarily meet threshold criteria for disease or disorder, such symptoms may affect work or home functionality. These symptoms will likely benefit from psychological and medical intervention.

A smaller subgroup may develop psychiatric illness such as PTSD or major depression and will require specialised treatment.

The variety of trajectories is not surprising given different people respond differently to the same or similar events. The same event may have little impact on one person but cause severe distress in another. It is therefore important to note that a critical incident is not inherently distressing or traumatic. As such the term 'potentially traumatic event' or PTE is a term that is often used in this context.

Whilst healthcare workers are not immune to significant medium- and long-term impacts of PTEs, the available research indicates that the pattern of trajectories of healthcare workers follows the one outlined above with most following the resilience or recovery pathways. As cited earlier (Laposa & Alden, 2003), the point in time prevalence of PTSD-like symptoms amongst healthcare workers is approximately 12%, which means that 88% do not develop PTSD-like symptoms. The latter group are likely to follow a range of other trajectories with most following recovery or resilience. Van Gerven et al. (2016) found that the psychological impact of a PTE decreased naturally over time for doctors, nurses and midwives regardless of their years of experience in the field.

The implications for critical incident response is that a one-size-fits-all approach is likely to be doing a disservice to many who are going through their own unique and personal response to the critical incident. Many are likely to feel that the organisation misunderstands them and their needs, which might not be evident until weeks after the incident. This research points to a need to restructure the organisational critical incident response to give far greater focus on processes that cater to the idiosyncratic psychological reactions and trajectories of those who have experienced the critical incident and their varying support needs.

A POTENTIALLY TRAUMATIC EVENT IS NOT THE ONLY RELEVENT FACTOR

The PTE itself (in this case the critical incident) has often been given much greater weighting than is warranted $vis-\dot{a}-vis$ the cause of subsequent mental ill-health including the diagnosis of PTSD (McNally et al., 2003). There are a large range of additional individual variables that may contribute to a person's response, influencing their post PTE psychological trajectory. These factors include:

Work and life stressors

People often assume that the biggest stressors for frontline workers are exposures to the death and serious injury they see on a regular basis. However, when staff in healthcare or emergency services are surveyed about their key sources of stress, it is often the more common workplace issues such as management practices, workload, and office politics, as well as personal stressors such as family, relationships and financial concerns that appear to the forefront. The Beyond Blue National Mental Health Survey of Doctors and Medical Students (2013) found the most common source of work stress reported by doctors related to the need to balance work and personal responsibilities (26.8%). Other sources of work-related stress include too much to do at work (25.0%), responsibility at work (20.8%), long work hours (19.5%) and fear of making mistakes (18.7%). Whilst the experience of a PTE might create some degree of stress on individuals, the likelihood of a poorer mental health outcome can increase when other work and personal stressors are added to the mix. Narrowing the focus onto the management of PTE itself may neglect some of the additional work-related factors that can significantly impact psychological distress.



Coping responses

Two broad strategies for coping with stressful events are identified in the psychological literature: an active pattern, or a passive pattern of coping. Many healthcare professionals have an active, problem-focused coping approach that helps them deal effectively with a critical incident including, making sense of their own immediate reactions and subsequently avoiding longer term dysfunction (de Boer et al 2013). With this problem-focused approach, healthcare professionals manage the experience by assessing the reality of the situation, accessing support and safety as needed, and talking it over with colleagues or friends. These people can adjust to what has happened and regain a sense of control and security (Olff et al., 2005).

A less effective coping mechanism is a more passive or defensive one. This is characterised by withdrawal, suppression, minimisation and denial (de Boer et al., 2013). In the initial stages postincident, these reactions may appear to be protective against otherwise overwhelming emotions. However, if maintained in the medium to longer term, they can become detrimental as they can sustain the frightening nature of the incident, so that the initial stress reactions persist (Birmes et al., 1999). The adoption of a passive or defensive coping style following a critical incident can reduce the likelihood of following a resilience or recovery trajectory (de Boer et al., 2013). This passive or defensive coping style may be associated with real or perceived stigma within their organisation. Healthcare workers may not seek help because they fear perceptions that help seeking is an admission they cannot cope with the rigours of the work. The Beyond Blue National Mental Health Survey of Doctors and Medical Students (2013) found approximately 40% of doctors felt that medical professionals with a history of mental health disorders were perceived as less competent than their peers, and 48% felt that these doctors were less likely to be appointed compared to doctors without a history of mental health problems. These findings highlight the importance of creating mentally healthy workplaces, in which it is psychologically safe to seek support. Building supportive workplace cultures is part of a preventative approach to managing PTEs (Bywood & McMillan, 2019).



Interpretations of the PTE

People's experiences of PTEs have subjective components that may intensify an individual's reactions. For example, this may occur in healthcare where the incident is unexpected, the incident is perceived by the healthcare professional as avoidable, or the person strongly identifies with a patient or family suffering a traumatic clinical event (e.g., death of a child of similar age to one of their own; de Boer et al., 2013). What might be interpreted as potentially traumatic for one person, may not be interpreted similarly for another. These interpretations can exacerbate pre-existing mental health issues and lead to poorer mental health outcomes.

Other variables that can influence post PTE trajectory include a person's existing mental and physical health at the time of the incident, the person's past experiences and capacity to recover (time and their own skills) and years of experience.



Looking beyond the PTE to take a preventative approach to creating mentally healthy workplaces

One of the key assumptions that organisations have often made about PTEs is that the event itself is the cause of the subsequent psychological response of the parties involved. However, with research showing that multiple interacting factors determine the ensuing psychological trajectory, a narrowing of focus onto the PTE itself can result in a lack of attention on other factors contributing to mental illhealth outcomes, including both personal and organisational factors. This reinforces the need to move away from an event-centred response to managing PTEs, to one that adopts both a **person-centred** and a **system-centred** approach, respectively. The former approach moves away from the reactive management of the incident and the immediate aftermath, to instead focus on the whole person, their experience of the workplace and their likelihood of a recovery trajectory. The latter preventative approach considers the organisational practices, processes and supports that promote staff wellbeing and prevent injury in general.

NATURAL RECOVERY

Natural recovery is defined as recovery to normal functioning post-exposure to a PTE or critical incident, through access to non-professional supports such as family, friends and one's own internal mental health strategies and resources. Not only do most people recover and/or are resilient in the face of critical incidents, this resilience and recovery is mostly achieved by one's own doing, rather than through the co-opting and intervention of mental health professionals (McNally et al., 2003).

We also know that disrupting processes of natural recovery can lead to poorer mental health outcomes. This can result from mandating unwanted help, or placing individuals in an environment where they are talking about, or hearing details of, the incident before they are ready (McNally et al., 2003).

Symptom severity in the initial days after a trauma is not a good indicator of PTSD risk (Shalev, 1992). It is not until one to two weeks after a critical incident that the number of symptoms, their severity, or both, predict increased risk of PTSD (Harvey & Bryant, 1998b; Koren et al., 1999; Murray et al., 2002; Shalev et al., 1997). These findings reinforce the delineation between symptoms and illness, whereby the presence of the former in the initial days post a critical incident does not lead to the latter in most cases. Initial emotional reactions post a PTE including distress and its manifestations are in most cases adaptive rather than maladaptive.

One of the key lessons from these findings is that organisations need to be more cognisant of the adaptive response and natural recovery process when responding to individuals in the first 24-48 hours post a critical incident. If recovery without professional support is common, and the trajectories indicative of mental ill-health are not clear until at least one to two weeks post the critical incident, and if interfering in this natural recovery process can cause further harm, we must pause to question the merits of organisational responses that rush in with professional services or encourage participation in group sessions in the immediate hours after a PTE. Such practices may fail to give those impacted sufficient agency to find their own path to recovery. It is also possible that they may be sending an implicit signal to those impacted that they should be feeling damaged by what has occurred. In the well-intentioned attempt to manage risk and be helpful to those impacted, many organisations could in fact be hindering recovery through their rapid interventionist approach. Brewin (2001) is even more cautious about early intervention and recommends intervention only when symptoms fail to subside naturally by about four to six weeks post-trauma.

THE RISKS IN PSYCHOLOGICAL DEBRIEFING

During the 1980s and 1990s, a model of 'critical incident stress debriefing' gained ascendancy and was taken up by many sectors. This was influenced by the work of Mitchell (1983) who championed it as an effective part of a critical incident management system for use with emergency workers, police officers, firefighters and military personnel. One of this system's features was group 'psychological debriefing' – encouraging 'ventilation' and the elicitation of the emotional experience of participants – as well as elements of education and discussion about possible symptoms, reactions and problems that may be experienced after incident exposure.

Note that psychological debriefing is to be distinguished from 'operational debriefing'. Also done as a group discussion, operational debriefing is a process of review of the management of an emergency situation or event in order to learn from what was done in practice, affirm and reinforce what worked well, and refine and improve future processes and practices.

Since about 2000, systematic reviews have raised questions about psychological debriefing (see McNally et al., 2003). A Cochrane review (Rose et al., 2002) concluded that there was no evidence of a positive treatment effect for psychological debriefing. The review stated that: "The routine use of single session debriefing given to non-selected trauma victims is not supported. No evidence has been found that this procedure is effective" (p. 2). It outlined that the use of single session psychological debriefing is of no benefit compared to a control intervention in "preventing or reducing the severity of PTSD, depression, anxiety and general psychological morbidity," (p. 2) and in fact, may increase the risk of PTSD and depression following PTEs.

Other reviews concluded that psychological debriefing is ineffective in most instances and might in fact be harmful for vulnerable populations, increasing the risk of PTSD and depression. Whilst people may be appreciative for the experience of debriefing, there is in fact the potential for (re)traumatisation to occur through participation in the process, as there is the possibility, even in well managed psychological debriefings, for participants to engage in the telling of stories, the articulation of details of their experience, and/or the expression of emotions that have a negative psychological impact on other participants. This may impede natural recovery as a result. Research into terrorism-related trauma-exposed workers shows a negative impact of critical incident stress debriefing with lower quality of life scores and higher depressive symptomatology in people who underwent critical incident stress debriefing compared with those who do not (Wesemann et al., 2020).

The World Health Organisation (2012) has made a strong recommendation that "psychological debriefing should not be used for people exposed recently to a traumatic event as an intervention to reduce the risk of post-traumatic stress, anxiety or depressive symptoms." Psychological debriefing is not supported by National Institute for Health and Care Excellence (NICE) Guidelines on trauma (2018). Phoenix Australia - Centre for Posttraumatic Mental Health (2013) has stated that for adults exposed to a potentially traumatic event, a one-session, structured, psychological intervention in the acute phase, such as psychological debriefing, should not be offered on a routine basis for the prevention of PTSD.

The implications of the above findings are significant for critical incident response in organisations given that debriefing is often a core component of the response. The findings require organisations to reconsider the way group interventions are conducted and ensure that the psychological debriefing component is eliminated. It also requires organisations to more vigilant in their oversight of group processes, ensuring that those facilitating them are highly trained and skilled to conduct them and do so adhering strictly to safe process.

There are organisations who are convinced that their psychological debriefing is sound because they receive positive feedback from participants. However, we know that debriefed people appreciate debriefing even in studies showing adverse effects of debriefing (Bisson et al., 1997; Carlier et al., 2000). It is important for organisations to understand that there are often many things going on in a group debriefing scenario and it is quite possible that the positive feedback is not specifically about the psychological debriefing components but instead is related to the demonstration of care by the organisation simply by getting those impacted together and the feeling of camaraderie the group setting brings. Participants are unlikely basing their feedback on bona fide improvements in mental health but rather a subjective feeling about the event itself.

TRAUMA CAN BE DIRECT, VICARIOUS AND CUMULATIVE

Whilst some people experience trauma-related responses from their direct involvement in critical incidents, others can experience it second hand such as hearing or reading stories from trauma survivors or seeing images of trauma experienced by others. As such, the experience of vicarious trauma is now recognised as a valid pre-condition for a diagnosis of PTSD. The risk of vicarious trauma is highly relevant to critical incident response as group debriefing processes in the aftermath of a critical incident can expose those impacted to the stories told by their colleagues.

In addition, there is evidence to suggest that the cumulative experience of incidents or stimulus can put people at greater risk of psychological harm. One study of NSW Fire fighters found there was a significant positive linear relationship between the number of fatal incidents attended and rates of post-traumatic stress disorder, depression and heavy drinking (Harvey et al., 2015). But this effect is not confined to 'major' incidents or those regarded *prima facie* as more impactful. The cumulative impact can be significant from exposure to numerous events of varying type, frequency, 'size' and nature. The risk of cumulative trauma from exposure to multiple critical incidents needs to be given greater attention by those supporting people impacted.

A new way forward

The research outlined above creates a strong case to reconsider the traditional critical incident response that has typically been observed in healthcare organisations. The following summarises some of the potential changes that could be made to improve the long-term management of critical incident responses, one that takes a prevention-focused approach by:



Preparing staff and managers with the capabilities and level of preparedness to manage the critical incident response and create a mentally healthy environment following a PTE.

Equipping staff and managers to prevent and mitigate against unnecessary exposures to PTEs through a contemporary, coordinated and consistent approach to support staff in the aftermath of a PTE.

Supporting those who are impacted by the PTEs and/or surrounding systems of work with the right support at the right time.

A prevention-first approach to creating psychologically healthy and safe environments removes the work-related risk factors that can accompany a rapid, event-centred, critical incident response. For further detail about recommendations for change see the Critical Incident Response Model.

ACTIVELY SUPPORT, BUT WATCH AND WAIT

Instead of introducing professional counsellors on-site and available to all in the initial hours of a critical incident, organisations may be better placed to enlist managers in a supportive watch-and-wait set of tasks in this initial period. Managers closely observing their staff in the initial 24–48 hours can encourage contact with a psychologist or trained mental health professional where there is acute distress or the staff member believes that will be of benefit to themselves. Managers would continue to observe staff across the weeks and months following the PTE, and once again encourage staff to take up the services of psychologists where observed signs indicate the potential for a poor mental health trajectory.

However, it does remain important for managers and perhaps senior managers to acknowledge that the incident has occurred. It is also appropriate to consider the need to bring staff together to provide an information provision session conducted with a group of staff directly impacted by a PTE and usually convened and led by a manager. Such a session is intended to provide basic factual details of any event or events that have occurred, address immediate safety needs, and ensure staff have details of available supports and services. These sessions would occur at the discretion of managers and need to be conducted with caution and constraint to ensure they do not stray into the arena of emotional or psychological expression or disclosure.

RESPECT NATURAL RECOVERY

Rather than relying on the organisation to determine what is best for the individual, it may be more effective for organisations to focus on enabling agency amongst those impacted. This means more education for managers and staff about how to achieve good mental health outcomes post a critical incident and placing greater trust in managers and employees to take action to protect their mental health. In this way there is a decreased likelihood of interfering in the natural recovery process as those impacted are free to determine what support they need and when. **Psychological First Aid (PFA)** is a key tool to enable agency in this situation. It follows models of post-incident support that are most likely to assist recovery, while avoiding those which may unintentionally cause a degree of harm to a minority of people (Shultz & Forbes, 2014). The pragmatic nature of PFA means that it initially targets acute stress reactions and the immediate needs of people exposed to trauma so as to manage the distress in the period immediately after a critical incident (Fox et al., 2012).

The core principles of PFA are:

LOOK

• Check for safety and take note of who is experiencing distress reactions.

LISTEN

- Approach these people and ask about their needs and concerns.
- Help them feel calm importantly this does not include the need to discuss the event.

LINK

• Connect people with access to services and social support including their own personal supports.

The key elements of psychological first aid have been drawn from research on risk and resilience, field experience and expert agreement (Australian Psychological Society, 2013). These elements are to promote safety, calm, connectedness, self-efficacy as well as group efficacy, and hope. Psychological first aid can include efforts to calm people, reduce distress, make people feel safe and secure, establish human connection and help facilitate social support. It can help people identify their own strengths and abilities to cope, give hope, promote adaptive functioning, get people through the first period of high intensity and uncertainty, and set people up to be able to recover naturally from an event. It can also assist with early screening for people needing further or specialised help.

An important aspect of PFA is that it is a practical and helpful, rather than therapeutic or clinical intervention and so can be successfully delivered by people who are already known to those exposed to trauma. PFA does not need to be delivered by mental health clinicians. Managers and line supervisors are particularly important in this context as part of a structured organisational response, including in the identification of those at heightened risk of persisting symptoms subsequent to the immediate stress response. Managers who are supported to deliver Psychological First Aid are thought to be an effective initial organisational support for healthcare professionals exposed to critical incidents.

Following the immediate period after a PTE, **peer support c**an be a valuable intervention, as another option to help facilitate natural recovery. Peer support is highly valued by healthcare professionals in critical incidents across the hierarchy of occupational roles – from non-clinicians through to consultants (Slykerman et al., 2019). Indeed, peer support has been shown to be the most significant factor in mitigating the psychological impact of PTEs in some studies (Chesham & Dawber, 2019). Additionally, peer support can be a useful tool in helping healthcare professionals manage the emotional load of their day-to-day role outside of the critical incident response. Development and formalisation of peer support networks across the healthcare workforce is likely to be a vital component of the organisation's overall strategic wellbeing framework.

In a report prepared for the National Mental Health Commission and the Mentally Healthy Workplace Alliance, Harvey et al. (2014) summarise the situation thus: "In the case of a traumatic event in the workplace, many employees will have some symptoms in the immediate aftermath of a critical incident, but in the vast majority of cases these will resolve. Rather than offering routine emotional debriefing after a traumatic incident, individuals should be offered simple support, comfort, have their immediate needs met and have some form of ongoing monitoring. This can typically be provided by colleagues and supervisors." (p. 44).

TAILORED RESPONSES, NOT ONE-SIZE-FITS-ALL

As emphasised, individuals respond differently to critical incidents and take different mental health journeys. They also have different preferences for support. All of this points to the need for varied and tailored responses to those impacted, not a one-size-fits-all approach. A **stepped care model** helps with natural recovery by avoiding unintended problems associated with 'pre-emptive intervention', and protects against people 'falling through the cracks'.

Flexible systems of support require both a process for ongoing monitoring and a stepped care model approach to intervention that matches the person's situation. The roles of managers, supervisors and peer supporters are critical to the success of this model, with psychology services used as a source of referral for staff who show early signs of impacted mental health. That is, a stepped care model relies on effective identification of people who may be struggling with their distress in the days and weeks following a PTE. Identification of those maintaining a more passive, defensive coping strategy or those at risk of cumulative trauma exposure load in the period after a PTE is important in implementing a stepped care model.

The stepped care model incorporates three levels of intervention:



The availability of immediate support and monitoring for all exposed, such as Psychological First Aid (see above) – delivered by line managers, supervisors, and peer supporters. Support should preferably be initiated by those who want help rather than imposed by others.

Brief focused interventions for those who do not 'bounce back' and who continue to experience mild mental health symptoms – delivered by psychologists or other trained mental health professionals.

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Referral to evidence-based treatment (e.g., trauma-focused cognitive behavioural therapy, medication) for the minority of people who develop and maintain post-traumatic mental health problems. These interventions are delivered by trauma specialists such as psychologists or psychiatrists.

A PERSON-CENTRED APPROACH

Rather than focusing on the event as the central player in a PTE response, better outcomes arise when the individuals impacted are the centre of attention. When the individual is in focus, those assisting them in recovery not only take note of their idiosyncratic response to the PTE but also understand that many other factors, in addition to or instead of, the PTE, could influence their mental health trajectory. Importantly, those supporting continue to monitor individuals well after PTE. Those who adopt a person-centred approach understand that the PTE is one variable and that the enduring mental health of an individual impacted by many variables. This does put responsibility on managers and supervisors, who are acknowledged to often be under significant workload demand. Monitoring the mental health of employees is, however, a legal responsibility of an employer under the OHS Act (2004).

PROACTIVE AND PREPARATORY SUPPORT

Effective organisational approaches to PTE management include a significant proactive component. People exposed to PTEs report that they value psychological preparation (Chesham & Dawber, 2019). Providing education on the neurobiological responses to threat and techniques to increase the ability for one to identify and manage their response can be beneficial (Beattie et al., 2018). Proactive pre-incident training sessions aimed at recognising and acknowledging the normalcy of acute distress, understanding vulnerability factors and the functional application and practice of coping strategies can be considered (Brooks et al., 2017). It is important to build a resilient workforce outside of a crisis (Brooks et al., 2017) and both clinical and non-clinical staff should be included with all levels of experience catered for (Chesham & Dawber, 2019).

Proactive pre-incident training interventions can improve perceptions of organisational support and self-efficacy. Nurses who undergo PFA training have an improved perception of their preparedness for PTEs and improved general self-efficacy (Kılıç & Simsek, 2019). Increases in individual resilience and perceived organisational support are seen after the delivery of PFA training, with a direct correlation between individual resilience and perceived organisational support (Hechanova et al., 2019). The delivery of proactive training providing reassuring information regarding the acute stress reaction, skills and tools to support coping, resilience and the development of self-efficacy appear to be very beneficial.

In addition, training for leaders and managers in promoting general workplace wellbeing, and in conducting wellbeing conversations with individual staff, provide a bedrock of psychological resources and safety that can be drawn on at all times but including following a PTE. Further, support via a manager-assist function of an EAP is likely to be helpful for managers. This function can provide access to advice and support in the hours, days and weeks following a PTE.

Conclusion

A review of international literature makes a compelling case to suggest that not only PTEs, but also other surrounding work-related stressors, can have an impact on staff working in healthcare. A preventative approach to mitigate against the psychological impact that can accumulate from exposure to PTEs and other work-related stressors involves:



The literature provides evidence of the intervention elements and approaches that can mitigate the negative impacts that can occur through an uncoordinated response. However, no comprehensive or consistent model of response has been developed for use, nor has a model focused on taking a preventative approach to mitigate against the experience of psychological impact as a result of the PTE. This paper aims to provide the conceptual and evidentiary foundation for the development of such a model for Victorian health services.

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