POSITIVE MENTAL HEALTH IN YOUNG ADULT FIRE AND EMERGENCY SERVICE PERSONNEL

Final Report

















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We acknowledge the Traditional Custodians of the lands on which this research project was conducted. We acknowledge and value the deep and ongoing connection Aboriginal and Torres Strait Islander peoples have to country and cultural beliefs and pay our respects to Elders past, present, and emerging.

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EXECUTIVE SUMMARY

Background

In Australia, fire and emergency service agencies rely on volunteers to protect local communities. To ensure the ongoing viability of these essential services, it is critical to identify ways to ensure that engagement in these roles can be sustained across the volunteer's lifespan. In recent years, attention has been given to the importance of mental health and wellbeing for fire and emergency service personnel, an essential element of retention and sustainable engagement in the role. A recent study showed that the average age of volunteer fire and emergency service personnel in Australia is approximately 55 years (Beyond Blue Ltd., 2018). It is, therefore, necessary to understand how to best support younger volunteers to ensure that the wellbeing of the entire voluntary workforce can be maintained. Despite this need, to date, there remains a paucity of research, information and practice guidelines on optimal support strategies specifically aimed at young volunteers. This project aimed to understand how best to support and promote good mental health and wellbeing for young adult volunteers (aged 16–25 years) in fire and emergency service organisations.

Research

The research activities for this project took place between June 2020 and March 2021 and consisted of multiple iterative phases, as follows:

- 1. A rapid systematic review of existing research literature was undertaken on mental health in young adult fire and emergency service volunteers aged 16–25 years (June 2020).
- 2. An analysis of existing data from previous surveys focused on mental health and wellbeing in the fire and emergency services, using data available on 18–25 year-old volunteer and career personnel. Datasets that were re-analysed for the present project were taken from the Answering the Call (AtC) survey of police, fire, and emergency services personnel, conducted in late 2017 (Beyond Blue Ltd., 2018), and the Mental Health and Wellbeing Survey conducted with Metropolitan Fire Service (MFS) firefighters in South Australia in 2016 (Centre for Traumatic Stress Studies, 2017).
- 3. A survey of mental health, wellbeing and experiences in the emergency service volunteer role for 16–25-year-old fire and emergency service volunteers in Australia, conducted between September and December 2020. The survey was completed by 192 fire and emergency service volunteers aged between 16 and 25 (mean age 21.1 years), with complete data available for mental health outcome analyses for 138 participants. All states and territories were represented in this survey, with 62% of participants from regional or rural locations.
- 4. An environmental scan of existing programs to support mental health and manage psychosocial risks and hazards in fire and emergency service agencies. Twelve semistructured interviews were conducted with fire and emergency service agency representatives between October 2020 and January 2021.
- 5. A series of five focus groups conducted with young adult fire and emergency service volunteer representatives from all states and territories in Australia, held between December 2020 and January 2021. These focus groups aimed to understand the perceived facilitators and barriers to engaging in mental health supports, the differences in support needs for younger v. older volunteers and the impacts of COVID-19 on the volunteer experience.

Data collected across these five phases were synthesised with existing practice frameworks for supporting mental health in fire and emergency service personnel to produce a Wellbeing

Framework for young volunteer mental health (Chapter 9). This framework was then reviewed with eight fire and emergency service agency representatives from across Australia between February and March 2021 to ensure that the framework was applicable and feasible to be implemented across agencies.

Findings from the online survey and focus groups were also used to produce an information guide to support mental health for young volunteers that was co-designed with young fire and emergency service volunteers.

Research Findings

Key Findings: The volunteer role experience

- The rapid review of the international research identified that exposure to potentially traumatising events is common.
- Previous Australian research (AtC and the MFS Health and Wellbeing Survey) identified that 25% of young volunteers had experienced an event that affected them deeply in the course of their volunteering and that 4 in 5 young firefighters had experienced at least one stressful event in the course of their role.
- A large proportion of young volunteers (75%) had an active role in the 2019–2020 Australian bushfires, with 44% also living in a bushfire affected area.
- Young volunteers generally perceived that their volunteer role benefited their wellbeing via a sense of contributing to the community but also reported experiencing stressful impacts due to the need to balance multiple roles (e.g., work, study and volunteering).

Key Findings: Mental health outcomes

- International research showed elevated anxiety, depression and post-trauma symptoms in many young fire and emergency service personnel.
- Australian research conducted in 2017 (Beyond Blue Ltd., 2018) identified:
 - Higher levels of probable post-traumatic stress disorder (PTSD) in young volunteers (8.8%) compared to older volunteers (4.7%).
 - Close to 25% of those young volunteers who experienced high psychological distress or probable PTSD did not perceive that they had a problem requiring support, suggesting the need for improving mental health literacy in this cohort.
 - Several risk factors for mental health concerns, including exposure to childhood trauma, lower self-worth, lower education, regular consumption of alcohol, more significant perceived work stress and not accessing psychological support following exposure to a potentially traumatising event. Lower levels of social support from friends and family were also associated with increased risk for MH concerns.
 - Several protective factors for mental health concerns, including high individual resilience and conscientiousness, in concert with high levels of perceived social support from friends.
- In the 2020 online survey:
 - Young volunteers reported high levels of psychological distress (20% in the 'risk of mental health concerns' range) and high wellbeing (95% moderate to high wellbeing).
 - COVID-19 impacts were experienced by many young volunteers, with 72% reporting negative mental health impacts from the pandemic.
 - Self-compassion, mindfulness, and the use of engaged or active (rather than avoidant) coping strategies were associated with improved mental health among young volunteers.
 - Disengaged (or avoidant) coping strategies were associated with increased risk for mental health concerns for young volunteers.

- Young volunteers believed that they had good skills for identifying and responding to potential mental health concerns in others but had less well-developed skills for identifying mental health concerns in themselves.
- Young volunteers reflected that they had strong values in providing care and support for others, consistent with their volunteer role. At times, this value of caring for others took precedence over caring for themselves (e.g., engaging in self-care).

Key Findings: Agency-based support for mental health in young adult volunteers

- Agency representatives in 2020 acknowledged:
 - o The importance of supporting mental health.
 - That support for mental health existed across all levels of the agencies (including to the executive level).
 - The degree to which this support was reflected in the operational workplace or volunteer role culture varied across brigades, groups and units.
 - That approaches to mental health within agencies were predominantly reactive (i.e., responding to the identified risk of mental health concerns) rather than functioning proactively.
 - There is less of a focus on promoting positive mental health.
 - There is currently no specific mental health strategy or supports targeted explicitly to young adult volunteers or personnel.
- According to young volunteers in 2020:
 - Mental health-related stigma remained present within many units, groups, and brigades, particularly for older volunteers and personnel.
 - Debriefing followed by peer support and employee assistance programs (EAP) were the most commonly accessed support services provided by agencies.
 - Debriefing was perceived as the most valuable source of agency support, followed by employee assistance programs, peer support and online programs.
 - Support from family and friends, followed by general practitioners, were the most utilised (and found to be most useful) sources of community mental health-related support.
 - Social media, although commonly used, was perceived to be a less useful mental health support.
 - Operational debriefings, particularly those conducted informally, were valued and perceived as useful but could be enhanced by including information on mental health-related responses to incidents and provision of support options (including the process of normalisation).
 - Psychological safety was highlighted as an essential discussion point with volunteer peers and colleagues regarding mental health.

Synthesis and Framework Development

The data obtained from this mixed-methods project were synthesised and adapted in accordance with relevant practice frameworks to produce a Wellbeing Framework for Young Fire and Emergency Service Volunteer Mental Health. This framework identifies goals and actions across four pillars to support mental health (Promotion, Prevention, Protection and Intervention) within three specific contexts relevant to the fire and emergency service volunteer role: Culture, Communication and Capacity Building.

Specific goals and actions for each context are detailed in the Wellbeing Framework and are briefly summarised below (please see Wellbeing Framework, Chapter 8, for further detail).

Culture

- Address mental health stigma
- Normalise and promote support seeking
- Prioritise mental health and psychosocial safety

Communication

- Diversify communication channels for mental health related information, including provision of information to volunteer friends and family
- Promote positive mental health related information across communication channels
- Include mental health and support information in operational debriefing conversations

Capacity Building

- Include mental health related information in induction and training materials
- Mental health related information to include a focus on wellbeing skill development
- Access to information supports and options for reporting psychosocial hazards to be able to be completed confidentially

Research Outputs

- Young Volunteer Wellbeing Framework (Chapter 8)
- Agency Implementation Guide (Chapter 9)
- Care4Guide to mental health for young fire and emergency service volunteers (Chapter 10)

How the Research Could Be Used

- The suggestions provided in the framework are intended as a 'best practice' guide for agencies to support practices already in place or offer options to shift practices to promote and maintain young volunteer mental health.
- Guidance for implementation of the Wellbeing Framework has been provided in the Agency Implementation Guide. The implementation indicators in the guide are intended as examples of possible agency practices and are not exhaustive; agencies may develop and implement their own specific actions to assist in meeting relevant goals within the framework.
- The Care4Guide to mental health for young fire and emergency service volunteers will be provided to agencies in different formats to allow for it to be promoted through training, provided in recruitment materials, and made available via multiple channels (e.g., agency intranet, printed in hard copy, shared via social media platforms). Included in the Care4Guide is the suggestion to share the information, particularly the support pathways and resources, with family and friends. This approach recognises the importance of family and friends in providing support to young volunteers.

1 INTRODUCTION

1.1 Overview

Fire and emergency service personnel, particularly those who volunteer, contribute in innumerable ways to their communities and to Australian society more broadly. Engaging in such a role brings the benefits of connecting with like-minded others and a valued sense of contributing to the community, benefiting mental health and wellbeing (Son & Wilson, 2012). Concurrently, however, fire and emergency service personnel are more likely than the general population to be exposed to potentially traumatic events (PTE), are at higher risk for developing mental health conditions, and are at two-fold increased risk of suicidal ideation (Beyond Blue Ltd., 2018). Therefore, maintaining good mental health for personnel is increasingly recognised as an integral part of the sustainability of the fire and emergency services. Maximising the productivity and retention of younger early-career volunteers is particularly important, given that over half of the current volunteer force across many emergency services (ambulance, fire and rescue, state emergency service) exceeds 55 years of age (Beyond Blue Ltd., 2018). To ensure the sustainability of the fire and emergency services broadly and the volunteer force more specifically, recruitment and retention of younger volunteers is imperative.

While numerous individual, social and organisational factors have been identified as contributing to mental health and, thus, the sustainability of volunteering, mental health support frameworks, along with research and resources for the mental health of fire and emergency service personnel have focused on outcomes across the age range and length of service (Varker et al., 2018), with limited consideration given to developmental factors that may impact initial uptake and engagement. In particular, emerging adulthood (the period between ages 16–25 years) is recognised as a specific phase of development that has its own particular constellation of psychosocial and demographic correlates (e.g., identity exploration and openness to possibility; Arnett, 2000). Australian young people tend to access support for mental health difficulties through different means than traditional face-to-face mental health services or programs, including from peers, parents and sourcing information regarding mental health online (Mission Australia & Black Dog Institute, 2017). Uptake of formal mental health programs (e.g., school counselling) can also be limited (Rickwood et al., 2007). Thus, a 'one size fits all' approach to mental health across emergency service personnel may not be acceptable to the younger adult cohort. Of concern, younger volunteers were reported in the AtC study into the mental health of fire and emergency responders in Australia to have higher levels of self-reported psychological distress and lower levels of resilience than older volunteers (Beyond Blue Ltd., 2018). Early intervention is recognised as an essential approach for preventing and minimising mental health conditions (McGorry & Mei, 2018).

The present research project was developed in response to a call to action from agencies that the Australasian Fire and Emergency Service Authority Council develop data-driven approaches for supporting mental health, aligned with best practice guidelines and targeted specifically at young fire and emergency service volunteers, supported by practical guidance to agencies for implementing these approaches.

1.2 Project Aims and Objectives

The overall aim of the project was to understand what can be done at an individual, local and organisation-wide level to minimise the short- and long-term impacts of potentially traumatising events and to support and promote good mental health and wellbeing for young adult (16–25-year-old) volunteers in emergency service organisations.

Specific objectives for the project were as follows:

- To summarise the international and national evidence concerning the prevalence of mental health symptoms and/or psychological distress in young fire and emergency service volunteers and individual, social and organisational risk and protective factors for mental health.
- 2. To create a summary of self-reported mental health and wellbeing in the context of risk and protective factors among young Australian emergency service personnel using data from the Answering the Call: National Health and Wellbeing Study of Police and Emergency Services and the Metropolitan Fire Service Health and Wellbeing Study.
- 3. To develop an understanding of the existing programs and services utilised by young emergency services volunteers to support their mental health and wellbeing following a significant Australian disaster (the 2019–2020 bushfires) and during a worldwide pandemic, as well as their perceived usefulness.
- 4. To develop an understanding of the current psychosocial safety climate within the Australian emergency service sector as it relates to young fire and emergency service personnel, as well as the mental health programs and supports available to and utilised by these young adults.
- 5. To develop an understanding of the young emergency services volunteers' perspective of perceived facilitators and barriers to accessing relevant mental health services both within and outside the organisation and appropriate sources and type of information that are most likely to be accessed by those volunteers.
- 6. To develop a Wellbeing Framework for fire and emergency service organisations to support young adult volunteers' mental health and wellbeing.
- 7. To develop a plain language information guide for supporting mental health and wellbeing targeted at the young adult volunteer cohort.

This report presents information and outcomes for these objectives and provides recommendations for agency-based implementation of the proposed Wellbeing Framework for Young Fire and Emergency Service Volunteers. The outputs of this project are informed by data from this cohort and are aligned with the available evidence for best practice in relevant contexts. It is hoped that the framework and its associated implementation guide will assist agencies in providing informed psychosocial support for the mental health of their young volunteers, thereby contributing to the sustainability of the volunteer service among fire and emergency service agencies. Please note that key terms used throughout the report are defined in the Glossary (Chapter 12).

2 METHODOLOGY

This research involved a series of iterative stages that collectively informed the development of a data-driven Wellbeing Framework, aligned with best practice, for supporting mental health in young adult fire and emergency service volunteers.

The first stage involved a rapid systematic review of existing published research on mental health outcomes for young fire and emergency service personnel, including considering risk and protective factors contributing to mental health outcomes. This stage provided an indication of the present state of published research in this area. To further contribute to an understanding of research that had been conducted with young personnel, the second stage of the project focused on a re-analysis of existing datasets from previous studies investigating mental health in fire and emergency service personnel, specifically the Answering the Call (AtC) and Metropolitan Fire Service (MFS) Health and Wellbeing Surveys that were conducted between 2016 and 2017. For the current project, an investigation of mental health outcomes for those aged 25 years and under was conducted. Stage 3 subsequently involved an online survey for young (16-25 year-old) fire and emergency service volunteers and investigated psychological outcomes, experiences in a volunteer role, including during the 2019-2020 bushfire season, along with the perceived availability and accessibility of support services. Stage 4 involved two components. Firstly, a series of semi-structured interviews were conducted with fire and emergency service agency representatives to determine the present status of programs and resources available to support young volunteers' psychosocial safety and mental health. Focus groups were subsequently conducted with young volunteers and operational leadership (e.g., brigade captains, first officers and unit controllers). These focus groups aimed to understand the mental health needs for young adults in the fire and emergency services, perspectives on the extent to which current services and programs meet those needs, and to identify what further supports and resources may be of benefit to this cohort.

Each phase of the research is outlined in detail below.

2.1 Rapid Review

The rapid review was designed to capture all national and international research focused on the mental health and wellbeing of young adult fire and emergency service volunteers and personnel. The protocol followed the Cochrane Rapid Review Guidelines (Garritty et al., 2020).

The search strategy comprised three main subject headings:

- 1. emergency service personnel/volunteers
- 2. young adults
- 3. mental health and wellbeing.

The search was conducted using the PubMed, Embase and PsycINFO databases. It yielded 6,175 studies for review, of which 13 studies included relevant data according to the inclusion and exclusion criteria for this review. Studies were included if they investigated psychological outcomes for young adult fire and emergency service personnel aged 16–26. In terms of age range, studies were required to either report on outcomes for participants aged under 26 years or have a mean age of ≤26. Studies were excluded if data were not able to be extracted for participants aged under 26. To maximise the reach of the review, grey literature (e.g., dissertations) were also included.

2.2 Secondary Data Analysis

The primary dataset analysed in the secondary data analysis was drawn from AtC, the national survey of the mental health and wellbeing of police and emergency services. This survey was

conducted between October 2017 and March 2018 by The University of Western Australia, with funding from Beyond Blue and the BNHCRC. Some 33 out of a possible 36 police and emergency service agencies across Australia took part in the survey, with participation from 14,868 employees, 5,485 volunteers, and 661 former employees. The AtC analysis contained weighted estimates based on responses from volunteers in the fire and rescue and state emergency service sectors only. It should be noted that the scope of AtC was volunteers aged 18 years or older; therefore, the estimates provided for young volunteers from the secondary data analysis (18–24 years) do not match precisely the age range of the young volunteers included in the present research project (16–25 years).

Additional information was provided from the Metropolitan Fire Service dataset, drawn from the MFS Health and Wellbeing Study. Results were based on survey responses weighted to represent the entire MFS population, based on known characteristics for the whole population. Similar to AtC, the scope of the study was firefighters aged 18 and over; therefore, estimates are for those aged 18 to 25 years only. To be noted, only a minimal number of participants in this cohort responded to the mental health measures for this study. Results should be interpreted with caution and should not be assumed to represent all young adult firefighters in Australia. Analyses were attempted to compare results for retained (volunteer) v. career (full-time) firefighters in the 18–25-year age group, but there were insufficient respondents in the retained group to facilitate this. The results presented are therefore representative only of career firefighters.

2.3 Survey of Young Volunteer Mental Health and Supports

The survey was conducted between September and December 2020 and administered online using the Qualtrics online survey platform (https://www.qualtrics.com). Eligible participants were those aged between 16 and 25 years who were actively involved in a volunteer role in a fire and/or emergency service agency in any capacity. Advertisements for the study were communicated through fire and emergency service agency newsletters, email lists and social media channels and included a link to the survey. Those who followed the link were taken to an information sheet about the study that they could review before indicating consent to participate. Consent was obtained from a parent or guardian for those aged under 18.

The questionnaire consisted of screening measures for mental health symptoms and psychological factors associated with mental health, along with questions relating to the availability, uptake and perceived usefulness of organisational and community supports. Participants were additionally asked to provide demographic details. The full questionnaire took an average of 26 minutes to complete.

2.3.1 Survey Questions and Measures

2.3.1.1 Demographic Information

Demographic questions included state, zone (metropolitan or regional/rural), age, gender, Aboriginal or Torres Strait Islander background, marital status, dependent children (yes/no), living circumstances, financial stability, educational qualification, current educational status, primary service of volunteering, duration of volunteering, volunteer role in other emergency service organisations, nature and frequency of central volunteer role, employment status and leave provided by an employer.

2.3.1.2 Bushfire Exposure

To gauge the participants' exposure to potentially traumatising events during the 2019–2020 bushfire season (September 2019–March 2020), respondents were initially asked if they lived in an area affected by the bushfires. Those participants responding 'yes' selected from a list of possible ways in which they were affected, relating to their property, evacuation requirement, loss of

pets/livestock, and the effect on close family and friends. Participants that indicated they had an active volunteer role were asked questions about the nature of their role and time spent in the role during the bushfire season.

2.3.1.3 COVID-19 Impact

The participants were asked to rate the impact of the COVID-19 pandemic on their physical and mental health using a five-point Likert scale with responses ranging from 'Large negative impact' to 'Large positive impact'. They also indicated the impact of COVID-19 on their volunteer role, selecting from a four-point scale from 'No impact' to 'Unable to conduct the role'.

2.3.1.4 Mental Health Measures

Participants completed five validated screening measures relating to mental health to provide an insight into their emotional, social and psychological wellbeing, psychological distress, trauma exposure, alcohol use and physical distress symptoms. The measures included were the Mental Health Continuum—Short Form (MHC-SF), Kessler Psychological Distress Scale (K6), Primary Care PTSD Screen for DSM-5 (PC-PTSD-5), Alcohol Use Disorders Identification Test—Concise (AUDIT-C) and the Somatic Symptoms Scale, eight-item version (SSS-8). A full description of the measures is included in the Glossary (Chapter 12).

2.3.1.5 Modifiable Skills Measures

Participants completed four measures of mental health and wellbeing skills to indicate skills that may be associated with improved mental health outcomes, namely mindfulness, self-compassion, coping, and mental health literacy. These skills show consistent associations with reduced risk for psychopathology and improved wellbeing (Burns & Rapee, 2006; Counson et al., 2019; Gloria & Steinhardt, 2014; MacBeth & Gumley, 2012). The measures for self-compassion, mindfulness, coping and mental health literacy were, respectively, the Self-Compassion Scale-Short Form (SCS-SF), Mindful Awareness Attention Scale (MAAS), Coping Strategies Inventory—Short Form (CSI-SF) and the Mental Health Literacy questionnaire—Young Adults (MHLq-YA). A full description of these measures is included in the Glossary (Chapter 12).

2.3.1.6 Supports

2.3.1.6.1 Organisational Supports

Participants were provided with a list of possible services, programs and training courses related to improving mental health and wellbeing that may be offered by the organisation for which they volunteer and asked to select the options offered by their organisation. For the options selected, participants indicated if they had accessed the service before the 2019–2020 bushfire season, during or following the bushfires, or in response to the COVID-19 pandemic. For each support accessed in response to the bushfires or COVID-19, the participant rated its usefulness on a five-point Likert scale ranging from 'No use at all' to 'Extremely useful'. For the services the participant had not selected as provided by their volunteer organisation, respondents were asked to select the options they would likely access for mental health support if it were available. Please refer to the Glossary (Chapter 12) for an explanation of the conceptualisation of 'debriefing', as used in the current project.

2.3.1.6.2 Community Supports

A list of possible sources of support information and services relating to improving mental health and wellbeing available in communities was provided to participants from which respondents selected which supports were accessed prior to, during or following the 2019–2020 bushfire season and/or in response to COVID-19. Participants rated their usefulness on a five-point Likert scale ranging from 'No use at all' to 'Extremely useful' for the supports selected.

2.3.2 Statistical Analysis

Statistical analysis was conducted using IBM SPSS Statistics, Version 27 (IBM Corp., 2020). Results were summarised using descriptive statistics (e.g., mean or proportion).

To examine the associations between mental disorders and skills that promote positive mental health, regressions were performed to model these associations. Initially, simple regressions were conducted separately with each of the predictor variables of demographic characteristics, bushfire exposure, and perceived COVID-19 impact for each mental health outcome (see Appendix 1 for a complete list of predictor variables used as inputs for separate unadjusted regression models). Along with the four positive mental health variables of self-compassion, mindfulness, coping strategies and mental health literacy, those predictors that showed significant associations with the mental disorder variables were subsequently entered simultaneously into a regression model to determine the unique variance explained by each of the predictors while controlling for the remaining variables in the model.

These analyses were thus able to determine whether modifiable psychological skills (e.g., coping strategies, mindfulness, self-compassion) were associated with reduced risk for mental health concern and increased wellbeing, exceeding the contribution of other relevant factors such as residing in a rural/remote (as opposed to a metropolitan) location, gender, the nature of the volunteer role, or exposure to potentially traumatising events.

Full details of the regression analyses are in Appendix 2.

2.4 Semi-Structured Interviews

The semi-structured interviews were conducted with 12 representatives from fire and emergency service agencies who have oversight responsibility or are involved in supporting young volunteers aged between 16 and 25. The 12 agency representatives, while from different agencies across all states and territories in Australia, all represent broadly comparable roles in terms of senior oversight and psychosocial safety management of young adult volunteers.

The purpose of these interviews was to gain a greater understanding of the status of the current psychosocial safety climate and support available within Australian fire and emergency service organisations for young adults. Each interview was recorded and consisted of questions prompting discussion relating to four broad areas:

- 1. the role of the interviewee and of young volunteers in their agency
- 2. psychosocial risks and hazards and how these are managed
- 3. supports available and uptake and feedback about these supports
- 4. how the COVID-19 pandemic has impacted young volunteers, their roles, mental health and supports available.

This series of semi-structured interviews followed a collective case study approach. This style of investigation aims to establish patterns of findings across cases by exploring differences and similarities within and between cases (Yin, 2018). Following the interviews, the recordings were transcribed, and responses were analysed using a collaborative thematic analysis approach. This iterative technique encompasses six phases of analysis: familiarisation, coding, initial themes, reviewing themes, defining and naming themes, and reporting (Braun & Clarke, 2006), of which reviewing, defining, and reporting were undertaken collaboratively.

2.5 Focus Groups

The focus groups were conducted with fire and emergency service agency representatives across all Australian states and territories. There were five focus groups with young adult volunteers, totalling 20 volunteers aged 17–25 years, representing a broad cross-section of fire and emergency volunteers from urban, peri-urban, rural, and remote brigades. Additionally, one leadership focus group was conducted with brigade captains and unit leaders who have oversight for young volunteers, with six representatives in total.

The purpose of the focus groups was to gain a greater understanding of young volunteers' motivations for volunteering, role and support differences for younger adults compared to older adults, barriers to care, understanding of mental health concerns in self v. others, differences between urban, rural and remote locations, and the impacts of the COVID-19 pandemic. The discussion was broadly guided by the introduction of topics, although the conversations were also allowed to evolve naturally during the focus groups.

Consistent with the standard approaches for conducting semi-structured interview analysis, the focus groups were recorded, transcribed, and analysed using a collaborative thematic analysis approach (Braun & Clarke, 2006) to uncover convergent and divergent themes across jurisdictions, agencies, and roles.

2.6 Knowledge Synthesis

Following all phases of data collection, a knowledge synthesis was undertaken. A convergent parallel design informed the synthesis of analyses from these research phases (Creswell & Plano Clark, 2011). This synthesis model involves comparing and relating the results from each phase to integrate findings across phases. Results from each phase were tabled collectively to identify converging threads, linking findings across multiple research phases, representing a synthesised understanding of risk, protective and modifiable factors involved in young volunteer mental health and wellbeing.

The knowledge synthesis is a component of the broader knowledge translation strategy. Straus et al. (2009) detail that the Canadian Institute of Health Research formally defines knowledge translation as a "dynamic and iterative process that includes the synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more effective health services and products, and strengthen the health care system" (Straus et al., 2009, p. 165).

In this project, knowledge translation involved developing evidence-based goals and actions that address modifiable factors identified through the knowledge synthesis stage to inform the Wellbeing Framework. Importantly, this process has been undertaken with ongoing consultation with stakeholders from the commencement of the project through to feedback provision and validation of synthesised findings and the final framework.

The Beyond Blue 'Good practice model for mental health and wellbeing in first responder organisations' framework is guided by the best available evidence for best practice (Beyond Blue Ltd., 2016) and provided the conceptual foundation for framework development in this project. In the Beyond Blue framework, mental health and wellbeing are addressed through the three pillars of Promotion, Protection and Intervention, with Prevention included in this project as an additional pillar. While this research project focuses on promoting positive mental health and wellbeing through a proactive and preventative approach, it is also necessary to include information about support for managing mental health conditions in the intervention pillar.

This knowledge synthesis approach was data-driven, based on the mixed-methods research findings, and was also guided by evidence-based frameworks for supporting mental health. The resulting Young Volunteer Wellbeing Framework and guidelines are aligned with current best practice for

mental health support and intervention for this population in this context (e.g., the Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Post-Traumatic Stress Disorder and Complex PTSD (Phoenix Australia, 2020)). Examples of how the framework recommendations link with current best practice guidelines are provided in Chapter 8: 'Young Volunteer Wellbeing Framework'.

2.7 Desktop Assessments

Desktop assessment interviews were held with eight fire and emergency service representatives, including one representative from each of the states and territories across Australia. The draft version of the framework was presented to each of the agency representatives. Each provided feedback on the feasibility and relevance of each goal and action within the framework. While ongoing stakeholder consultation was conducted throughout the project, these desktop assessments entailed a structured approach to focus on the content and the implementation feasibility of the draft framework. The feedback was used to refine the framework, and suggestions concerning its implementation in differing contexts were included in the implementation guide for the framework.

Of the eight fire and emergency service representatives engaged for this desktop assessment phase, six representatives had also taken part in the semi-structured interview phase of the research. These interviews allowed the participants to validate their contributions with the draft framework and to provide additional insights.

2.8 Methodological Strengths and Limitations

The methodological approach used for the current project has both strengths and limitations. Firstly, this project is, to our understanding, the first to focus specifically on young fire and emergency service volunteers in Australia and is thus able to provide an insight into the unique experiences of this age group. The mixed-methods design of the project allowed the integration of quantitative findings with detailed perspectives gathered through qualitative investigation. The qualitative component is essential for research in this age group. It provided insight into young volunteer needs and preferences and the unique challenges faced in fire and emergency service volunteer roles. Additionally, the current project explored mental health and support for mental health in the young volunteer role, incorporating agency leadership perspectives and the young volunteers themselves.

Stakeholder involvement throughout the life of the project represents a significant strength of this research. The project working group comprised personnel from multiple fire and emergency service agencies across Australia, who were consulted from project conception through to completion and who assisted with shaping the research to maximise the applicability at an agency level. The young volunteer advisory committee (YVAC), comprising young volunteers from agencies nationally, was also involved throughout the project. The YVAC particularly contributed to the development and design of the knowledge product (Care4Guide: Chapter 10), increasing its relevance and potential uptake for this age group.

Lastly, this project resulted in multifaceted outputs that are data-driven, practical, and detailed guidance to assist agencies with implementation, thereby potentially increasing the likelihood of uptake and impact.

Regarding limitations of the research, the project was focused on young adult fire and emergency service volunteers. This may limit the applicability of the study findings to other cohorts, including volunteers outside of the target age range and employed career personnel. Resource constraints meant that not all phases of the research (e.g., online surveys and focus groups) were able to obtain a sample that was representative of all fire and emergency service volunteers across Australia, with particularly low levels of participation in some states. The present findings may not necessarily,

therefore, apply to all young fire and emergency service volunteers across Australia. A further limitation of the project was the emergence of the COVID-19 pandemic during the project. This itself may have impacted data collection and the project more generally in ways that could not be measured.

Finally, while they align with current best practice, the recommendations arising from this research have not yet been formally evaluated in this population. This provides the opportunity for future researchers to evaluate and report on the implementation of the outputs from this project.

3 SUMMARY OF RAPID REVIEW AND DATASET RE-ANALYSIS

Rapid Review and Dataset Re-analysis Key Findings Fact Sheet



POSITIVE MENTAL HEALTH IN YOUNG ADULT FIRE AND EMERGENCY SERVICE PERSONNEL

RAPID REVIEW AND DATASET REANALYSIS: KEY FINDINGS FACT SHEET

The present investigation aimed to develop an understanding, based on a review of international literature and on Australian based population data, of the experiences of mental health and wellbeing of young adult fire and emergency service personnel, along with the risk and protective factors that contribute to mental health in this cohort.

The rapid evidence review involved screening over 6000 research studies from diverse samples that investigated mental health in fire and emergency service personnel. Of these, only 13 provided data on young adult personnel, indicating that this age group is seriously underrepresented in fire and emergency services mental health research. The data reanalysis of young fire and rescue and SES volunteers was undertaken using the Answering the Call study (1), and of young firefighters using the South Australian Metropolitan Fire Service Health and Wellbeing study (2)

Prevalence of Mental Health Concerns





Stressful Events

Around 1 in 4 young volunteers have experienced one or more stressful events that affected them deeply during the course of their volunteering (1). More than 4 in 5 experienced at least one stressful event (2).



Mental Health Literacy

Almost 1 in 4 young volunteers experiencing mental health concerns do not perceive that they have a problem requiring support. Improving mental health literacy may be an important step towards supporting volunteer mental health



Perceived need for help

Despite high levels of psychological distress, a majority (64%) of young volunteers reported no functional impact of this distress (1), and a majority (78.9%) of young firefighters reported their career was 'not at all' impacted by mental health (2). 1 in 4 young volunteers with probable PTSD reported awareness of their mental health

concerns, but did not believe they needed help or support (1) suggesting the importance of promoting early intervention for mental health. 14% sought help but needed more support, and 26.9% received sufficient help. All young firefighters reported that mental health concerns would not prevent them from serving as a firefighter (2).

Risk Factors

International evidence suggests that there are multiple risk factors for mental health in young emergency service personnel. Individual risk factors include childhood trauma, lower self-worth lower education, younger age, and regular consumption of alcohol. Social risk factors include lower levels of social support from friends and family

work were predictors of depression and PTSD.

Protective Factors

emergency service personnel or volunteers. Individual factors

Higher levels of support from friends was identified as a



Importance of this study

This knowledge synthesis uncovered several important points. Firstly, young adult emergency service personnel and volunteers are an extremely underrepresented population in the international research literature, highlighting the need for research in this age group

Secondly, the existing Australian evidence suggests that this population experiences high levels of psychological distress and probable PTSD, however despite this, do not perceive they have a problem and/or do not seek help

Interestingly, international research findings suggest that those with past trauma experiences may be drawn to emergency services roles. This has important implications, given that previous lifetime trauma is a risk factor for mental health concerns.

1. Beyond Blue Ltd. Answering the call national survey, Beyond Blue's National Mental Health and Wellbeing Study of Police and Emergency Services - Final report. 2018. 2. Centre for Traumatic Stress Studies. MFS Health & Wellbeing Study. 2017

















For more information, please contact the authors of the infographic: Dr Amanda Taylor, amanda taylor@adelaide.edu.au, and Dr Jane Cocks, jane.cocks@adelaide.edu.au.

3.2 Summary of Literature (Rapid Evidence Review, AtC and MFS Health and Wellbeing Study) on Mental Health in Young Fire and Emergency Service Personnel

3.2.1 Demographics and Exposure

Thirteen studies were included in the review, with samples from Brazil, China, France, Turkey, Israel, South Africa and the United States (Dieke, 2011; Fjeldheim et al., 2014; Huang et al., 2013; Huang et al., 2019; Kiliç & Inci, 2015; Lubin et al., 2007; Maia et al., 2015; Palgi et al., 2009; Reynaud et al., 2013; Roditi et al., 2019; Wang et al., 2010; Wang et al., 2011; Zhang et al., 2011). The studies discussed various service types, including firefighters, police, rescue workers, military first responders, medical technicians and paramedics. There was also variation in event context, from earthquakes to train crashes. The majority of studies used a quantitative design involving self-report measures of psychological symptoms, with one qualitative study investigating the benefits of the volunteering role.

3.2.2 Mental Health Outcomes

3.2.2.1 Post-Traumatic Stress Disorder

Four studies reported PTSD rates, ranging from 0.7% up to 16% of young emergency responders, with two studies finding rates between 6 and 6.5% within their samples (Huang et al., 2013; Wang et al., 2011). The highest prevalence of PTSD, 16%, was found in a sample of South African first-year paramedics, which could be explained by a high level of lifetime exposure to traumatic events (94%) indicating potential cumulative exposure (Fjeldheim et al., 2014). The lowest, 0.7%, was among a sample of medics but may underestimate the actual PTSD rate given the data were obtained retrospectively (Lubin et al., 2007). Three studies reported mean PTSD symptom scores below the threshold for probable PTSD (Huang et al., 2019; Maia et al., 2015; Roditi et al., 2019).

3.2.2.2 Depression and Anxiety

Three studies found elevated levels of depression and anxiety in young emergency service personnel. Fjeldheim et al. (2014) found a high rate of probable depression (28%) among paramedic trainees, Wang et al. (2010) found that 77.3% of police recruits had developed some depressive symptoms after 12 months of service, while Zhang et al. (2011) reported depression in 7.2% of young soldiers in China deployed as emergency rescue workers after a natural disaster. The latter study also found that 6.6% of soldier volunteers reported anxiety.

3.2.2.3 Other Physical and Mental Health Impacts

Two studies provided further evidence that working and volunteering in fire and emergency services has also been associated with other physical and mental health impacts. Fjeldheim et al. (2014) found that nearly one-quarter (23%) of young paramedic trainees were at risk of alcohol abuse, while almost half (49%) of a sample of young soldiers deployed as rescue workers reported experiencing other mental health symptoms (e.g., irritability, restlessness and sadness) one month after the event. Further, close to three-quarters of these soldiers reported concerns with their physical health (Zhang et al., 2011).

No studies included in this review compared the mental health of fire and emergency service personnel to their same-aged peers who were not engaged in a fire and/or emergency service role.

3.2.3 Risk Factors and Protective Factors

3.2.3.1 Individual Factors

3.2.3.1.1 Risk and Protective Factors

Risk factors found to be associated with mental health symptoms included experiences of trauma before commencing the emergency service role, lower levels of education, younger age,

experiencing physical health symptoms, lower self-worth, higher perceived stress and the personality traits of neuroticism (characterised by heightened tendency to experience negative emotions and low emotional stability) and psychoticism (characterised by aggression and interpersonal hostility) (Fjeldheim et al., 2014; Huang et al., 2013; Kiliç & Inci, 2015; Wang et al., 2010).

In contrast, young emergency service personnel with higher levels of resilience (the ability to 'bounce back' following adversity) and personality traits of conscientiousness reported a lower risk for mental health concerns, including post-trauma symptoms (Fjeldheim et al., 2014; Huang et al., 2013).

3.2.3.1.1.1 Factors Connected to Role

With regards to factors connected to the fire and emergency service role, exposure to a potentially traumatising event was associated with higher levels of PTSD (Fjeldheim et al., 2014; Huang et al., 2013; Kiliç & Inci, 2015; Lubin et al., 2007; Maia et al., 2015; Roditi et al., 2019; Wang et al., 2011). An association was also shown between the intensity of exposure (e.g., witnessing death or deceased v. not witnessing) or personal relevance of the experience (e.g., having family members affected by a disaster or witnessing deceased who is personally known) and an increased risk of PTSD or acute stress response.

In terms of personal response to PTEs, one study found that an immediate response to a PTE that involved panic, 'tonic immobility' (feeling as if one is frozen), or dissociation (a feeling of being disconnected or separated from reality) during or immediately following the PTE predicted traumatic stress symptoms (Maia et al., 2015). In emergency medical volunteers, of a range of potential predictors of PTSD symptoms (e.g., number of PTEs, level of self-efficacy), only a hyperarousal response to a PTE was associated with an increased risk for PTSD (Roditi et al., 2019).

3.2.3.2 Organisational and Social Factors

3.2.3.2.1 Risk Factors

Of the studies included in the present review, two studies found that lower rates of social support from family, friends or a significant other were significant predictors of post-traumatic stress symptoms (Fjeldheim et al., 2014; Huang et al., 2013).

Of the organisational factors considered, higher perceived work routine stress in police recruits was associated with depressive symptoms additional to the impact of critical incident stressors (Wang et al., 2010). In a group of military emergency response personnel, not accessing available psychological counselling following exposure to a serious natural hazard (earthquake) was associated with an increased risk of developing PTSD symptoms (Wang et al., 2011).

3.2.3.2.2 Protective Factors

One study (Huang et al., 2019) explored social protective factors for young adult firefighters and found that perceived social support from non-family members, rather than from family members, was associated with lower levels of PTSD in firefighters. The individual personality trait of conscientiousness mediated this effect.

3.2.3.2.3 Positive Health Promotion

In an exploratory study evaluating the benefit of community involvement for risk reduction in adolescents, Dieke (2011) found that engaging in the Medical Reserve Corps (MRC) had a variety of positive impacts on young adults, including preparing them for future careers and providing a focus beyond themselves. This study also found that having an adult advisor increased youth engagement in the MRC.

3.2.4 Gaps in Existing Research

This rapid evidence review identified that research literature on young fire and emergency service personnel is scarce, particularly in Australia. Past research has identified that young people across various emergency service settings experience impacts from trauma exposure and have also identified a number of risk and protective factors at the individual and organisation levels that can contribute to positive mental health. However, the review identified a need for further research to understand better the mental health needs of young fire and emergency service personnel and define the strategies that agencies can implement to support their young personnel.

3.3 Secondary Data Analysis

3.3.1 Demographics and Exposure

3.3.1.1 AtC Demographics

When AtC was conducted in late 2017, there were an estimated 11,900 young volunteers aged under 25 years in the fire and rescue and SES agencies that participated in the survey (Table 1), representing 5.2% of all volunteers in the sector (Beyond Blue Ltd., 2018). The vast majority volunteered in the fire and rescue sector.

Table 1Estimated Number of Fire and Rescue and SES Volunteers in Australia in 2017

Age group	Estimated number	%	95% CI
	Fire and Rescue		
Under 25 years	10,700	5.2	(4.3–6.1)
25–34 years	13,600	6.6	(5.6–7.6)
35 years or over	182,000	88.3	(86.9–89.6)
	State Emergency Service	е	
Under 25 years	1,170	4.9	(4.1–5.7)
25–34 years	2,290	9.6	(8.5–10.6)
35 years or over	20,500	85.6	(84.2-86.9)
	Total		
Under 25 years	11,900	5.2	(4.3–6.0)
25–34 years	15,800	6.9	(6.0-7.8)
35 years or over	203,000	88.0	(86.8-89.2)

Note. CI = confidence interval.

Among those under 25, there were twice as many young male as female volunteers (66.9%), with the majority being single (65.9%) (Table 2). For just over half (55.3%), the highest level of education was the completion of Year 12, but it is likely that, given their age, many were still undertaking tertiary studies. A majority of young volunteers under 25 (51.1%), compared to those aged 25 and above, lived in inner regional areas.

The AtC data show the relatively lower levels of young volunteers in outer regional and remote areas, reflecting the ageing demographic of many of these areas.

Table 2Demographic Characteristics of Fire and Rescue and State Emergency Service Volunteers in Australia, by Age Group

	Und	der 25 years	25	–34 years	35 ye	ears or over
-	%	95% CI	%	95% CI	%	95% CI
Sex—						
Male	66.9	(59.2–74.5)	68.7	(62.7–74.6)	75.4	(73.4–77.5)
Female	33.1	(25.5–40.8)	31.3	(25.4–37.3)	24.6	(22.5–26.6)
Marital status—						
Single	65.9	(58.1–73.7)	26.6	(20.9–32.3)	6.1	(5.0-7.2)
Married/De facto	34.0	(26.2-41.8)	69.7	(63.8–75.6)	81.0	(79.1–82.8)
Widowed, separated or divorced	0.0	(0.0–0.2)	3.7	(1.4-6.0)	12.9	(11.3–14.5)
Born in Australia—	97.8	(96.1–99.5)	93.9	(90.9–97.0)	84.4	(82.7–86.1)
Dependent children—	2.4	(0.5-4.4)	38.5	(31.9–45.1)	24.4	(22.5–26.3)
Highest level of education—						
Secondary school to Year 12	55.3	(47.2-63.4)	17.4	(12.6–22.2)	26.3	(24.2–28.5)
Certificate III/IV	26.8	(19.5-34.0)	43.1	(36.4–49.8)	28.5	(26.3–30.6)
Diploma	6.4	(2.2–10.6)	13.6	(9.1–18.0)	18.3	(16.5–20.2)
Bachelor degree	11.0	(5.9–16.1)	16.7	(12.0-21.4)	13.0	(11.4–14.6)
Postgraduate qualification	0.0	(0.0-1.3)	9.2	(5.6–12.9)	13.9	(12.3–15.5)
Remoteness—						
Major cities	30.1	(22.9-37.3)	31.6	(25.6–37.7)	22.0	(20.1–24.0)
Inner regional	51.1	(42.9–59.2)	37.2	(30.7–43.8)	37.3	(35.0–39.6)
Outer regional	16.1	(9.9–22.3)	24.5	(18.7–30.3)	31.4	(29.2–33.6)
Remote	2.4	(0.5-4.3)	3.8	(1.4-6.1)	7.5	(6.2-8.9)
I move around for my work	0.3	(0.0–0.6)	2.8	(0.8–4.9)	1.7	(1.2-2.3)

As expected, length of service closely mirrored age, with the majority (35.1%) of young volunteers having served for 3–5 years, although 17% had volunteered for 6–10 years, showing strong levels of commitment (Table 3). This commitment was echoed in the time spent volunteering, with over half (52.4%) having been called for duty more than 30 times in the previous 12 months and 6.9% having spent more than 40 hours volunteering in the previous four weeks. Interestingly, although 81.8% of young volunteers were employed, only 13.6% received paid time off to undertake their volunteer role compared to over a third in the older age groups.

Table 3Volunteering Profile of Fire and Rescue and State Emergency Service Volunteers in Australia, by Age Group

	U	nder 25 years	2	5–34 years	35 years or over		
	%	95% CI	%	95% CI	%	95% CI	
Length of service—							
Less than 12 months	16.3	(10.7–21.9)	9.4	(5.4–13.3)	4.6	(3.6–5.6)	
1–2 years	31.6	(23.7–39.6)	15.6	(11.1–20.1)	7.3	(6.2-8.5)	
3–5 years	35.1	(27.3–42.8)	20.7	(15.0–26.5)	13.7	(12.1–15.3)	
6-10 years	17.0	(11.1–23.0)	25.7	(19.7–31.8)	16.0	(14.3–17.8)	
More than 10 years	0.0		28.6	(22.9–34.4)	58.3	(56.0–60.7)	
umber of times volunteering in ast 12 months—							
Haven't been called out or volunteered yet	6.1	(2.5–9.7)	4.3	(1.5–7.0)	5.7	(4.6–6.9)	
1–5 times	13.2	(7.5–19.0)	13.3	(8.5–18.2)	16.0	(14.2-17.8)	
6-10 times	11.7	(6.5–16.8)	7.6	(4.7–10.5)	14.0	(12.2–15.7)	
11–30 times	16.6	(10.4–22.8)	19.5	(14.2–24.9)	24.6	(22.5–26.6)	
More than 30 times	52.4	(44.2–60.6)	55.3	(48.6–61.9)	39.8	(37.5–42.1)	
ours of volunteering in the past ur weeks—							
None	22.8	(15.9–29.7)	15.6	(10.7–20.6)	21.2	(19.1–23.2)	
1–12	33.3	(25.5–41.2)	40.3	(33.7–46.9)	39.9	(37.6–42.3)	
13–24	17.7	(11.2–24.3)	23.4	(17.7–29.1)	20.1	(18.3–22.0)	
25–40	19.2	(13.1–25.2)	15.2	(10.9–19.5)	12.9	(11.4–14.4)	
More than 40	6.9	(3.7–10.2)	5.5	(2.9-8.1)	5.9	(4.8–6.9)	
o you supervise other plunteers? ^a —	34.8	(27.0–42.6)	54.8	(48.2–61.5)	49.1	(46.7–51.5)	
re you in paid employment? a —	81.8	(75.8–87.9)	92.1	(88.5–95.6)	63.1	(60.7–65.4)	
employed, are you provided ith time off to undertake your olunteer role?b—							
No	36.5	(27.6–45.4)	29.9	(23.5–36.3)	30.6	(27.9–33.3)	
Yes, paid	13.6	(7.7–19.4)	34.9	(28.2–41.6)	31.3	(28.7–34.0)	
Yes, unpaid	31.7	(23.2-40.3)	35.9	(29.2–42.5)	36.5	(33.6–39.3)	
Don't know	19.6	(12.5–26.8)	8.7	(4.9–12.4)	6.9	(5.4-8.4)	

3.3.1.2 MFS Demographics

In the MFS in 2016, 89.1% of firefighters aged 18–25 were male, and 10.9% were female, with the proportion of females decreasing in each successive age group. Just over 40% of young volunteers were single (40.6%), and 25.7% had dependent children (Table 4). For a majority (59.4%) of young adult firefighters, the highest completed level of education was a trade or apprenticeship certificate.

^a Percentages indicate a 'Yes' response to the question.

^b Volunteers may have access to both paid and unpaid leave to undertake their volunteer roles

Table 4Demographic Characteristics of MFS Volunteers in South Australia, by Age Group

	18–25 years		:	26–35 years	36 years and over		
	%	95% CI	%	95% CI	%	95% CI	
Sex—							
Male	89.1	(57.4–98.0)	93.6	(89.4–96.3)	98.4	(97.5–99.0)	
Female	10.9	(2.0–42.6)	6.4	(3.7–10.6)	1.6	(1.0-2.5)	
Narital status—							
Married and living together	-		57.3	(47.8–66.2)	77.1	(74.3–79.7)	
De facto and living together	29.7	(7.7–68.2)	30.7	(22.5–40.4)	11.6	(9.7–13.8)	
Married and not living together	-		-		0.8	(0.4–1.4)	
In a relationship and not living							
together	29.7	(7.7–68.2)	6.2	(3.4–10.9)	3.7	(2.7–5.1)	
Not in a relationship	40.6	(13.6–74.8)	5.8	(2.9–11.6)	6.9	(5.3–8.8)	
ependent children—	25.7	(6.7–62.7)	53.8	(44.6–62.9)	90.1	(88.1–91.9)	
ducation level—							
Primary school	-		-		0.3	(0.0–1.2)	
Secondary school up to grade 10	-		1.4	(0.3–5.2)	4.0	(2.9–5.6)	
Secondary school grades 11–12	40.6	(13.6–74.8)	31.6	(23.4–41.1)	22.9	(20.5–25.4)	
Certificate (e.g., trade,							
apprenticeship)	59.4	(25.3–86.4)	41.7	(32.5–51.4)	43.9	(40.9–46.9)	
Diploma (associate, undergraduate)	-		4.9	(2.5–9.4)	12.8	(10.9–14.9)	
Bachelor degree	-		16.4	(10.9–24.0)	9.4	(7.9–11.2)	
Postgraduate qualification	-		4.1	(1.9–8.7)	6.8	(5.5–8.4)	

The average length of service for young adult firefighters in the MFS was just over two years (2.3, Cl 1.4–3.2), compared with an average of 5.5 years (Cl 4.1–6.8) and 10.9 years (Cl 9.5–12.2) for firefighters aged between 26 and 35 years and older than 36 years, respectively.

3.3.1.3 AtC Exposure (Stressful Events)

Volunteers were asked if they had ever experienced a stressful event or events at their volunteer work that had deeply affected them. The survey found that younger volunteers appear to be more greatly affected by these events than their older counterparts. Around a quarter (25.8%) of young volunteers had been deeply affected by one or more events during their volunteering career, and 17.6% of those young people also had probable PTSD (Table 5).

Table 5Exposure to Traumatic Events and Mental Health in Fire and Rescue and SES Volunteers in Australia, by Age Group

	Under 25 years		2	25-34 years		35 years or over	
	%	95% CI	%	95% CI	%	95% CI	
Proportion of volunteers wh	o have exp	erienced a stressfu	l event or	series of events th	nat deeply	affected them	
Has experienced one or more stressful events that affected them deeply—							
While volunteering	25.8	(18.7–33.0)	41.9	(35.3–48.4)	39.0	(36.7–41.3)	
Outside volunteering	25.4	(18.2–32.7)	29.5	(23.5–35.6)	30.6	(28.4–32.8)	
Has not experienced traumatic events	48.7	(40.5–56.9)	28.6	(22.5–34.7)	30.4	(28.2–32.6)	
Proportion	of voluntee	ers with probable P	TSD by exp	oosure to stressfu	l events		
Has experienced one or more stressful events that affected them deeply—							
While volunteering	17.6	(5.0–30.2)	9.5	(3.8–15.2)	7.9	(5.9–9.8)	
Outside volunteering	15.4	(1.3-29.5)	6.4	(2.6–10.3)	4.5	(2.8-6.1)	
Has not experienced traumatic events	0.0	(0.0–7.7)	0.0	(0.0–7.7)	0.0	(0.0–0.1)	
Proportion of volunteers w	ith high or	very high psycholo	gical distr	ess (K10) by expo	sure to stre	essful events	
Has experienced one or more stressful events that affected them deeply—							
While volunteering	57.7	(42.1–73.4)	36.7	(26.7–46.7)	21.7	(18.8–24.7)	
Outside volunteering	35.3	(19.6–50.9)	34.9	(23.4–46.5)	16.3	(13.2–19.5)	
Has not experienced traumatic events	22.6	(13.2–32.0)	18.6	(8.6–28.6)	7.2	(5.0–9.4)	

Rates of psychological distress were even higher in the under 25 group, with over half (57.7%) experiencing high or very high levels of distress. In comparison, the oldest age group had a higher incidence of stressful events at work (39.0%) and high or very high rates of psychological distress (21.7%), but much lower rates of PTSD (7.9%). The fact that younger volunteers have had, on average, shorter volunteer careers than their older counterparts may explain their lower exposure to stressful or traumatic experiences during that career. However, these data suggest that young volunteers exposed to trauma may be more adversely affected by it or that older volunteers may have had more time or experience to process traumatic events they have experienced in their volunteer work.

3.3.1.4 MFS Exposure (Stressful Events)

A majority of young firefighters were exposed to one or more PTE (85.2%, CI 41.3–97.9). The most common PTEs, experienced by at least 40% of young firefighters, were:

- 1. call out for incident where bystanders were distressed or interfering with tasking (59.4%, CI 25.3–86.4)
- 2. call out concerning an attempted suicide (non-fatal) (44.6%, CI 15.5–77.9)

- 3. call out where mental health issues (of non-MFS personnel) were a concern (40.6%, CI 13.6–74.8)
- 4. call out where violent threats were made or violence was feared (40.6%, CI 13.6–74.8)
- 5. direct exposure to hazardous chemicals/substances (40.6%, CI 13.6–74.8)

3.3.2 Mental Health Outcomes

3.3.2.1 Wellbeing

3.3.2.1.1 AtC Wellbeing

The majority of young volunteers reported good to excellent physical health (88.8%) and good sleep quality (57.0%) (Table 6). Their levels of resilience were similar to other age groups, with 61.5% having a high level of resilience. Similarly, the vast majority (94.5%) reported strong two-way social support—a known protective factor against mental health problems.

 Table 6

 Wellbeing and Support for Fire and Rescue and SES Volunteers in Australia, by Age Group

	Under 25 years		2	5–34 years	35 years or over		
	%	95% CI	%	95% CI	%	95% CI	
Physical health—							
Excellent	16.6	(10.4–22.8)	9.8	(5.3–14.3)	8.8	(7.5–10.1)	
Very good	36.6	(28.7–44.6)	33.9	(27.7–40.2)	34.7	(32.5–37.0)	
Good	35.6	(27.8–43.3)	41.3	(34.8–47.9)	40.0	(37.7–42.4)	
Fair	9.9	(5.3–14.6)	11.9	(7.9–15.9)	13.9	(12.2–15.5)	
Poor	1.3	(0.0–3.2)	3.0	(0.5–5.6)	2.6	(1.8-3.4)	
Sleep quality—							
Good	57.0	(49.0-65.1)	42.7	(36.1–49.3)	50.2	(47.8–52.6)	
Fair	36.1	(28.3–43.8)	44.8	(38.2–51.4)	39.2	(36.9–41.6)	
Poor	6.9	(2.8-11.0)	12.5	(8.3–16.7)	10.5	(9.1–12.0)	
Resilience—							
High	61.5	(53.6–69.4)	61.4 (54.9–67.8)		66.3	(64.1–68.5)	
Moderate	32.1	(24.5–39.7)	32.3	32.3 (26.2–38.4)		(26.0-30.2)	
Low	6.3	(2.6–10.0)	6.3	6.3 (3.0–9.7)		(4.5-6.7)	
Two-way social support—							
High giving and receiving	94.5	(91.1–98.0)	91.1	(87.4–94.8)	87.7	(86.1–89.2)	
High giving and low receiving	3.2	(0.5-6.0)	5.4	(2.5-8.4)	3.4	(2.7–4.2)	
Low giving and high receiving	and high receiving 1.2 (0.1–2.3)		3.3 (1.0–5.6)		7.0	(5.8-8.3)	
Low giving and low receiving	Low giving and low receiving 1.1 (0.0–2.9)		0.2 (0.0–0.3)		1.9	(1.3-2.5)	

Note. CI = confidence interval.

3.3.2.1.2 MFS Wellbeing

The majority of young firefighters reported that their quality of life was good (82.6%, CI 34.5–97.7), with the remaining reporting a very good (17.4%, CI 2.3–65.5) quality of life.

3.3.2.2 Mental Health

3.3.2.2.1 AtC Mental Health

The study included several mental health and wellbeing measures, including the short form of the Warwick–Edinburgh Mental Wellbeing Scale (Short WEMWBS), the Kessler-10 Psychological Distress

scale (K–10) and a PTSD scale. The Short WEMWBS was used to assess mental wellbeing. The scale covers both feelings and functioning and has been designed such that 15% of the adult population fall in the low wellbeing category and 15% fall into the high wellbeing category. Based on this measure, young volunteers have slightly higher levels (20.7%) of low wellbeing and lower levels (11.0%) of high wellbeing (Table 7), compared both to other age groups of volunteers and to the general population.

Notably, more young volunteers were experiencing high (27.5%) to very high (7.4%) levels of psychological distress as measured using the K–10 scale. These rates were considerably higher than the equivalent high and very high rates of distress in the older age groups, as shown in Table 7.

In the survey, young volunteers were assessed as having the highest rate of probable PTSD at 8.5%, compared to 4.7% of all fire and rescue volunteers and 4.4% of Australian adults (Creamer et al., 2001). A third (33.4%) of young volunteers had been diagnosed with a mental health condition at some time in their lives, and a fifth had a current mental health condition at the time of the survey. These high rates are comparatively similar to those of all volunteers in the SES but are higher than those in the fire and rescue volunteer sector specifically.

Table 7 *Mental Health and Wellbeing of Fire and Rescue and SES Volunteers in Australia, by Age Group*

	Under 25 years		25–34 years		35 years or over	
	%	95% CI	%	95% CI	%	95% CI
Short WEMWBS—						
Low	20.7	(14.1–27.3)	23.9	(18.2–29.6)	14.4	(12.8–16.0)
Medium	68.3	(60.7–75.9)	68.4	(62.2-74.6)	70.4	(68.2–72.6)
High	11.0	(6.0–16.1)	7.8	(4.2–11.4)	15.2	(13.4–17.0)
Psychological distress (K-10)—						
Low	31.6	(24.1–39.1)	39.7	(33.2–46.2)	60.3	(58.0–62.6)
Moderate	33.5	(25.6–41.3)	29.3	(23.2–35.4)	24.1	(22.0–26.1)
High	27.5	(20.2–34.9)	24.2	(18.2–30.3)	11.7	(10.2–13.2)
Very high	7.4	(3.5–11.2)	6.8	(4.3–9.2)	4.0	(3.1–4.8)
Functional impact of psychological distress—						
None	64.0	(56.1–71.8)	60.2	(53.7–66.7)	73.7	(71.6–75.7)
Mild	13.9	(9.0–18.9)	19.6	(14.4–24.7)	15.6	(13.9–17.4)
Moderate	14.4	(8.3–20.6)	11.5	(7.4–15.6)	7.4	(6.2–8.6)
Severe	7.7	(3.0–12.3)	8.8	(4.8–12.8)	3.3	(2.5-4.1)
Probable PTSD—	8.5	(3.4–13.6)	6.7	(3.7–9.7)	4.5	(3.5–5.4)
Ever diagnosed with a mental health condition—	33.4	(25.6–41.2)	42.4	(35.8–48.9)	32.4	(30.2–34.6)
Has a current diagnosed mental health condition—	20.0	(13.3–26.8)	22.3	(16.7–27.9)	16.4	(14.7–18.2)
Impact of volunteering on mental health ^a —						
Very positive impact	1.1	(0.0–3.3)	3.8	(0.4–7.1)	4.9	(3.1–6.6)
Slightly positive impact	14.0	(4.1–23.8)	12.4	(6.8–18.1)	11.7	(9.3–14.1)
Didn't have any impact	26.3	(13.0-39.5)	16.9	(9.8–24.0)	20.0	(16.6–23.4)

Slightly negative impact	15.4	(5.6–25.2)	28.2	(19.1–37.4)	26.0	(22.5–29.5)
Very negative impact	43.2	(28.9–57.5)	38.7	(28.7–48.6)	37.4	(33.4–41.4)

Contrary to national mental health guidelines, which advocate community involvement as therapeutic for mental health (e.g., Act, Belong, Commit), volunteering does not appear to exert this desired effect on survey participants (Donovan & Anwar-McHenry, 2015). People diagnosed with a mental health condition were asked about the impact of volunteering on their mental health at any time in their lives. Nearly half (43.2%) of young volunteers felt that it had had a very negative impact (15%, slightly negative), compared with 37.4% (and 26.0%) for those aged 35 years or over.

3.3.2.2.2 MFS Mental Health

A variety of mental health outcomes were explored, including psychological distress (K–10), probable PTSD (PCL-5), depression (PHQ-9), anxiety (GADS-7), mental health condition diagnosis, current diagnosis, mental health concerns and quality of life across three age groups. Young adult MFS firefighters were assessed as having higher levels of psychological distress, a higher level of moderate depression, and a higher level of mild and moderate anxiety than those aged 26 and over. These results are shown in Table 8.

A higher proportion of young adults had previously had a mental health condition diagnosed (25.7%, CI 6.7–62.7) as compared with adults aged 26–35 (13.8%, CI 8.8–21.1) and 36 years or older (16.8%, CI 14.7–19.2). This was also the case for current mental health diagnoses in young adults (25.7%, CI 6.7–62.7) when compared with adults aged 26–35 (5.6%, CI 2.6–11.5) and 36 years or older (4.5%, CI 3.4–5.9). However, a smaller proportion of young adult firefighters indicated that they have previously been concerned about their mental health (30.2%, CI 7.5–69.9) when compared with adults aged 26–35 (42.2, CI 32.6–52.4) and 36 years or older (45%, CI 41.9–48.2).

Table 8

Mental Health and Wellbeing of Metropolitan Fire Service Personnel in South Australia, by Age Group

	18–25 years		26–35 years		36 years or over	
	%	95% CI	%	95% CI	%	95% CI
Psychological distress (K10)—						
Low	34.9	(8.7–75.1)	68.6	(59.4–76.5)	67.3	(64.2-70.2)
Moderate	47.7	(15.3-82.1)	22.1	(15.4–30.5)	22.8	(20.2–25.6)
High	17.4	(2.3-65.5)	5.6	(2.3–13.3)	6.9	(5.5–8.6)
Very high	-		3.7	(1.7–7.9)	3.0	(2.0-4.5)
Probable PTSD	-		-		3.3	(2.4-4.4)
Depression (PHQ 9)—						
Minimal	69.8	(30.1–92.5)	78.1	(68.6–85.4)	76.1	(73.3–78.7)
Moderate	30.2	(7.5–69.9)	20.4	(13.4–29.9)	22.3	(19.8–25.00)
Severe	-		1.5	(0.4–5.7)	1.6	(0.9–2.8)
Anxiety (GADS 7)—						
Minimal	52.3	(17.9–84.7)	84.1	(75.7–90.0)	83.4	(82.9–87.5)
Mild	30.2	(7.5–69.9)	15.0	(9.2-23.4)	12.8	(10.8–15.2)
Moderate	17.4	(2.3-65.5)	0.9	(0.4–2.1)	1.2	(0.7–2.0)
Severe	-		-		0.7	(0.3–1.5)

Note. CI = confidence interval.

^aFor those who have ever been diagnosed with a mental health condition.

3.3.3 Risk/Protective Factors

3.3.3.1 Mental Health Literacy

3.3.3.1.1 AtC Mental Health Literacy

Volunteers were asked if they felt they needed help or support for an emotional or mental health issue in the previous 12 months. We examined the perceived need for support by those volunteers who had probable PTSD or high or very high psychological distress as assessed in the survey. Results suggest that addressing mental health literacy in younger volunteers may be of benefit. Over a quarter of those with PTSD or high psychological distress (27.3%) said they did not believe they had a problem requiring help or support, with a further 22.5% recognising that they had an emotional or mental health problem but believing they did not need any help or support (Table 9). In comparison, 11.7% of the oldest age group did not believe they had a problem, and 28.5% did not believe they needed help. As such, young volunteers may benefit from increased knowledge of what types of emotions and behaviours are potential symptoms of emerging mental health issues, the types of help and support available, and the benefits of obtaining help or support in a timely way.

Volunteers who had ever been diagnosed with a mental health condition, or who felt that they had an undiagnosed condition were also asked about their feelings and experiences of stigma related to their mental health condition, including both feelings of shame and embarrassment, sense of burden to others, and having experienced people avoiding them or mistreating them because of their mental health problems. While not statistically significant, the data suggest that younger volunteers with mental health issues may perceive a higher level of shame or burden associated with their mental health when compared to those aged 25–34 years and those aged 35 years and older.

Table 9Perceived Need for Help among Fire and Rescue and SES Volunteers in Australia Who Screened
Positive for Either Probable PTSD or High or Very High Psychological Distress (K–10), by Age Group

Perceived need for help	Under 25 years		25-34 years		35 years or over	
	%	95% CI	%	95% CI	%	95% CI
Did not believe they had a problem	27.3	(14.8–39.8)	15.4	(6.7–24.2)	11.7	(7.9–15.5)
Did not believe they needed help	22.5	(12.2–32.7)	38.1	(26.0-50.1)	28.5	(23.4–33.5)
Did not seek help	9.4	(1.7–17.0)	12.9	(6.5–19.4)	14.8	(11.0–18.6)
Needed more help than they received	14.0	(5.3–22.8)	15.2	(8.1–22.2)	22.4	(17.8–27.0)
Received sufficient help	26.9	(13.8–39.9)	18.4	(8.8–28.1)	22.7	(17.8–27.5)

Note. CI = confidence interval.

3.3.3.1.2 MFS Mental Health Literacy

Firefighters were asked if their current mental health was negatively impacted by their fire service career, with most young firefighters reporting 'not at all' (78.9%) or 'a little bit' (21.2%). Despite showing high rates of psychological distress, depression, and anxiety symptoms, all young adult MFS firefighters (100%) felt that mental health issues would not prevent them from serving out an entire career as a firefighter. This compared with a much lower proportion of older adults aged 26–35 years (54.6%) and older than 36 years (59.8%) when presented with the same proposition.

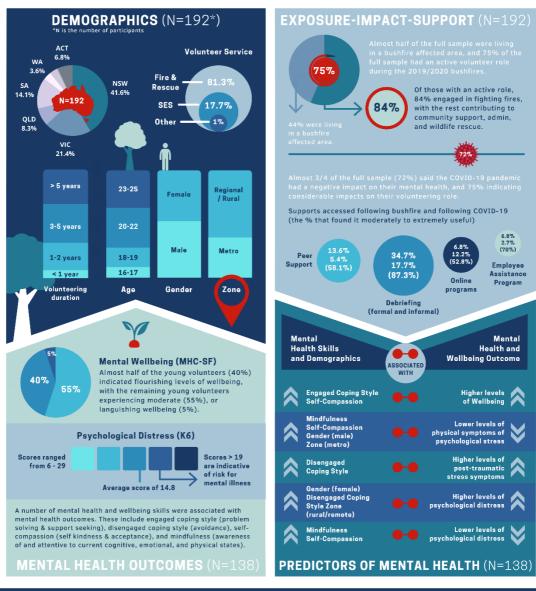
4 YOUNG VOLUNTEER MENTAL HEALTH AND SUPPORT ACCESS

To develop an understanding of current young volunteer mental health, exposure to potentially traumatising events, access to supports and their perceived usefulness during the 2019–2020 bushfire season and COVID-19, a survey was conducted with this group between September and December 2020.

4.1 Young Volunteer Survey: Key Findings Fact Sheet



KEY FINDINGS FACT SHEET - ONLINE SURVEY





4.2 Demographics

4.2.1 Sample

A total of 192 participants completed the demographic section of the survey, while fewer participants completed many of the later measures. No identifiable patterns of missing data were noted. To ensure a complete sample for mental health outcomes analysis, only those who completed the full suite of mental health-related measures were included in the final analysis sample (N = 138). Tables 10 to 13 provide information on demographics, volunteer role, bushfire exposure, and volunteer activity during the bushfires for both the total sample (N = 192) and the analysis sample (N = 138). There were no or only very limited differences between these two samples for most demographic factors and outcome measures. Of note, however, was a slight tendency for those who identified as Aboriginal and/or Torres Strait Islander and those with lower socioeconomic status (financial) to only complete the demographics portion of the survey. No differences were shown between the total sample and the analysis sample for any mental health outcome measures.

Table 10 describes the samples and the groups within them, based on demographic data including location, age, gender, Aboriginal and/or Torres Strait Islander origin, marital status, children, living circumstances, socioeconomic status and education.

Table 10Demographic Characteristics for Fire and Emergency Service Volunteer Participants (aged 16–25) from the Full Sample (N = 192) and the Mental Health Analysis Sample (N = 138)

Demographic characteristic	Full sa	•	MH analysi	•
	(N = 1		(N = 1	
	n	%	n	%
State				
NSW	80	41.6	56	40.6
VIC	41	21.4	31	22.5
QLD	16	8.3	10	7.2
SA	27	14.1	23	16.7
WA	7	3.6	4	2.9
TAS	7	3.6	5	3.6
NT	1	0.5	1	0.7
ACT	13	6.8	8	5.8
Zone				
Metropolitan area	72	37.5	53	38.4
Regional/Rural area	120	62.5	85	61.6
Age				
16–17	19	9.9	15	10.9
18–19	35	18.2	21	15.2
20–22	71	37.0	52	37.7
23–25	67	34.9	50	36.2
MEAN (SD)	21.1 (2.6)		21.1 (2.6)	
Gender				
Male	100	52.1	70	50.7
Female	91	47.4	68	49.3
Other	1	0.5	0	0
I prefer not to specify	0	0	0	0
Aboriginal or Torres Strait Islander origin				
No	184	95.8	135	97.8
Yes, Aboriginal	8	4.2	3	2.2
Yes, Torres Strait Islander	0	0	0	0
Yes, both Aboriginal and Torres Strait Islander	0	0	0	0
Relationship status	0.5	50.0	60	50.0
Single	96	50.0	69	50.0
In relationship / married / partner	95	49.5	68	49.3
Divorced/ separated	1	0.5	1	0.7

Dependent children aged 0–17 years				
Yes	11	5.7	7	5.1
No	181	94.3	131	94.9
Living circumstances				
Still living at home	113	58.9	81	58.7
Living independently (renting)	64	33.3	48	34.8
Living independently (owner occupier)	15	7.8	9	6.5
Ability to raise \$2,000 emergency funds				
Easily	62	32.3	50	36.2
With sacrifice	70	36.5	52	37.7
Drastic measures needed	45	23.4	29	21.0
Could not do it	15	7.8	7	5.1
Highest level of education				
Secondary school up to Year 10	8	4.1	7	5.1
Secondary school up to Year 11 (inc. Certificate I or II)	26	13.5	21	15.2
Secondary school up to Year 12	64	33.3	40	29.0
Certificate III/IV (trade, apprenticeship, etc.)	46	24.0	35	25.4
Diploma (associate, undergraduate)	13	6.8	10	7.2
Bachelor degree	27	14.1	18	13.0
Postgraduate qualification	8	4.2	7	5.1

The majority of participants resided in New South Wales and Victoria and rural or regional areas of Australia. Close to half of the participants were female; most were aged over 20 years, although over 10% of the sample were under 18. Commensurate with their age and developmental stage, a majority resided in the family home. Very few had dependent children of their own. Most would need to make sacrifices to raise \$2000 (a finding indicative of financial status). Many had also not yet completed secondary or tertiary study; thus, while family commitments were unlikely to impact their volunteer role, the need to maintain employment and engage in study commitments may have created role conflicts and contributed to pressures for these young volunteers.

Table 11 describes the role of participants as fire and emergency service volunteers, providing insight into the services they volunteer, the duration, frequency, and nature of their role(s) and their employment status.

As shown in Table 11, most participants were employed, and a large proportion also volunteered with a fire service, with close to 20% of the sample comprised of SES volunteers. Most young volunteers engaged in an active operational role, and the vast majority had attended a large number of call-outs (over 30) during the previous 12 months. Close to a quarter also volunteered with more than one emergency service, highlighting the commitment of these young volunteers to their roles with fire and emergency services.

Table 11Volunteer Service and Role Characteristics for Fire and Emergency Service Volunteer Participants (aged 16-25) from the Full Sample (N = 192) and the Mental Health Analysis Sample (N = 138)

Volunteer service and role characteristics	Full sample (N = 192)		MH analysis sample ^a (N = 138)	
	n	%	n	%
Main Service				
Fire and Rescue (including Rural Fire)	156	81.3	111	80.4
State Emergency Service	34	17.7	26	18.8
Other ^b	2	1.0	1	0.7
Volunteering duration				
Less than 12 months	14	7.3	7	5.1
1–2 years	48	25.0	36	26.1
3–5 years	69	35.9	49	35.5

^a MH analysis sample: subsample of participants with complete responses to mental health measures utilised in mental health outcome analyses.

More than 5 years	61	31.8	46	33.3
Volunteering status at other emergency services ^c	~ -	02.0	.0	22.3
None	149	77.6	105	76.1
Ambulance	7	3.6	7	5.1
Fire and Rescue (including Rural Fire Service)	17	8.9	12	8.7
Marine Rescue	1	0.5	1	0.7
State Emergency Service	10	5.2	9	6.5
Parks and Wildlife Services	4	2.1	3	2.2
Other ^d	11	5.7	8	5.8
Nature of volunteer role in the main service				
Operational (i.e., participating in call-outs,	131	68.2	94	68.1
attending emergencies)				
Non-operational	5	2.6	3	2.2
Both operational and non-operational	56	29.2	41	29.7
Volunteering frequency in the main service (last 12				
months)				
Haven't been called out or volunteered yet	4	2.1	2	1.4
1–5 times	13	6.8	9	6.5
6-10 times	7	3.6	4	2.9
11–30 times	30	15.6	19	13.8
More than 30 times	138	71.9	104	75.4
Paid employment status (in addition to volunteer				
role)				
No	34	17.7	23	16.7
Yes	158	82.3	115	83.3

4.3 Bushfire Exposure

Table 12 shows the level of exposure of the volunteer samples to the 2019–2020 bushfire season, the personal impact on their livelihood, family and friends and their volunteer activity in response to the fires.

^a MH analysis sample: subsample of participants with complete responses to mental health measures utilised in mental health outcome analyses.

^b Other main service: Forest Fire Management, Human Social Recovery Agency.

^c Participants were able to select more than one option; percentages will total to greater than 100.

^d Other services participants volunteer with: NSW Volunteer Rescue Association, Surf Life Saving, Medical Services, Australian Air Force Cadets, Scouts, St John Ambulance.

Table 12Bushfire Exposure and Impact for the Full Sample (N = 192) and the Mental Health Analysis Sample (N = 138)

Bushfire exposure/impact		Full sample (N = 192)			MH analysis sample ^a (N = 138)		
_	n	% of bushfire affected	% of full sample	n	% of bushfire affected	% of MH sample	
		(N = 84)			(N = 58)		
Living in affected area							
No	108	-	56.3	80	-	58.0	
Yes	84	-	43.8	58	-	42.0	
Bushfire impact for those							
living in an affected areab							
My property was under							
threat	35	41.6	18.2	26	44.8	18.8	
My property was							
damaged/destroyed	6	7.1	3.1	4	6.8	2.9	
I/my family had to evacuate							
from home	27	32.1	14.1	16	27.5	11.6	
Loss of pets/Loss of livestock	2	2.4	1.0	2	3.4	1.4	
A close family member or							
friend was in close							
proximity to the fires	46	54.8	24.0	33	56.8	23.9	
A close family member or							
friend was injured in the							
fires	24	28.6	12.5	5	8.6	3.6	
A close family member or							
friend lost property in the							
fires	24	28.6	12.5	16	27.6	11.6	
Other ^c	13	15.5	6.8	10	17.2	7.2	
Active volunteer role during							
bushfires							
No	48	-	25.0	32	-	23.2	
Yes	144	_	75.0	106	-	76.8	

a MH analysis sample: subsample of participants with complete responses to mental health measures utilised in mental health outcome analyses.

While less than half of young volunteers in the present sample lived in an affected area during the 2019–2020 bushfire season, approximately three-quarters performed an active volunteer role. An essential consideration for mental health is the stressors that young volunteers experience concerning their personal experience of the fire and their level of exposure to the bushfire through their role as an emergency service volunteer. For example, one in five young volunteers reported that their property was under threat from the fires, with 15% needing to evacuate their property. This has the potential to further exacerbate the negative impacts of the fires on these individuals. The impacts of close friends or family difficulties are also important considerations, with over a third having a close friend or family member either lose their home or have their property under threat, and over one in 10 having a friend or family injured during the fires.

Table 13 shows the nature and duration of volunteer roles for those who actively volunteered during the 2019–2020 bushfire season.

b Participants were able to choose more than one option.

c Other bushfire impacts: Lived in close vicinity, deployment to fires in the region, smoke, firefighters in zone killed, months spent away from family, family member working close to burnt-out areas.

Table 13Nature and Duration of Participants with an Active Volunteer Role During the 2019–2020 Bushfire Season for the Full Sample (N = 144) and the Mental Health Analysis Sample (N = 106)

Nature/duration of		volunteer role (full		volunteer role (MH		
volunteer role	sar	nple)	analysis sample ^b)			
during bushfires ^a	(N =	= 144)	(N = 106)			
	n	% of active	n	% of active		
		volunteers		volunteers		
Nature of volunteer						
role						
Fighting fires	121	84.0	87	82.0		
Community						
support	45	31.3	23	21.7		
Wildlife rescue	5	3.5	3	2.8		
Administrative						
operations	36	25.0	24	22.6		
Other bushfire						
response roles ^c	24	16.7	21	19.8		
Volunteer role						
not involved						
with bushfire						
response	6	4.2	6	5.6		
Volunteering time						
during response						
Less than 1 week	13	9.0	11	10.4		
1–2 weeks	22	15.3	16	15.1		
2–4 weeks	37	25.7	28	26.4		
1-2 months	27	18.8	18	17.0		
Over 2 months	45	31.3	33	31.1		

Of those engaged in an active volunteer role during the 2019–2020 bushfire season, more than 80% were engaged in a firefighting role, with around one-fifth to one-third engaged in community or administrative support. Volunteers reported several other roles, many of which were likely to involve potential exposure to trauma, either directly or through exposure to discussions about potentially traumatising events, including incident management roles and supporting base camp and emergency operations centres. Finally, it should be noted that close to one-third of participants spent over two months volunteering during the response to the 2019–2020 bushfires; thus, factors such as fatigue and cumulative exposure to stressors are of particular relevance when considering the mental health of this sub-group.

4.4 COVID-19 Impact

Table 14 describes the impact of the COVID-19 pandemic on the physical and mental health of the volunteer samples and the effect on their volunteer role in fire and emergency services.

a Participants were able to choose more than one option.

b MH analysis sample: subsample of participants with complete responses to mental health measures utilised in mental health outcome analyses.

c Other bushfire response roles included: incident management team, emergency operations centre, evacuee and risk management support, aviation bush fire support, base camp support, rescue support, community engagement, radio communications, travelling to attend fires in other states.

Table 14COVID-19 Impact on Physical and Mental Health and Volunteer Role for Fire and Emergency Service Volunteer Participants (aged 16-25) from the Full Sample (N = 192) and the Mental Health Analysis Sample (N = 138)

COVID impact	Full sample (N = 192)		MH analysis sample ^a (N = 138)	
	n	%	n	%
Impact on physical health				
Large positive impact	6	3.2	6	4.3
Small positive impact	23	12.0	16	11.6
No impact	69	35.9	49	35.5
Small negative impact	73	38.0	52	37.7
Large negative impact	21	10.9	15	10.9
Impact on mental health				
Large positive impact	4	2.1	4	2.9
Small positive impact	10	5.2	8	5.8
No impact	39	20.3	24	17.4
Small negative impact	109	56.8	77	55.8
Large negative impact	30	15.6	25	18.1
Volunteer role impact				
No, there have been no impacts	3	1.6	1	0.7
Minor impacts (e.g., increased				
hygiene measures, social distancing				
measures)	37	19.2	27	19.6
Considerable impacts (e.g., changes				
to role, cancellation of training)	144	75.0	105	76.1
I was not able to conduct my volunteer role during COVID-19				
restrictions	8	4.2	5	3.6

a MH analysis sample: subsample of participants with complete responses to mental health measures utilised in mental health outcome analyses.

Approximately three-quarters of young volunteers reported that COVID-19 caused considerable impacts (changes in role and cancellation of training) on their volunteer role. This decreased opportunities to gather together, which is a key part of establishing and maintaining interpersonal connections for the role. Approximately 20% reported only minor impacts. Of note, despite the youth of this sample, approximately 50% reported negative impacts on their physical health, and 75% perceived COVID-19 to have had negative impacts on their mental health.

4.5 Probable Mental Disorders

Young volunteers completed diagnostic measures relating to mental health to provide an insight into their emotional, social and psychological wellbeing, psychological distress, post-trauma symptoms, alcohol use and physical distress (somatic) symptoms. Community comparisons have been made where possible. Due to demographic differences inherent in these populations, however, it is difficult to make accurate comparisons between them; thus, these comparisons should be interpreted with caution. Table 15 summarises the mental health measures total scores, with further detailed analysis following.

Table 15Descriptive Statistics for the Mental Health Measures for the Mental Health Analysis Sample (N = 138)

Measure	М	SD	Range
Wellbeing total score (MHC-SF)	42.6	13.7	8–70
Psychological distress total score (K6)	14.8	4.7	6–29
PTSD total score (PC-PTSD-5)	1.5	1.7	0–5
Alcohol use total score (AUDIT-C)	2.9	2.1	0–9
Somatic symptoms total score (SSS-8)	9.9	6.1	0-27

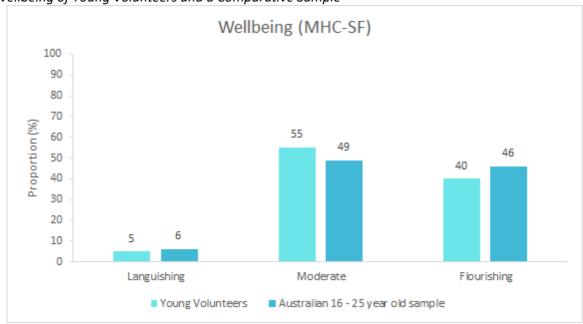
Note. N = 138, number of participants; M = mean; SD = standard deviation.

4.5.1 Wellbeing (Mental Health Continuum-Short form; MHC-SF)

The MHC-SF, was used to indicate the overall wellbeing experienced by young volunteer participants (Keyes, 2018). The measure provides an overall score for wellbeing, along with a categorical indicator of the level of wellbeing—Languishing, or low wellbeing, Moderate wellbeing, and Flourishing or High wellbeing. The young volunteers had a mean wellbeing score of 42.6, with approximately 40% of young volunteers showing high levels of wellbeing and categorised as flourishing.

The young adult fire and emergency service volunteers had a mean wellbeing score comparable to the wellbeing mean of 45.5 in a sample of 2,082 Australian residents aged between 16 and 25 (47% students) (Hides et al., 2019). As shown in Figure 1, the young volunteers also had comparably high levels of wellbeing as measured by the MHC-SF, with 40% flourishing and 55% moderate, compared to 46% flourishing and 49% moderate in the Australian sample (Hides et al., 2019). The languishing category comprised 5% and 6% of the volunteer and Australian samples, respectively (Hides et al., 2019).

Figure 1Wellbeing of Young Volunteers and a Comparative Sample

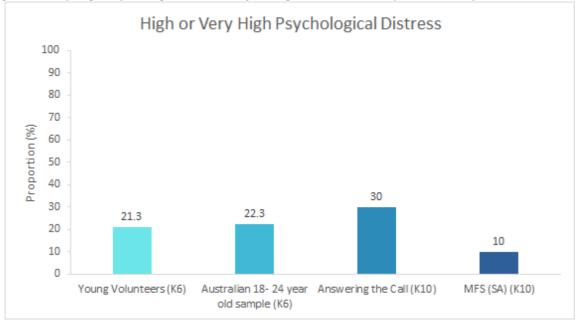


4.5.2 Psychological Distress (Kessler Psychological Distress Scale -6; K6)

The K6 is a brief screening measure of psychological distress, with higher scores indicating greater levels of distress (Kessler et al., 2010). The young adult fire and emergency service volunteer sample demonstrated an average psychological distress score of 14.8, with approximately 20% of the volunteers within the high to very high psychological distress range. In 2017, in a large sample of 3,155 young Australian adults aged 18–25 conducted using the K6, 14% were assessed as experiencing high to very high psychological distress (Biddle et al., 2020). In the same study, using a sample obtained in April 2020, distress levels were found to have increased to 22.3%. Given the timing of the young volunteer survey, the volunteer sample's psychological distress levels could be considered comparable to the general Australian sample of young people.

The AtC study investigated psychological distress using the 10-item version of the Kessler Psychological Distress scale (K10) and found that among Ambulance, Fire & Rescue and SES volunteers aged 18–24 years, 34.9% experienced high to very high psychological distress (Beyond Blue Ltd., 2018). Also, using the K10, the MFS study reported levels of high to very high psychological distress of 17.4% for young firefighters aged 18–25 years (Centre for Traumatic Stress Studies, 2017). Figure 2 provides a visual comparison of psychological distress of young volunteers, the Australian sample, and the samples from AtC and MFS.

Figure 2High and Very High Psychological Distress of Young Volunteers, Comparative Sample, AtC and MFS



4.5.3 Post-Traumatic Stress Symptoms (Primary Care PTSD Screen for DSM-5; PC-PTSD-5)

A brief screening measure, the PC-PTSD-5, was used to assess PTSD symptoms in the present sample of young volunteers (Prins et al., 2015). A recent study provided substantive evidence that the measure is not sufficiently comprehensive to indicate probable PTSD diagnosis reliably; thus, proportions of those experiencing probable PTSD are not provided (Hawn et al., 2020). On average, as shown in Figure 3, participants self-reported between one and two symptoms of PTSD (Mean = 1.5, SD = 1.7), comparable to a sample of 475 primarily female (76%) and white (52%) undergraduate US college students (Mean = 1.36, SD = 1.5) (Hawn et al., 2020).

Number of Self-Reported PTSD Symptoms of Young Volunteers and Comparative Sample

Number of self-reported PTSD symptoms
(PC-PTSD-5)

Figure 3 *Mean Number of Self-Reported PTSD Symptoms of Young Volunteers and Comparative Sample*

4.5.4 Alcohol Use (Alcohol Use Disorders Identification Test—Concise; AUDIT-C)

Young Volunteers

0

A brief measure of frequency and amount of alcohol use, the AUDIT-C was used to assess alcohol use (Bush et al., 1998). Scores higher than three for women and four for men are suggested to be associated with increased risk for problematic levels of drinking. The young adult fire and emergency service volunteer sample had a mean score of 2.9 and a standard deviation of 2.1, indicating that, on average, they were not engaging in a hazardous level of alcohol use. A considerable proportion of the sample (46%) was found to be engaging in probable hazardous alcohol use, with slightly higher proportions of females (54%) than males (39%) in this category.

US college students

The level of young volunteers engaging in hazardous drinking was lower among young volunteers in the present study when compared to a sample of 1,001 15-29 year-old Victorians drawn from the general population. In this sample, the mean was 4.6 (SD = 2.5), with 67% in the hazardous drinking category (Figure 4). The drinking habits across gender in the same sample, however, were different, with a higher percentage of males (74%) engaging in hazardous drinking compared to females (64%) (Carrotte et al., 2016).

Using a variation of the AUDIT-C to assess alcohol consumption, AtC found that 34.3% were at risk of short-term and long-term harm among the volunteer sample studied (Beyond Blue Ltd., 2018). There was, however, variation between the sectors, with 25%, 35.4% and 28.4% for Ambulance, Fire & Rescue and SES, respectively, at short- and long-term risk of harm. Using diagnostic interviews based on the World Health Organization International Classification of Diseases, 10th revision (ICD-10), the MFS study found that an estimated 30% of their workforce met the criteria for an alcohol disorder in their lifetime and 3% for an alcohol disorder over a 12-month period. This comprised an estimated prevalence of 1.6% for harmful alcohol use and 1.4% for alcohol dependence (Centre for Traumatic Stress Studies, 2017).

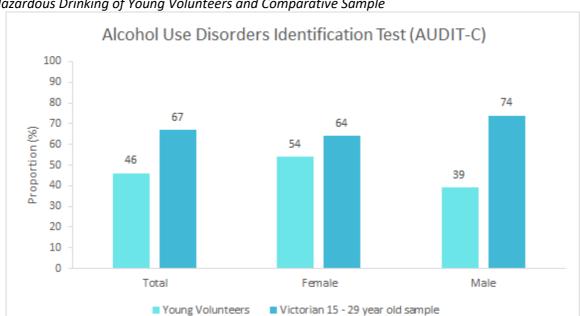
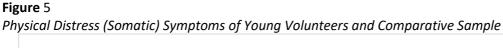


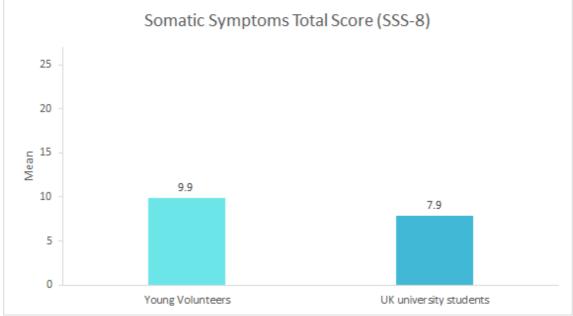
Figure 4 *Hazardous Drinking of Young Volunteers and Comparative Sample*

4.5.5 Physical Symptoms (Somatic Symptoms Scale; SSS-8)

The SSS-8 was used to assess the tendency to experience painful or difficult physical symptoms that may not be associated with a physical or medical condition (Gierk et al., 2014). These symptoms may relate to the physical expression of psychological distress or a clinically diagnosable mental health condition. Approximately 39% of participants showed minimal to low severity somatic symptoms, 25% experiencing medium severity levels of symptoms, and a further 36% experiencing high to very high levels of somatic symptoms.

For the young adult fire and emergency service volunteer sample, the average score for the SSS-8 was 9.9 (SD = 6.1), within the medium severity range (8–11). This was comparable, as shown in Figure 5, to a UK university sample (N = 170) mean score of 7.9 which falls into the low to medium severity range (Denovan et al., 2019).





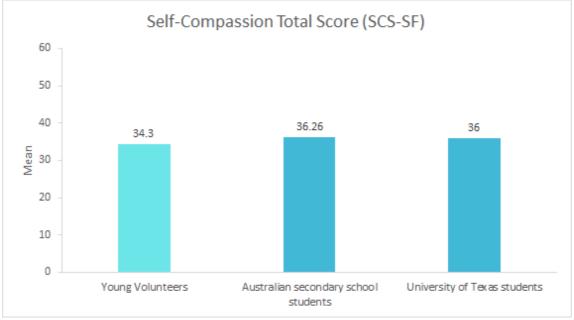
4.6 Mental Health Skills

4.6.1 Self-Compassion (Self-Compassion Scale-Short Form; SCS-SF)

The SCS-SF measures the three key components of self-compassion: self-kindness, common humanity (a sense that one is not alone in suffering) and mindfulness (present moment awareness; Raes et al., 2010). The mean self-compassion score of the young adult fire and emergency service volunteers was 34.30 (SD = 8.87). Total self-compassion scores can range from 12–60.

As shown in Figure 6, the average self-compassion score of the young volunteers was comparable to average scores of 36.26 for a sample of 449 Australian secondary school students (average age 13.69 years) and 36.00 for a sample of 415 University of Texas students (average age 20.6 years) (Allen et al., 2020; Raes et al., 2010).



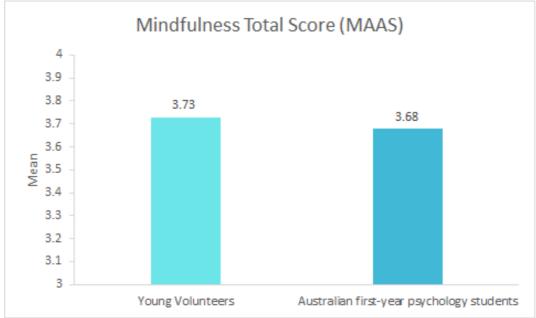


4.6.2 Mindfulness (Mindful Attention Awareness Scale; MAAS)

The MAAS was used to measure the trait of mindfulness in young volunteers, assessing their attentiveness to and awareness of what is taking place in the present (Brown & Ryan, 2003). The young adult fire and emergency service volunteer sample showed a mean mindfulness score of 3.73, with a standard deviation of 0.91. Scores on this scale can range between 1 and 6, with higher scores reflecting greater mindfulness levels.

As seen in Figure 7, the mean mindfulness score of the young volunteers is similar to the higher levels of mindfulness found in an Australian study of 247 first-year undergraduate psychology students with a mean mindfulness score of 3.68 (Elphinstone et al., 2020).





4.6.3 Coping Strategies (Coping Strategies Inventory—Short Form; CSI-SF)

The coping strategies of the young volunteers in response to stressors were assessed with the CSI-SF, with coping efforts categorised as engaged, involving actions to confront stressors, or disengaged, where an avoidance strategy is used (Addison et al., 2007). The mean engaged coping score of the young volunteers was 24.83 with a standard deviation of 5.41 and a mean disengaged coping score of 24.81, with a standard deviation of 5.53. Scores on each subscale can range between 8 and 40, with higher scores reflecting a higher level for each subscale.

While no studies identified to date have used the CSI-SF with a comparable sample of adolescents, the coping strategies of 5,302 African American adults (aged 35–84 years) in the USA have been assessed using the CSI-SF (Addison et al., 2007). As shown in Figure 8, the study sample showed slightly higher engaged coping, with a mean of 28.16 compared to a disengaged mean of 22.97, while the young adult fire and emergency service volunteer sample indicated similar mean scores for their engaged and disengaged coping strategies (Addison et al., 2007). This indicates that young volunteers use both engaged and disengaged coping strategies to a similar extent.

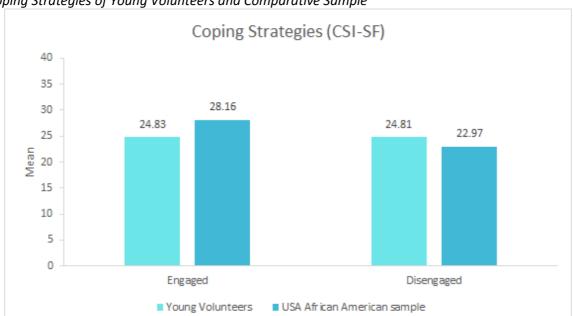
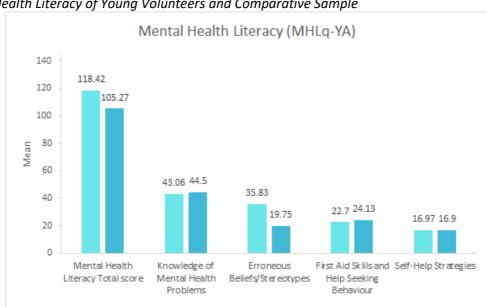


Figure 8 *Coping Strategies of Young Volunteers and Comparative Sample*

4.6.4 Mental Health Literacy (Mental Health Literacy questionnaire—Young Adults; MHLq-YA)

The MHLq-YA was used to measure the young volunteers' understanding of mental health issues, assessing their overall perception of mental health and specifically their knowledge of mental health problems, their level of erroneous beliefs and stereotypes about people experiencing mental health conditions, their degree of mental health first aid skills and help-seeking behaviour, as well as their self-help strategies. The mean (standard deviation) of the total mental health literacy score was 118.42 (9.96), with means and standard deviations of 43.06 (4.46), 35.83 (3.16), 22.70 (3.99) and 16.97 (2.17), respectively, for the knowledge, erroneous beliefs, first aid skills and self-help subscales.

Compared to a sample of 356 Portuguese students aged 18–25 years (Figure 9), the young fire and emergency service volunteers had a higher mental health literacy global score, with the higher score attributed to a higher score on the erroneous beliefs/stereotypes subscale (Dias et al., 2018). The erroneous beliefs subscale is reverse scored, with higher scores indicating the sample have a lesser prevalence of incorrect beliefs and stereotypes relating to mental health. This indicates that young volunteers may exhibit a relatively lower level of stigma concerning mental health in others, compared to Portugese students of similar age.



■ Young Volunteers
■ Portuguese students

Figure 9 *Mental Health Literacy of Young Volunteers and Comparative Sample*

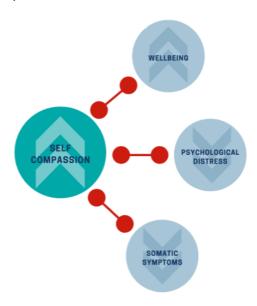
4.7 Relationship between Probable Mental Disorder and Positive Mental Health Skills

We investigated the association between the mental health-related skills of self-compassion, mindfulness, coping strategies, mental health literacy, and mental health and wellbeing outcomes for the young adult volunteer sample. Multiple regression analyses were conducted to assess these relationships, which allowed us to control for the contribution of relevant demographic, bushfire and COVID related exposure and volunteer role characteristics to mental health outcomes. This meant that those psychological skills that showed associations with mental health outcomes, as reported below, contributed to mental health outcomes in excess of the contribution of these demographic and exposure factors.

4.7.1 Self-Compassion

The multiple regression analyses indicated self-compassion showed associations with wellbeing, psychological distress and somatic symptoms (Figure 10). This suggests higher levels of self-compassion were associated with increased wellbeing and a reduction in risk for psychological distress and somatic symptomatology (see Appendix 2, Tables 19, 20 and 23 for details).

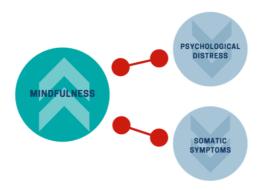
Figure 10Associations between Self-Compassion and Mental Health Outcomes



4.7.2 Mindfulness

Multiple linear regression analyses determined that mindfulness had a significant negative association with psychological distress and somatic symptoms (Figure 11). This indicates that increased mindfulness engagement may be associated with a reduction in risk for psychological distress and somatic symptomatology (see Appendix 2, Tables 20 and 23 for details).

Figure 11Associations between Mindfulness and Mental Health Outcomes



4.7.3 Coping Strategies

For coping strategies, multiple regression analyses indicated that an engaged coping strategy showed associations with wellbeing, suggesting engaging in an active coping style was associated with increased wellbeing in young volunteers, even when controlling for other psychological skills and relevant demographic and volunteer role factors (see Appendix 2, Table 19 for details). A disengaged (or avoidant) coping style was significantly associated with psychological distress and PTSD, and showed marginal significance for somatic symptoms, suggesting that having an avoidant

coping style was linked with higher risk for psychological distress, increased risk of experiencing PTSD symptoms, and possible increased risk of somatic symptoms (Figure 12) (see Appendix 2, Tables 20, 21 and 23 for details).

Figure 12Associations between Coping and Mental Health Outcomes



4.7.4 Mental Health Literacy

Regression analyses found no associations between mental health literacy and mental health outcomes.

4.8 Mental Health Supports

4.8.1 Organisational Supports

Table 16 lists the most accessed services, programs and training courses related to improving mental health and wellbeing that are available across the fire and emergency service organisations, showing the number of respondents in the sample that recognised the support as being available in their volunteer organisation and the number that accessed the services prior to, during or following the 2019–2020 bushfire season and/or in response to the COVID-19 pandemic.

Table 16Most Recognised and Accessed Organisational Supports Services and Availability (N = 187) and Accessed Status (N = 147) Prior to, During and/or Following the 2019—2020 Bushfire Season and in Response to COVID-19 for the Respondent Sample

Organisational Support Service ^a	Recognised availability ^b n (%) (N = 187)	Recognised availability & accessed service ^c n (%) (N = 147)	Accessed prior to the 2019/2020 bushfire season ^d n(%) (N = 147)	Accessed during or following 2019/2020 bushfire season ^d n (%) (N = 147)	Accessed in response to COVID-19 ^d n (%) (N = 147)
Formal or informal debriefings with a manager or work colleague	137 (73.2)	63 (42.9)	35 (23.8)	51 (34.7)	26 (17.7)
Peer support program or group	127 (67.9)	31 (21.1)	18 (12.2)	20 (13.6)	8 (5.4)
Online training/program for mental and physical self-care	81 (43.3)	27 (18.4)	13 (8.8)	10 (6.8)	18 (12.2)
Mental health first aid training	69 (36.8)	20 (13.6)	14 (9.5)	6 (4.1)	5 (3.4)
Employee/volunteer counselling service or assistance program (EAP, or other employer provided counselling service)—FACE TO FACE	104 (55.6)	17 (11.6)	9 (6.1)	10 (6.8)	4 (2.7)

Chaplaincy service	101 (54.0)	17 (11.6)	11 (7.5)	10 (6.8)	4 (2.7)
Face-to-face training/program for mental and physical self-care	68 (36.4)	16 (10.9)	10 (6.8)	7 (4.8)	10 (6.8)

The most widely available and utilised support across all time points was formal and informal debriefing (Figure 13 – see glossary for definition of terms), with this type of support slightly more likely to be accessed in response to the 2019–2020 bushfire season when compared to seasons prior to or after COVID-19.

Figure 13Usefulness of Organisational Supports rated by the Respondents in the Sample who Accessed the Services Prior to, During and/or Following the 2019–2020 Bushfire Season and/or in Response to COVID-19



Note. N = number of participants rating the support usefulness. Values differ for each support type as participants did not use all services. The question was not mandatory; not all participants who accessed a service rated its usefulness.

Of note, the only support more likely to be accessed in response to COVID-19, relative to other time points, was online training and programs for mental health and self-care. Approximately one in five respondents to the survey had accessed a peer support service at some time. In contrast, a little over one in 10 had accessed an employee assistance program and/or chaplaincy service. Close to 15% of young people in this sample have been trained in mental health first aid.

For a complete list of organisational supports recognised and accessed, see Appendix 3.

All listed organisational supports were perceived to be useful by the broad majority of young volunteers in the current sample. Formal and informal debriefing was perceived as particularly useful, with 87.3% of participants rating this to be moderately to extremely useful. Online training and peer support were perceived as less useful, although information on reasons for this were not

^aParticipants were able to choose more than one option.

^bRecognised availability: participants who selected the support as being offered by their organisation.

Recognised availability & accessed service: number of participants who recognised the service was available and accessed it at one or more of the time points (note: each participant only counted once even if they had accessed a service at more than one time point).

^dPercent of those that accessed the service at a time point is a percentage of participants responding to the question. Participants could select more than one organisational support and more than one time point.

obtained and most volunteers still perceived these as at least a little useful for their mental health. Overall, it did appear that face-to-face supports were preferred to online supports for these young people.

4.8.2 Community Supports

Table 17 presents the most accessed supports, services and programs related to improving mental health and wellbeing available to young volunteers in their local communities. The number of respondents in the sample that recognised the support as being available is listed, along with the number that accessed the services prior to, during or following the 2019–2020 bushfire season and/or in response to the COVID-19 pandemic.

Table 17Community Supports Accessed Prior to, During and/or Following the 2019–2020 Bushfire Season and in Response to COVID-19 for the Respondent Sample

Community Support Service	Service accessed at one or more time points n (%)	Accessed prior to the 2019/2020 bushfire season n (%) ¹	Accessed during or following 2019/2020 bushfire season n (%)1	Accessed in response to COVID-19 n (%) ¹
Family or friends	82 (64.6)	66 (52.0)	78 (61.4)	68 (53.5)
General practitioner	58 (45.7)	42 (33.1)	34 (26.8)	33 (26.0)
Social media	47 (37.0)	41 (32.3)	40 (31.5)	38 (29.9)
None of the above	30 (23.6)	26 (20.5)	28 (22.0)	25 (19.7)
Counselling service—FACE TO FACE	29 (22.8)	20 (15.7)	14 (11.0)	13 (10.2)
Peer support program or group	25 (19.7)	13 (10.2)	15 (11.8)	11 (8.7)
Specialist psychological and psychiatric services—FACE TO FACE	24 (18.9)	18 (14.2)	18 (14.2)	13 (10.2)
Internet sites run by mental health organisations	24 (18.9)	14 (11.0)	10 (7.9)	13 (10.2)
Mental health first aid training	23 (18.2)	13 (10.2)	11 (8.7)	11 (8.7)

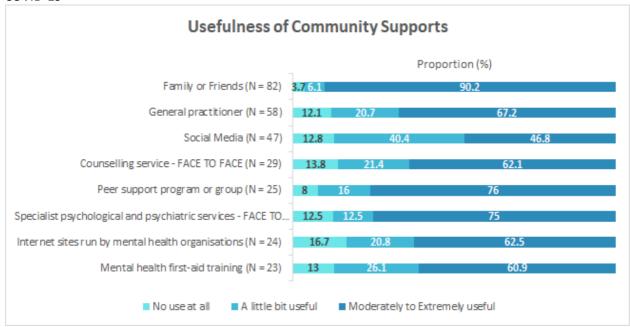
Note. N = 127, number of participants; n (%) = number of responses (percentage of sample).

Accessed Service = participants who used the service either prior, during and/or following bushfire season and/or in response to COVID-19.

A majority of young volunteers used family and friends as sources of information and support at all time points (Figure 14). This informal support source was accessed more in response to the 2019–2020 bushfire season than prior to or in response to COVID-19. Most sources of support were accessed at slightly higher levels in response to the 2019–2020 bushfires than at any other time points assessed in this survey. Of interest, close to half of all participants had engaged with the general practitioner concerning their mental health at some point. However, less than 20% had engaged in specialist psychological or psychiatric support, services that are accessible through a referring GP. Social media was recognised as a source of mental health information or support for over one-third of participants, highlighting the importance of considering this medium for providing mental health information to young people.

For a complete list of community supports recognised and accessed, see Appendix 3.

Figure 14Usefulness of Community Support Services, Rated by the Respondents in the Sample who Accessed the Services Prior to, During and/or Following the 2019–2020 Bushfire Season and/or in Response to COVID-19



Note. N = number of participants rating the support usefulness. N varies for each support as participants did not use all services.

Most community supports were rated as being at least moderately useful by a large majority of participants, with only social media perceived by less than half of young volunteers to be at least moderately useful. However, most still found this source of mental health information or support to be at least a little bit useful.

5 LEADERSHIP PERSPECTIVES ON MENTAL HEALTH

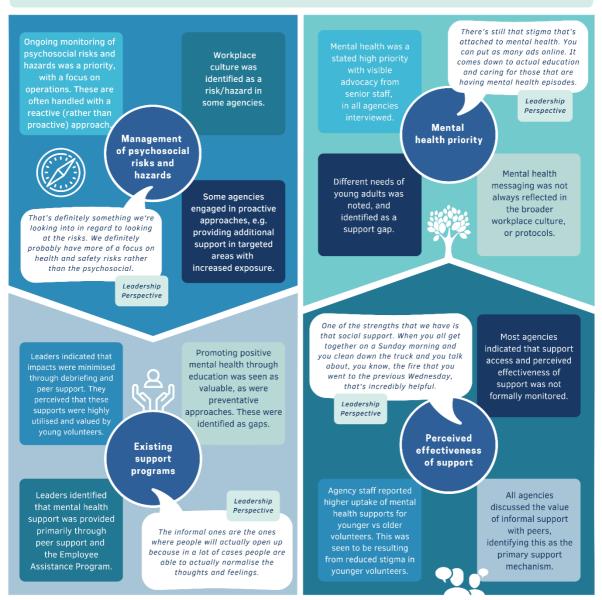
Leadership Perspectives: Key Findings Fact Sheet



POSITIVE MENTAL HEALTH IN YOUNG ADULT FIRE AND EMERGENCY SERVICE PERSONNEL

EY FINDINGS FACT SHEET - Leadership Perspectives

Leadership perspectives were provided through twelve one-on-one semi-structured interviews with senior leadership personnel, along with one focus group comprising unit leaders and brigade captains. All states and territories were represented.





















For more information, please contact the authors of the infographic: Dr Amanda Taylor, amanda.taylor@adelaide.edu.au, and Dr Jane Cocks, jane.cocks@adelaide.edu.au.

5.2 Leadership Sample

Perspectives on mental health and available supports for young adult volunteers were sought from leadership personnel through a series of 12 one-on-one semi-structured interviews and one focus group.

The interviews (n=12) were conducted with senior agency leadership personnel from 12 different agencies across all states and territories, including QFES (QLD), SACFS and SAFECOM (SA), RFS and SES (NSW), CFA and SES (VIC), DFES (WA), Bushfires NT (NT), TFS and DPFEM (TAS), and ESA (ACT). The focus group (n=6) included unit level brigade captains and unit leaders from CFA and FRV (VIC), SES (ACT), RFS and QFES (QLD), and RFS (NSW).

The structure of the findings discussed in this chapter is guided by the themes that developed from the interviews and focus groups.

5.3 Management of Psychosocial Hazards

Comprehensive psychosocial risk and hazard management protocols were detailed by the interviewed leadership personnel, with all agencies having a high level of organisational knowledge and involvement. Identified psychosocial risks included operational (e.g., exposure to traumatic experiences when attending incidents) and workplace-related risks (e.g., exposure to workplace bullying and harassment). Risk management frameworks varied between agencies, including monitoring known risks, documenting incidents, detailing intervention protocols, and adapting the management of risks and hazards as they are progressively identified.

While systems for managing risk were in place across all agencies interviewed, these varied from largely reactive approaches where risks and hazards are generally managed as they arise to systems that incorporate both proactive and reactive strategies to identify and monitor risks and hazards. This was also reflected in the leadership focus group, with psychosocial safety systems being largely reactive as risks and hazards arise. An example of a proactive approach for managing psychosocial hazard risk provided by one leadership personnel was to monitor incidents (e.g., floods) and provide additional mental health training in targeted areas with increased exposure. Of the agencies operating with a more reactive approach, there was an acknowledgement that a more proactive approach is warranted.

Most leadership personnel identified that the focus of psychosocial risk management is predominantly operational. As such, risks and hazards that arise during the course of operations, for example, the risk of psychological trauma through exposure during operations, constituted the priority in identification and management. One interviewee described this in these terms:

That's definitely something we're looking into in regard to looking at the risks. We definitely probably have more of a focus on health and safety risks rather than the psychosocial. [Semi-structured interviewee]

Beyond operational risk management, some leadership personnel reported that the workplace itself was an additional context in which psychosocial risks and hazards can develop, including through workplace culture, harassment, and bullying, which were essential to monitor and manage.

Regarding specific considerations for managing risk concerning young adult volunteers, all agencies indicated minimum age (some 17, most 18) and minimum training requirements before the young adults could attend incidents. It was acknowledged that the focus of these minimum requirements tended to be operational, rather than psychosocial, in nature.

5.4 Mental Health as a Priority

Leadership personnel across both the interviews and the focus group identified that mental health is a high priority within their agencies. This priority was reported to be reflected through visible advocacy and messaging across multiple levels of their agency (including from executive level) and across several contexts, including in-person visits to brigades and units, training courses, online groups and peer support networks.

While there was clear priority and commitment to the development of a culture of awareness and support, leadership personnel also reported an apparent disconnect between this identified priority of mental health and wellbeing and actual workplace culture, along with the translation from top-down messaging through to actionable safety and support protocols at the brigade level:

We say people are our most important asset, but do we practise it in real life? [...] Sometimes the role of leaders, particularly middle management, in [demonstrating] the right culture of safety and wellbeing, gets lost sometimes on the leaders themselves. [Semi-structured interviewee]

There's still that stigma that's attached to mental health. You can put as many ads online. You can put as many things on Facebook as you want to. We could do it to death if we wanted to. It doesn't mean that people are going to see mental health any differently. It comes down to actual education and [...] caring for those that are having mental health episodes. [Leadership focus group participant]

Finally, most interviewees recognised no particular focus or priority on mental health specifically aimed at young adult volunteers. This was identified as an area for development within agencies, particularly given the recognition that young adults have different needs with respect to communication, support preferences and approaches to mental health.

5.5 Existing Support Programs

Leadership personnel shared a variety of mental health initiatives, programs, and supports available to young adult volunteers across three broad areas:

- 1. promotion of positive mental health and wellbeing
- 2. preventative and protective approaches
- 3. post-incident support, including intervention for mental health disorders.

5.5.1 Mental Health Promotion

Programs promoting positive mental health and wellbeing were mentioned by approximately half of the interviewed leadership personnel. Some interviewees indicated that these topics are part of volunteer induction, while others mentioned the availability of opt-in programs. Most interviewees noted that their agency did not have, or did not have enough, promotion and education about positive mental health and wellbeing. All interviewees recognised the value of these initiatives, and most agencies have plans to increase the focus in this area in the future. This was also reflected in the leadership focus group.

5.5.2 Prevention and Protection

Some leadership personnel mentioned prevention and pre-PTE exposure protection initiatives, but these were not offered across all agencies. Most agencies that offered prevention-based resources provided them on an opt-in basis, with some aimed only at those in leadership positions. Leadership personnel noted the role of peer support, particularly in informal contexts, as a valuable protective form of support.

Most leadership personnel recognised that formalised preventative approaches are valuable and that a lack of preventative strategies remains an omission that requires addressing across the agencies. An emergent theme identified concerning mental health prevention was the intention of some agencies to implement mental health prevention-focused training, but only to people in leadership positions, with the idea that this support would then disseminate to volunteers at the brigade level. However, it was noted that there were no specific policies or processes to ensure this dissemination of information, resources, and training actually took place.

5.5.3 Mental Health Intervention

Leadership personnel identified that support for mental health tended to be focused on intervention across two areas: minimising the impact of exposure and addressing mental health concerns as they arise.

Minimising the impact of exposure and providing support in a peri-exposure context was reported to be addressed consistently across all agencies, mainly through formalised peer support and post-incident debriefing protocols, which interviewees indicated as including both operational and psychological components.

Personnel involved in operational leadership roles highlighted, through the focus group, an important consideration relating to debriefing and after-action reviews. While it is evident that post-incident debriefing occurs in the field, the focus is mainly operational, with minimal (if any) mental health focus. The presence of stigma at an organisational level was reported to be a barrier to communicating mental health concerns and emotional impacts in the formal post-incident context, with volunteers choosing to engage in informal discussions later with peers with whom they have developed a rapport. As one participant described:

I think the after-action reviews are very much an operational review with, for want of a better word, an afterthought just tacked on the end where whoever's running the afteraction reviews will say, 'How's everyone feeling? Do you need any help,' type thing. And in a formal group setting like that people are going to go, 'No, I'm fine. I'm all good,' because of the stigma that's attached to mental health as it is, just in general sort of thing and not wanting to be seen as the weak person by actually having an issue. [Participant] did touch on it and say that the informal ones are the ones where people will actually open up because in a lot of cases people are able to actually normalise the thoughts and feelings. Critical incidents are bound to happen at some point, but they've already got that rapport and that trust in that person to say, 'I actually am. I didn't feel comfortable saying it in the afteraction review, but I can say it to you. So, what can we do now?' [Leadership focus group participant]

Addressing mental health concerns as they arise is primarily undertaken through an Employee Assistance Program, with most agencies also providing access to chaplaincy support. For most agencies, the EAP is available to volunteers and their families, while the remaining agencies intend to expand their current employee-only EAP to volunteers in the future.

Role flexibility for young adult volunteers was reported to be high across all agencies. Young adult volunteers are able, and in some cases encouraged, to adapt their role depending on preferences and capacity, particularly following PTE exposure. The processes by which this role flexibility takes place varies between agencies, from informal changes led by brigade captains to more formalised processes.

5.6 Support Uptake and Perceived Effectiveness

Most leadership personnel indicated that EAP and chaplaincy programs are readily available and have high levels of uptake among volunteers. While the age of volunteers who have accessed these services is generally not recorded, some leadership personnel anecdotally reported that young adult volunteers appear to engage with support at a higher level than their older peers. This higher level of uptake is not seen as representative of higher levels of mental health concerns or support need, but rather an indication of an increased willingness to access support when needed instead of internalised stigma regarding accessing support that may lead to lower access rates for older adults.

Most leadership personnel indicated that intervention programs, such as the EAP, are generally not monitored for effectiveness or satisfaction. In most agencies, EAP services are provided by an external provider, with details of client satisfaction or intervention effectiveness not provided to the agencies due to service confidentiality requirements. Most agencies identified this as a gap that needs to be addressed, and some agencies have plans to gather relevant data through the surveying of program participants in the future. Most interviewees indicated that these programs appeared to be valued and effective in providing support based on high levels of uptake.

While not formally monitored, all leadership personnel across both interview and focus groups communicated that, anecdotally, formal and informal peer support is highly utilised and valued, particularly for young adults. Interviewees indicated that young adult volunteers engage with their peer support officers for a range of issues, including volunteer role-related support as well as matters unrelated to their volunteer roles such as relationships, role conflict, family and education concerns. This highlights the value and importance of building strong peer relationships that are supportive of mental health.

A strong theme that emerged during the interviews was that all agencies appreciate the presence and importance of informal and incidental peer support mechanisms. While this type of support is not part of any formalised prevention or interventional approach for mental health, all leadership personnel identified that a considerable proportion of support is inherent in the incidental and unmonitored supportive conversations that take place:

One of the strengths that we have is that social support. When you all get together on a Sunday morning and you clean down the truck and you talk about, you know, the fire that you went to the previous Wednesday, that's incredibly helpful. [Semi-structured interviewee]

6 YOUNG VOLUNTEER PERSPECTIVES ON MENTAL HEALTH

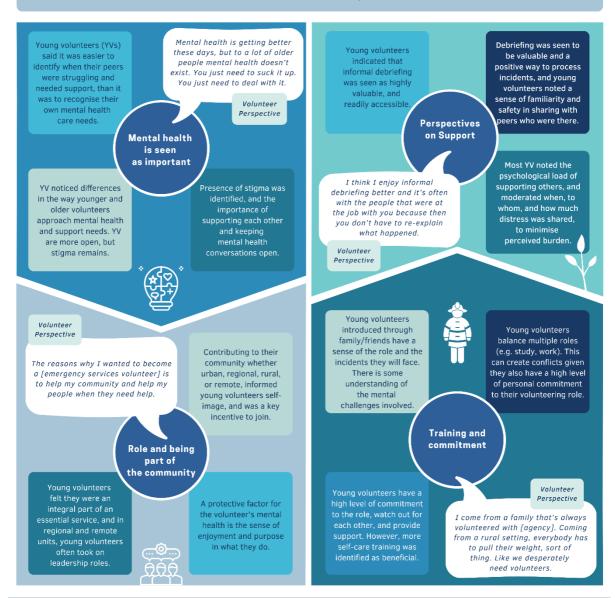
Young Volunteer Perspectives: Key Findings Fact Sheet



POSITIVE MENTAL HEALTH IN YOUNG ADULT FIRE AND EMERGENCY SERVICE PERSONNEL

FINDINGS FACT SHEET - Young Volunteer (YV) Perspectives

Perspectives on mental health and available supports were sought from young adult fire and emergency service personnel through a series of focus groups. Five focus groups were conducted with a total of twenty young adult volunteers participating. All states and territories were represented.



















For more information, please contact the authors of the infographic: Dr Amanda Taylor, amanda taylor@adelaide.edu.au, and Dr Jane Cocks, jane.cocks@adelaide.edu.au.

6.2 Young Volunteer Sample

Perspectives on mental health and available supports were sought from young adult fire and emergency service personnel through a series of focus groups. Five focus groups were conducted with a total of 20 young adult volunteers participating.

Young volunteers from the following agencies represented all states and territories of Australia:

- ACT: n = 3 (SES n = 1 and RFS n = 2)
- Queensland: n = 4 (RFS n = 1, SES n = 1 and QFES n = 2)
- South Australia: n = 3 (SES n = 2 and Country Fire Service n = 1)
- Victoria: n = 2 (Country Fire Authority n = 1 and SES n = 1)
- New South Wales: n = 5 (all participants from the RFS)
- Western Australia: n = 2 (both participants from the Department of Fire and Emergency Services)
- Northern Territory: n = 1 (Northern Territory Emergency Service).

Each jurisdiction was represented as follows:

- Urban, n = 10
- Peri-urban, n = 3
- Remote, n = 3
- Rural, n = 4.

This discussion is guided by the themes by which the interview and focus group were structured.

6.3 Mental Health in the Cultural Context of the Volunteer Role

6.3.1 Role and Being Part of the Community

The sense of role and joining a community of like-minded people was a major attraction for younger volunteers and contributed to how they managed the mental health effects of providing emergency services to the community. Whether urban, regional, rural, or remote, contributing to their community informed their self-image, was a key incentive to join and provided a background to how, culturally, they see themselves in providing care and support for their communities in times of need. As one volunteer expressed:

I was always really connected to my culture and country since I was a really young fella, and the reasons why I wanted to become a paramedic is to help my community and help my people when they need help. That when they need help, they can call on someone who looks a little bit familiar to them and they can trust him. [Young volunteer focus group participant]

Young volunteers felt they were an integral part of an essential service. As experience and specialised skills grew, they often felt they were one of only a few able to lead and execute their skills in a given situation. The need for resourcing and increasing skills was particularly evident when talking to volunteers from smaller units, particularly in regional and rural areas. These units seemed to place greater responsibility on young volunteers who often took on more significant leadership roles. Young members were often introduced to the emergency services through family and friends with a history of involvement in emergency services:

I come from a family that's always volunteered with CFS. [...] Coming from a rural setting, everybody has to pull their weight, sort of thing. Like we desperately need volunteers. We got a large area to cover with minimal help and assistance. [Young volunteer focus group participant]

A protective factor for the volunteers' mental health was the sense of enjoyment and purpose in what they do. They also saw their role as an opportunity to lead into a career in emergency services (e.g., firefighter, paramedic) or as a way to add variety to their lives and a change from their current work.

6.3.2 Training and Commitment

Young volunteers introduced through family and friends come with a sense of the role, the nature of the training and the incidents they would face. This is also associated with some understanding of the mental challenges involved. In contrast, volunteers who entered the service with little exposure through peers or family reported training to be demanding and felt ill-prepared for the psychological aspects of the role.

Young volunteers found that as their personal responsibilities changed, their ability to commit time to and their availability for volunteering also changed, and on occasions, this created a perceived sense of conflict. As young volunteers, they are establishing careers, studying and balancing other evolving responsibilities in their lives. These role conflicts can impact upon the volunteers, in terms of coping with pressure to attend incidents while balancing other commitments. One young volunteer described the difficulty they experienced when they had been unavailable to attend a search and later found out that the focus of the search, two young persons, were found not far from their own residence. After this, they had felt they could not turn off their phone and needed to prioritise their volunteer work over other aspects of their life.

Most young volunteers felt there was understanding and support in managing the volunteer role and other commitments. As time in the service progressed, they developed a greater understanding of the volunteer role and did not need to be involved in every incident. There was also a sense of 'watching out' for and supporting each other as young members of the group and, for those in more senior roles, protectiveness, care and responsibility for those under their leadership.

As part of the discussion around training, early prevention and recognition of mental health concerns, young volunteers raised the need for further information, regular education, and the sharing of strategies for self-care and managing the mental health effects of their volunteer roles. Those who had undertaken further training such as mental health first aid found it invaluable and thought that particularly those in leadership positions should complete this training to fully support those in their unit.

6.4 Impact Reduction and Support: Recognition of Mental Health as Important 6.4.1 Recognition of Mental Health in Others v. Self

Participants in all focus groups indicated that it was easier to recognise when others were struggling than to recognise their own mental health care needs and know when to reach out for assistance. They recognised withdrawal and isolation as key indicators that someone in their group, unit or brigade was struggling.

The participants described how it was essential to keep in touch with each other and reaffirm that it was appropriate to talk about their emotions and reactions to the work. All focus groups mentioned the ongoing challenge of stigma surrounding mental health and the difficulty in recognising when to seek help and reach out for support. Those who had been in the service for longer assumed the role of following up and checking their peers' mental health, along with acting as a gatekeeper to the type of jobs that newer young volunteers would go to. The ability to monitor and support the volunteers and manage the deployment was made more challenging in rural and regional areas where there are smaller numbers of 'boots on the ground' and resources.

6.4.2 Younger v. Older Volunteers' Mental Health Needs

The groups outlined differences between how older and younger volunteers articulated mental health needs and willingness to seek support. Younger members generally recognised that mental health was more readily accepted as something that could be discussed and were aware of pathways to seek help. The challenge was often recognising when to reach out, navigating confidentiality, the level of mental health literacy they had to act and willingness to seek help. As young volunteers often reflected on 'how would I look to other members', and how seeking help might still be perceived as a weakness indicating they might not be able to cope with the job:

There's also a certain stigma that generally—I don't really want to generalise it but the older demographic, they—mental health is getting better these days, but to a lot of older people mental health doesn't exist. You just need to suck it up. You just need to deal with it. [Young volunteer focus group participant]

The nature of the incident and the person's own prior experience also affected how the individual reacted to and processed an event and whether mental health concerns manifested themselves. Several participants had experience with mental health concerns of their own or those close to them, were mental health literate, were well aware of support, and had access to it.

Differences between younger and older volunteers in terms of their ability to engage in discussion around mental health was particularly evident for those who were involved in young volunteer advisory and organisational committees in addition to their operational volunteer role. In this context, young volunteers felt able and supported to communicate experiences and needs, in contrast to typical operational environments where they felt these concerns were more likely to be dismissed.

6.4.3 Formal/Informal Debriefing and Support Delivery

The focus groups outlined that there was considerable variability in terms of the effectiveness of different debriefing types and how debriefing is managed. The participants were conscious of the need to have well-structured debriefing programs and peer support available for volunteers. Peer support was perceived as beneficial, and talking to someone who is highly familiar with the role and work that volunteers undertake was a positive support mechanism.

One of the challenges raised by the participants in relation to formal debriefing was the difficulty making the process feel safe to members and providing the opportunity for emotional and psychological sharing. Formal operational debriefing tended to be done as a group exercise. It focused mainly on the logistical aspects of the incident, covering what was done well and what could have been done differently. In this context, the presence of leadership, and the focus on operations, could at times impact on young volunteers' ability to share openly. The process was, however, seen as generally beneficial as it allowed shared reflection on the incident and at times also reiterated the support networks available for members as needed.

In contrast, informal debriefing was viewed as more readily accessible in real time and perceived as psychologically safe. This type of debriefing tended to occur with people chosen by the individual and was associated with a sense of sharing with someone who understood the emotional and psychological effects of the job. Informal debriefing also depended on how close the group was and the social and personal relationships within the group:

I think I enjoy informal debriefing better and it's often with the people that were at the job with you because then you don't have to re-explain what happened, what was where, where this place was. [...] You can just go, 'Oh, I was a bit concerned about this when this happened.' And they go, 'Oh, yeah because this person was over here and that thing was

over there,' and they already know the basis of the incident. [Young volunteer focus group participant]

Although informal debriefing was considered an essential mechanism for sharing the emotional and psychological load, there was an awareness of when and whom you shared personal distress. The concept of not burdening others and moderating how much you shared of your distress was evident in focus group discussions:

If there was something that was in there that you're not too sure about talking about, having to relive that through telling it to someone who wasn't there, could be a bit daunting. [Young volunteer focus group participant]

6.5 Summary

These emergent themes show a group of young people committed to the volunteer role and what it entails. Their mental health needs are negotiated within the context of the culture and role that they are undertaking. Young volunteers find their role exciting and rewarding, providing a sense of purpose and the feeling of giving back to the community. The challenge this poses is the contrast between making an essential contribution to the community and that attending events can at times become an overwhelming part of their life. The ability to manage the volunteer role and the training also involved conflicts with their expectations of how they see their own mental health, ability to cope, and personal needs. Recognition of mental health concerns within themselves and others was related to whether they accessed available resources and engaged in debriefing. This, in turn, was crucial in how they perceived and managed their mental health needs as individuals and as a group.

7 SUMMARY AND OPPORTUNITIES

7.1 A Synthesised Understanding of Mental Health in the Fire and Emergency Services Context

This chapter presents a synthesis of all stages of the research, including existing Australian and international research, the survey with young volunteers, the leadership perspectives identified through interviews and a focus group, and the young volunteer perspectives gained through focus groups.

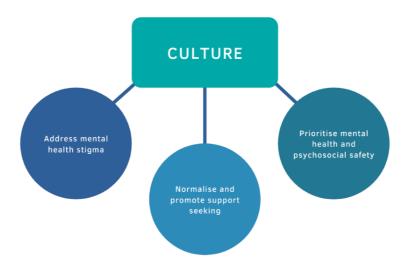
This synthesised understanding has been generated through an ongoing collaborative approach with researchers and stakeholders from the commencement of the project and validated following desktop assessments. The approach to knowledge synthesis is further detailed in the methods section (Chapter 2).

This synthesis highlights the risk, protective, and modifiable factors relating to young volunteer mental health and wellbeing. These factors are presented below in the three broad contexts of change that have been identified: Culture, Communication and Capacity Building.

7.2 Culture

The cultural context synthesises the organisational, social, and individual factors relating to how young volunteers interpret and manage mental health concerns and reflect the broader organisational culture. Broadly, the cultural context of change highlights the need for a cultural shift to address mental health stigma, normalise and promote support seeking, and increase the visibility of mental health and psychosocial safety as a priority from agency level through to unit level. This synthesised understanding identifies the opportunities and contexts for change and directly informs the framework (Figure 15).

Figure 15Opportunities for Change Related to Culture within Fire and Emergency Service Agencies



7.2.1 Address Stigma

At a cultural level, young volunteers highlighted the challenges of stigma around mental health. This stigma was particularly reflected in the lack of visibility of mental health messaging for young

volunteers, the need to normalise discussions about mental health and include mental health discussion in formal operational processes.

Young volunteers highlighted the absence of discussion about mental health across various operational activities, including training exercises, pre-incident preparation and post-incident debriefing. Leadership perspectives identified that mental health topics were not formalised components of these activities, with discussion around mental health most often taking place in informal peer to peer contexts.

The presence of stigma was a barrier to discussing mental health concerns or emotional impacts in the post-incident context. Young volunteers indicated a need for more visibility of these impacts at all levels of service:

Those role models that say to you, 'It's OK to speak. It's OK to not be OK.' I find that that's a really big thing. [Young volunteer focus group participant]

From both young volunteer and leadership perspectives, agencies that incorporated young volunteer advisory groups provide the opportunity for young volunteers to share their experiences and needs in a supportive environment and bring their unique perspectives to shape the protocols, supports, and culture in accordance with their needs.

There is a clear opportunity to increase the visibility of discussion about mental health at an organisational level, incorporate young volunteer perspectives, and normalise discussion of mental health and support pathways in formal post-incident debriefings across all levels of service.

7.2.2 Normalise and Promote Support Seeking

Young volunteers identified that the full breadth of support pathways was not readily visible, promoted adequately or normalised as part of their role.

Young volunteers shared perspectives that mental health support was primarily provided through informal debriefing, while other pathways were not as readily visible, accessible or indeed encouraged. As mentioned above in the section discussing mental health stigma, leadership representatives reflected this sentiment when talking about support uptake, indicating that engagement in informal debriefing was high and that young volunteers valued them. In contrast, other support pathways were less utilised. High levels of engagement and satisfaction were shown for formal and informal debriefing in the survey conducted with young volunteers, but with concurrent low levels of awareness of many of the other organisational supports offered. For example, just over half (55.6%) of young volunteers identified the availability of employee/volunteer assistance programs despite this support option being widely available across agencies nationally.

This highlights the need for ensuring the availability and awareness of a range of supports, the promotion of these support pathways, and the normalisation and acceptability of seeking support for mental health at a cultural level across agencies.

7.2.3 Prioritise Mental Health and Psychosocial Safety

Findings from the current project regarding the mental health outcomes of young adult fire and emergency service personnel indicate a solid need to prioritise young volunteers' mental health and psychosocial safety. This is supported by both existing national and international literature, and perspectives of young volunteers themselves obtained during focus groups. Leadership perspectives further support the vital need for prioritising mental health, indicating that this priority was actively promoted across agencies nationally.

Notably, both leadership and young volunteer perspectives identified messaging around mental health priority and seeking support. Still, participants acknowledged that this was not necessarily actioned on the ground through training, protocols or support strategies.

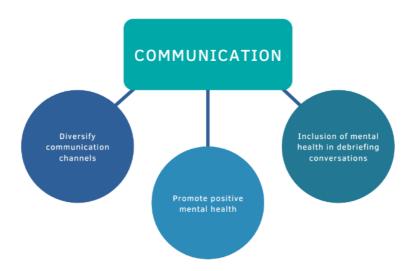
Leadership personnel indicated that protocols exist for providing mental health or psychological first aid training at leadership levels but that these were not necessarily made available to meet the needs of young volunteers. Young volunteer perspectives reflected this need, indicating the importance of considering mental health and the management of mental health as part of the role. As such, this should form part of training and skill development for all volunteers and personnel.

Together, the findings of the present project illustrate the need for a shift from simplistic messaging about the importance of mental health to messaging that reflects a culture of psychosocial safety evidenced by training, protocols, and supports that prioritise young volunteers' mental health.

7.3 Communication

The communication context synthesises how mental health promotion, support and training are communicated, visible, and normalised within the organisation. This informs how communication processes can be improved by normalising the discussion of mental health, increasing visibility of support pathways, and diversifying communication channels to ensure visibility and accessibility of information, resources and support (Figure 16).

Figure 16Opportunities for Change Relating to Communication for Fire and Emergency Service Agencies



7.3.1 Diversify Communication Channels

Young volunteers had moderate levels of awareness of available support pathways, including the availability of chaplaincy services (54%) and employee assistance programs (55.6%), both of which are primarily available to volunteers across all agencies.

Leadership perspectives provided an understanding of why this might be the case, indicating through the interviews that support pathways were often provided in brochure format within the unit. Consequently, the information is not always readily accessible in a confidential context,

highlighting the need to make mental health support related information available, accessible and promoted on various platforms.

Young volunteers confirmed the understanding that they often did not know where to go or how to seek help. Communication about support pathways was lacking. Leadership perspectives offered the insight that young volunteers access information differently, and as such traditional communication pathways may not be sufficient to reach young volunteers 'where they are'. A brochure in the brigade shed is unlikely to be picked up, but a social media post with links and a phone number may be more likely to generate engagement. This is especially relevant for young volunteers in rural and remote regions, who already face several barriers to access.

It is clear that agencies may benefit from diversifying communication channels such that messaging around mental health and support pathways is documented in accessible ways and promoted through multiple channels. Given the importance of social support sources (e.g., family and friends) for providing support for young volunteers, it is also necessary to include these social connections in communications regarding mental health.

7.3.2 Promote Positive Mental Health

Leadership perspectives indicated that both mental health messaging and support were primarily focused on addressing mental disorders and problems as they arose, rather than promoting resources and skills to support mental health and wellbeing before symptoms of mental illness develop. This reactive approach to mental health was also reflected in the young volunteer perspectives through the focus groups, where they communicated the need to consider the promotion of mental health and wellbeing and the skills needed to achieve it. Mental health-related resources and supports were focused on treatment for mental illness rather than on resources and services designed to support positive aspects of mental health. Additionally, research on young volunteer mental health has focused on mental ill-health, with a limited investigation into the positive aspects of mental health. Taken together, these findings indicate the need for a shift in messages from and within agencies away from a focus on reducing mental illness and towards the inclusion of positive and preventative aspects of mental health.

Regularly communicating information about positive aspects of mental health and the skills and supports that could contribute to this may also assist with reducing stigma and the normalisation of conversations about mental health across agencies.

7.3.3 Inclusion of Mental Health in Debriefing Conversations

The opportunity to engage in conversations with fellow unit, group or brigade members following attendance at an operation or incident was valued by young volunteers who completed the online survey. Among respondents, 87% found formal or informal debriefing to be moderately to extremely useful. Young volunteers also reported that they perceived post-incident debriefing within their unit, group or brigade to be helpful and often supportive of psychosocial safety. Leadership representatives identified that informal debriefing, in particular, was a valuable avenue of support. However, many young volunteers reported that debriefing commonly focused on operations rather than including information about coping with the emotional and psychological impact of incidents. Leadership representatives also advised that discussing self-care and mental health in post-incident debriefing protocols is not formalised at an organisational level, with current debriefing protocols focused mainly on operational matters.

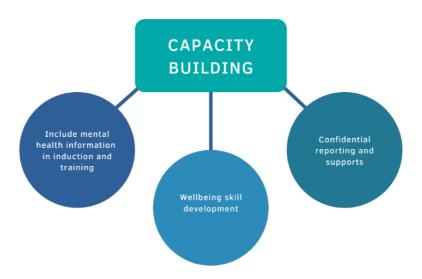
To reduce reliance on operational leaders to make decisions regarding the inclusion of conversations related to mental health as part of post-incident debriefing, agencies may benefit from developing protocols for this, including resources to support conversations about mental health and self-care.

7.4 Capacity Building

The capacity building context synthesises the need for training, role preparedness and mental health skills development to be implemented at a unit level through training and engagement of young volunteers (Figure 17). This informs how young volunteer capacity building can occur through the implementation of training and development of skills for positive mental health and wellbeing and protocols to facilitate learning:

I'm on this weekend course, and you're like, oh wow, I learnt so much. And then you're really on to it for the next month, and you keep those core skills. But it's like with anything, you need to practice and we practice our knots all the time. We practice our technical skills all the time. Maybe we need to practice mental health [skills], or just at least acknowledge it a little bit more. [Young volunteer focus group participant]

Figure 17Opportunities for Changes Related to Capacity Building for Fire and Emergency Service Agencies



7.4.1 Include Mental Health Information in Induction and Training

It was widely endorsed by leadership personnel and young volunteers that the mental health literacy of young volunteers is likely to be higher than that of older volunteers and personnel. However, findings in the present study indicated that many young people who are experiencing high levels of psychological distress do not perceive that they have a problem. Young people additionally reported that while they were able to identify markers of possible mental health concerns in their peers and others, they found it difficult to do so for themselves.

To improve mental health literacy and training in mental health-related skills, leadership representatives and young people recommended the inclusion of mental health information and resources in induction and training activities. Increasing the visibility of mental health-related skills as part of the fire and emergency services role may assist in normalising conversations and improve communication regarding mental health across units, groups and brigades. Early identification and prevention approaches may also facilitate access to relevant support prior to mental health concerns impacting volunteer role function.

Many young volunteers had peers or family involved in the fire and emergency services, which helped them understand potential exposures and impacts (e.g., potentially traumatising events) before commencing the role. Including information and psychoeducation on potentially traumatising

events and potential impacts of cumulative exposure in recruitment and induction materials can assist in ensuring expectations upon entry to the fire and/or emergency services are matched to the realities of the role.

7.4.2 Wellbeing Skill Development

Wellbeing is considered an essential element of complete mental health (Keyes, 2005). Specific individual skills were found to contribute to wellbeing in the sample of young volunteers, including developing self-compassion and active or engaged coping strategies. Despite these identified associations, young volunteers expressed limited awareness of the positive aspects of mental health and resources that contribute to this. As previously outlined, agency representatives recognised the benefits of promoting mental *health*, as opposed to solely reducing symptoms of mental *illness*, but they also acknowledged that limited attempts had been made to include this in education and training for personnel. This represents an opportunity for agencies to promote the positive aspects of mental health and the skills and resources that contribute to them.

7.4.3 Confidential Reporting and Supports

Psychosocial hazards were recognised as being essential to address by leadership representatives and young volunteers. This is particularly noteworthy given routine work stressors experienced by emergency personnel, including the experience of conflict with colleagues, are associated with increased risk for the development of mental health concerns. This is in addition to the role-related exposure to critical incidents (Wang et al., 2010). Identification of and response to these hazards was reported to be largely reactive, with limited agency protocols specifically focused on psychosocial hazards. Developing processes for reporting and monitoring psychosocial hazards that are confidential and clearly outlined may assist with allowing earlier identification and remediation and may, therefore, reduce their impact.

Young volunteers expressed concern about the perceptions of other volunteers, particularly older volunteers, in response to expressions of mental health difficulties and any support need. Additionally, some reported that information about mental health supports was limited to hard copy pamphlets available at unit, group or brigade training facilities and were concerned about the visibility of accessing these. Improving awareness of pathways to supports through various confidential means (e.g., agency intranet and social media) is needed for young volunteers.

8 YOUNG VOLUNTEER WELLBEING FRAMEWORK

8.1 Framework Development

8.1.1 Knowledge Translation Approach

The Wellbeing Framework was developed using a mixed-methods approach involving three stages:

- Stage 1: A rapid systematic review of existing literature (Garritty et al., 2020).
- Stage 2: Re-analysis of existing quantitative data and an online survey with young adult fire and emergency service volunteers (aged 16–25).
- Stage 3: qualitative interviews and focus groups with young volunteers and agency leadership staff, including senior and operational leaders (e.g., brigade captains), analysed via a collective case study (Yin, 2018) and thematic analysis (Braun & Clarke, 2006).

The quantitative research phases (rapid review, data re-analysis, and online survey) have primarily informed the content of the framework, in terms of defining the risk and protective factors to be addressed, while the qualitative research phases (semi-structured interviews and focus groups) have informed the context and timing for implementation of goals and actions. A detailed mixed-methods knowledge translation approach is outlined in the methodology chapter (Chapter 2).

8.1.2 Informed by and Aligned with Best Practice

The Beyond Blue 'Good practice model for mental health and wellbeing in first responder organisations' provided the best practice foundation that informed this framework. In addition, the Young Volunteer Wellbeing Framework is aligned with relevant best practice guidelines. These include the 'Australian Guidelines for the Prevention and Treatment of Acute Stress Disorder, Post-Traumatic Stress Disorder and Complex PTSD' (Phoenix Australia, 2020), the 'Youth Mental Health Service Models and Approaches: Considerations for Primary Care' guidelines (Orygen, 2018), and the 'Best Practice Framework' outlining best practice models in youth health and mental health (Headspace, 2014).

8.1.3 Tailored for Young Adults

Consistent research evidence supports an early intervention paradigm for mental health, ideally before the age of 25, to prevent or delay the onset of disorders (McGorry & Mei, 2018). Helping young fire and emergency service volunteers access support early is, therefore, vital. How young people access supports has changed in the face of technological advancement and continues to rapidly evolve (Freeman et al., 2018; Grist et al., 2018). Almost all young people in Australia aged 16–25 years are online (99%), with 60% using the internet to find information about mental health (Hickie et al., 2019). For young people in Australia, prominent barriers to help-seeking for mental health include stigmatising attitudes and embarrassment, concerns around confidentiality and trust, identifying the symptoms of mental illness, undue reliance on self-help, limited knowledge about mental health services and a lack of accessibility (e.g., transport, geographical location and cost) (Hickie et al., 2019).

To increase access to mental health information and supports, the World Health Organisation advocates engaging young people in the environments where they interact and using the tools and networks with which they are familiar (Hickie et al., 2019). To address the needs and preferences of young volunteers, the Wellbeing Framework has been developed to maximise its accessibility by incorporating actions that promote mental health information, support pathways, and foster mental health skills through various channels and contexts, including online. Further, by involving young volunteers themselves as stakeholders and contributors throughout the research project, the Wellbeing Framework and incorporated 'Care 4 Guide' is uniquely tailored for this population.

It is important to note that this Wellbeing Framework and the broader project, focused on fire and emergency service personnel aged 16–25, were informed by data predominantly obtained from those in volunteer roles and this age group. However, the findings and project outputs may also have relevance for young adult career personnel and other age groups in the unit, although they were not informed by data from older age groups or career personnel.

8.1.4 Terminology and Definitions

The Wellbeing Framework has four integrated pillars of support, defined as follows:

- 1. Promotion: Positive health promotion, advocacy and wellbeing skills (e.g., self-compassion skills training).
- 2. Prevention: Approaches and strategies to prevent the onset and further development of mental health conditions through early identification and support (e.g., mental health or psychological first aid training).
- 3. Protection: Minimising harm through protective processes pre- and post-incidents (e.g., providing post-incident unit support including a focus on self-care and connection to support pathways as needed).
- 4. Intervention: Mental health intervention in response to identified mental health concerns (e.g., accessing the supports available outlined in the stepped care-based Support Pathways section of the Care 4 Guide).

Additionally, the Wellbeing Framework incorporates three contexts in which informed change can occur, defined as follows:

- 1. Culture: Organisational culture and the psychosocial environment from agency level through to unit level.
- 2. Communication: Resources and materials that young adult volunteers and those that support them can access and protocols to increase their visibility.
- 3. Capacity Building: Training and engagement of young adult volunteers in the development of skills for positive mental health and wellbeing, protocols to facilitate learning, and how they can be supported to do this by others.

8.1.4.1 Note on Specific Terminology: Debriefing

Operational debriefing in the emergency services context is utilised as an opportunity for the team to focus on what was planned, what did and did not work well, what opportunities there are for improvement, and to apply the lessons learnt to future events (Dufty, 2013; Phoenix Australia, 2020). This is, therefore, distinct from psychological debriefings and Critical Incident Stress Debriefings (CISD), which evidence has suggested do not improve natural recovery from psychological trauma and have limited beneficial effects for psychological health (Feuer, 2021; Paterson et al., 2015). Further, psychological debriefings and CISDs have potentially detrimental outcomes due to their requirement for participants to re-experience the traumatic event, arousing symptoms and making the memory of the trauma more vivid, suggested as predictors of PTSD (Paterson et al., 2015).

The positive mental health framework for volunteers proposes the integration of mental health topics into operational debriefing, including providing information and psychoeducation on responses to traumatic experiences, helping to normalise reactions, providing information on support pathways and resources should they choose to seek help and recommending the use of the Care 4 Guide to nurture mental health and wellbeing. It is important to note that while the Young Volunteer Wellbeing Framework does refer to this process as debriefing, it is distinct from the CISD and psychological debriefing processes mentioned above.

A WELLBEING FRAMEWORK

for Young Adult Fire and Emergency Service Volunteers



PROMOTION

PREVENTION

PROTECTION

INTERVENTION

GOAL: To decrease mental health stigma and increase visibility of and normalise positive mental health skills as

Action 1: Incorporate lived experience stories in organisational messaging to share and promote the benefits of mental health services, seeking support, and positive outcomes, to promote

Action 2: Develop and communicate a 'mantra' of safety in volunteer roles being inclusive of psychosocial safety

Action 3: Agencies to develop young volunteer representative groups or committees to provide young volunteers the opportunity to advise on agency processes and policies, including those related to mental health

GOAL: To increase visibility of support seeking pathways and normalise support seeking

Action 1: Normalise mental health needs and promote support seeking pathways across all communication channels including agency specific wellbeing teams and

Action 2: Include consideration of diversity and inclusion in communications relating to mental health, and whether accommodations are required

GOAL: To increase awareness and discussion of mental health in pre- and post-incident settings

Action 1: Incorporate mental health prompts in pre- and postincident debriefing protocols

Action 2: Include consideration of diversity and inclusion in protocols and supports relating to mental health, and whether accommodations are required

GOAL: To decrease stigma and increase visibility of mental health as a priority

Action 1: Promote agency-wide discussion and visibility of mental health, promotion of support seeking, and services available, across all levels of personnel

Action 2: Agencies to introduce the wellbeing framework and visibly promote a commitment to implementing the actions

COMMUNICATION

GOAL: To increase awareness of positive mental health skills through communications, materials, and resources

Action 1: Provide access to and promote the 'Care 4 Guide' across all communication platforms, to increase awareness and knowledge relating to positive mental health skills

Action 2: Nominate 'Wellbeing Champions' to advocate for positive mental health by providing information, disseminating messaging, and linking to resources through a variety of communication channels including social media

GOAL: To increase awareness of skills for prevention of mental health concerns through communications, materials, and resources

Action 1: Provide access to and promote existing resources to support identification of early signs of mental health symptoms and avenues for seeking mental health support

Action 2: Incorporate and disseminate the information in the 'Care 4 Guide' across all communication platforms, including agency specific wellbeing teams and social media, to

GOAL: To improve awareness of protective strategies for mental health relating to attending incidents

Action 1: Provide access to and promote the self-check-in included in the 'Care 4 Guide' for individual reflection pre-

Action 2: Young volunteers to be made aware of and know how to contact peer support before attending their

Action 3: Post-incident debriefing protocol to include: mental health check-in questions, reminder of peer support availability, support pathways information, and encouragement to seek support if needed

GOAL: To ensure that young volunteers have knowledge of and access to all provided supports

Action 1: Agency-specific wellbeing team to develop support pathways documentation for inclusion in induction materials and availability online and in hard copy

Action 2: Provide young volunteers with information on mental health services available, how to access them, and assurance that support accessed is confidential

GOAL: To facilitate access to and foster transfer of positive mental health skills and skill development techniques through training and activities

Action 1: Provide access to the 'Care 4 Guide' and promote the skills and strategies relating to positive mental health skill development

Action 2: Incorporate mental health skills training into induction, training, and unit activities

GOAL: To facilitate access to and foster transfer of knowledge and skills for prevention of mental health concerns through training and activities

Action 2: Provide psychoeducation during recruitment and induction about potential mental health risks of being a fire and emergency service volunteer, including cumulative trauma

Action 3: Provide leadership personnel with training in mental health, which is tailored for the fire and emergency services sector (e.g. mental health or psychological first aid)

Action 4: Incorporate mental health or psychological first aid principles in induction, training, and unit activities by inviting trained leadership personnel to share knowledge

Action 5: Develop and implement a protocol for a regular check in with young volunteers, that is not necessarily linked

GOAL: To facilitate access to mental health information and support networks pre- and post-incident

Action 1: Promote social support, through identifying personal and volunteering networks

Action 2: Provide information to operational leadership personnel about how to engage in positive mental health conversations in order to engage in mental health check-ins pre-incident as needed

Action 3: Include adults between approximate ages of 25 to

Action 4: Young volunteers to be made aware that peer support officers are also supported, to reduce perception of burden GOAL: To foster increased awareness, accessibility, and promotion of available supports and confidential channels of reporting

provide access and information on how to report workplace hazards confidentially, e.g., bullying or harassment

BUILDING CAPACITY

9 AGENCY IMPLEMENTATION GUIDE

9.1 Guidance on Implementation

To maximise the feasibility and likely uptake of the Young Volunteer Wellbeing Framework across agencies, the research team consulted with agency stakeholders, including project working group members. This consultation led to the development of an implementation guide that provides examples agencies can use to implement framework actions and include guidance on evaluating uptake of these actions. This includes a flexible approach to integrating current and future agency processes and actions related to mental health.

It should be noted that the examples provided are not intended to be exhaustive. Agencies may put in place, or may already have in place, their own systems and structures relevant to the Wellbeing Framework. Agencies are encouraged to use this implementation guide and to determine which indicators are feasible to implement within their agency context. Additionally, agencies may elect to identify key priority actions and indicators and implement these according to this guide or in ways that are informed at an agency level.

9.2 Implementation Guide

9.2.1 Overview of this Guide

The Agency Implementation Guide (AIG) provides additional detail and guidance to assist agencies to implement the Wellbeing Framework. This includes measurable steps that can readily inform an evaluation strategy, to be developed and implemented at the agency level. The AIG is structured according to the four wellbeing pillars: Promotion, Prevention, Protection and Intervention. For each of the goals and actions in the framework, this guide provides several targeted strategies—implementation indicators— to address the actions. These indicators are intended as exemplar guides and may need to be adapted at the agency or unit level to complement existing frameworks, protocols and documentation. Further, each individual agency may choose to implement additional strategies to increase the relevance and uptake for their young volunteers.

9.2.2 The 'Care 4 Guide'

The 'Care 4 Guide' (the name for the mental health knowledge product) was co-designed with the Young Volunteers Advisory Committee members and acts as the primary mental health content referred to in the framework and this implementation guide. Each section or page of the Care 4 Guide will also be available as an individual 'shareable'. The guide (and individual shareables) will be available in digital format, and can be printed as hard copies. The content includes:

1. <u>Section 1: Mental Health Information</u>

- a. Positive mental health: Information about positive mental health and wellbeing, and activity to identify wellbeing building blocks.
- b. Protecting your mental health: Information on potential mental health impacts and ways to reduce these impacts.

2. Section 2: Mental Health Skills

- a. Self-Compassion: Education and activity suggestions to develop skills in self-compassion.
- b. Mindfulness: Education and activity suggestions to develop skills in mindfulness.
- c. Coping skills: Education and activity suggestions for developing engaged coping skills.

d. Mental health self-check: A checklist for noticing signs that may indicate a need to seek support.

3. <u>Section 3: Mental Health Support</u>

- a. Support pathways template: Flowchart with multiple levels of support, based on a stepped care approach, provided as a blank template for customisation.
- b. Mental health resources: Links and numbers to general mental health information and support in the community.

The Care 4 Guide also includes suggestions to share the guide, particularly the completed support pathways document, with family and friends. This reflects the importance of the social support that family and friends provide as identified in the current project.

WELLBEING PILLAR 1: PROMOTION

GOALS

ACTIONS

INDICATORS

Incorporate lived experience stories To decrease mental health stigma and increase visibility of in organisational messaging to share and promote the benefits of and normalise positive mental health skills mental health services, seeking support, and positive outcomes, to promote sustainable volunteering as part of the volunteer role

- Seek self-nominations for sharing perspectives on self-care and sustainable volunteering from older/long term volunteers, as 'Mental Health Ambassadors'

- Health Ambassadors'.

 Highlight lived experience quotes in the 'Care 4 Guide' via communications (e.g., email, social media) and during unit/group/brigade training and via communications.

 Peer support officers engaged in the process of lived experience storytelling, to support those with lived experience.

 Lived experience stories may be shared through a 'buddy system' with more experienced volunteers pairing with young volunteers to share experiences and positive outcomers. It is the process of the process of
- In order to reduce the risk of vicarious traumatisation, lived experience messaging to have a focus on self-care, the practical coping skills used by the volunteer, and the support pathways utilised (as opposed to a focus on the incident, or the emotional experience of the incident).

Develop and communicate a 'mantra' of safety in volunteer roles being inclusive of psychosocial safety

- - Consult with young volunteer committees to develop a mantra to communicate that safety includes psychosocial safety.

 Psychosocial safety mantra to be communicated via diverse channels (e.g., email, social media, face to face training, visible posters, etc.).

Agencies to develop young volunteer representative groups or committees to provide young volunteers the opportunity to advise on agency processes and policies, including those related to mental health

- Agency leadership to develop process for representative young volunteer committee to advise on agency activities and processes. Examples include a Young Volunteer Advisory Council that meets
- regularly or an annual Young Volunteer summit or camp.

COMMUNICATION

To increase awareness of positive mental health skills through communications materials, and resources

Provide access to and promote Provide access to and promot the 'Care 4 Guide' across all communication platforms, to increase awareness and knowledge relating to positive mental health skills

- Make the 'Care 4 Guide' available and accessible electronically on local
- unit/agency intranets, and in hard copy at each local unit.

 Provide each new volunteer with a hard copy of the 'Care 4 Guide' at recruitment/induction, and ensure that they know how to access it
- Distribute the 'Care 4 Guide' electronically, through broad agency communication channels, digital noticeboards, and on social media
- Share targeted components ('shareables') of the 'Care 4 Guide', with a focus on positive mental health information and skills regularly through broad agency communication channels, and on social media channels.

Nominate 'Wellbeing Champions' to advocate for positive mental health by providing information, disseminating messaging, and linking to resources through a variety of communication channels including social media

- Seek nominations for volunteers who are willing to engage in mental Seek nominations for volunteers wino are willing to engage in mental health and wellbeing promotion and communications at agency level. This role may fit into existing Peer Support roles, or it may be a distinct role called a 'Wellbeing Champion' or similar. Provide 'Wellbeing Champions' with mental health resources, including the 'Care 4 Guide', 'shareables', and agency-specific resources, for promotion and dissemination.

 Provide leadership personnel with 'Wellbeing Champions' contact details to add to their distribution lists for dissemination of
- details, to add to their distribution lists for dissemination of

CAPACITY BUILDING

To facilitate access to and foster transfer of positive mental health skills and skill development techniques through training and activities

Provide access to the 'Care 4 Guide' and promote the skills and strategies relating to positive mental health skill development

- Introduce the positive mental health and wellbeing information and the wellbeing building blocks activity during unit activities, and encourage young volunteers to reflect and complete this activity.
- 2 Incorporate mental health skills training into induction, training, and
- Incorporate mental health skills training as outlined in the 'Care 4 Guide' into volunteer induction and training sessions.
- Encourage young volunteers to engage in the activities incorporated in the 'Care 4 Guide'.
- Complete the support pathways template from the 'Care 4 Guide' as a unit activity, ensuring that young volunteers have included all details of unit, brigade, and agency-wide available supports.

WELLBEING PILLAR 2: PREVENTION GOALS ACTIONS INDICATORS Normalise mental health needs and promote support seeking pathways across all communication channels Share targeted components ('shareables') of the 'Care 4 Guide', with a focus on identifying support needs, when to seek support, and pathways to care, regularly through broad agency communication channels, and on social media To increase visibility of support seeking pathways and including agency specific wellbeing teams and social media normalise support Encourage leadership personnel to discuss the range of informal and formal supports available with young volunteers for inclusion on the support pathways seeking 2 Utilise inclusive language which is sensitive to diversity in agency, brigade, and inclusion in communications relating to unit communications Consider diverse access needs and provide accommodations to enable accessibility of information, training, and resources. mental health, and whether accommodations are required Make the 'Care 4 Guide' available and accessible electronically on local unit/agency intranets, and in hard copy at each local unit. Provide each new volunteer with a hard copy of the 'Care 4 Guide' at recruitment/induction, and ensure that they know how to access it digitally. Promote 'check-in with yourself' shareable from the 'Care 4 Guide'. To increase COMMUNICATION awareness of skills existing resources to support identification of early signs of mental health symptoms and avenues for seeking mental health support for prevention of mental health concerns through communications, Leadership personnel to include regular discussion of mental health topics, with reference to information in the 'Care 4 Guide', during unit activities. Distribute the 'Care 4 Guide' electronically, through broad agency Incorporate and disseminate the information in the 'Care 4 Guide' across materials, and resources all communication platforms, including communication channels, digital noticeboards, and on social media channels. Share targeted components ('shareables') of the 'Care 4 Guide', with a focus on protective mental health skills (including mental health literacy information, engaged coping skills, and self-identification of mental health symptoms) agency specific wellbeing teams and social media, to increase exposure regularly through broad agency communication channels, and on social media Encourage young volunteers to conduct regular self check-ins from the 'check-in with yourself' shareable. To facilitate access Provide access to training which will Make the 'Care 4 Guide' available and accessible electronically on local CAPACITY BUILDING unit/agency intranets, and in hard copy at each local unit. Provide each new volunteer them with a copy of the 'Care 4 Guide' at to and foster transfer of knowledge and recruitment/induction. skills for prevention Reminders to be sent to operational leaders to ensure that all young volunteers are aware of and can access the 'Care 4 Guide'. Incorporate skills training activities from the 'Care 4 Guide' into induction, training, and regular unit activities. of mental health concerns through training and activities Provide psychoeducation during recruitment and induction about potential mental health risks of being a Ensure that conversations with potential new recruits include discussion of the potential for exposure to traumatising experiences and associated risk for mental health impacts, including cumulative impacts. Potential new recruits to be provided with information on support for mental fire and emergency service volunteer, including cumulative trauma exposure, and the importance of early intervention health offered by the agency. Agencies to consider developing an information guide for families on supporting mental health in young fire and emergency service volunteers. 3 3 Provide leadership personnel with training in mental health, which is tailored for the fire and emergency Maintain a register of leadership personnel trained in Mental Health or Psychological First Aid (MHFA/PFA) or equivalent training. Provide MHFA/PFA training (or equivalent) to leadership personnel that have services sector (e.g., mental health or psychological first aid) not yet received training. Leadership personnel trained in MHFA/PFA to be requested to document their experience for knowledge transfer. Include skills in training MHFA/PFA principles into job and person specification for leadership roles for leadership roles. Ensure MHFA/PFA training incorporates 1) ability to aid in recognition of mental health-related symptoms most likely to occur in this cohort in this sector: anxiety, depression, PTSD; 2) ability to identify early warning signs of developing mental health problems, including maladaptive coping strategies such as increased alcohol consumption, withdrawal from volunteering; and 3) skills training in how to reach out to volunteer in an appropriate way. Incorporate an introduction to MHFA/PFA during new volunteer induction. Integrate knowledge learned, as recorded by MHFA/PFA-trained leadership personnel, into regular unit training activities and presentations. Invite MHFA/PFA-trained leadership personnel to present about their training and engage young volunteers in MHFA/PFA skill exercises. Develop agency-specific materials on MHFA/PFA principles for distribution. psychological first aid principles in induction, training, and unit activities by inviting trained leadership personnel to share knowledge 6 Develop and implement a protocol for a regular check in with young volunteers, that is not necessarily Utilise the 'Care 4 Guide' shareables on 'mental health self-check' and 'my support pathways' to guide discussion points for check in conversations with young volunteers young volunteers to regularly contact young volunteers via phone or face to face for a brief conversation. linked to incidents Conduct check-ins with young volunteers as needed on the basis of observing mental health concerns outlined in when to seek support. Operational leaders consider potential cumulative effects of incidents on mental health for young volunteers, and include this in their decision making regarding call outs.

		WELLBEING PILL	AR 3: PROTECTION
	GOALS	ACTIONS	INDICATORS
CULTURE	To increase awareness and discussion of mental health in pre- and post-incident settings	1 Incorporate mental health prompts in pre- and post-incident debriefing protocols	Leadership personnel include information on possible mental health impact of incidents, self-care and access to supports in post-incident debriefing protocol. Leadership personnel to promote the 'Care 4 Guide' during post-incident debriefing, as required.
		Include consideration of diversity and inclusion in protocols and supports relating to mental health, and whether accommodations are required	Utilise inclusive language which is sensitive of diversity in agency, brigade, and unit information, protocols and resources. Consider diverse needs of young volunteers when providing support post incident, including provision of a variety of avenues for support (e.g., online, phone, face to face).
COMMUNICATION	To improve awareness of protective strategies for mental health relating to attending incidents	Provide access to and promote the self-check-in included in the 'Care 4 Guide' for individual reflection pre- and post-incident	Include the 'self-check in' shareable from the 'Care 4 Guide' in incident training materials. Promote individual self-check during pre-incident checklist and preparation. Consider including references to additional agency-specific or publicly available mental health resources in pre- and post-incident check ins.
COM		Young volunteers to be made aware of and know how to contact peer support before attending their first incident	Include details of peer support contact information in new volunteer induction materials. Operational leaders to be sent regular (e.g., quarterly) reminders to encourage volunteers to link with peer support officers following attendance at incidents.
		Post-incident debriefing protocol to include: mental health check-in questions, reminder of peer support availability, support pathways information, and encouragement to seek support if needed	Agency leadership to seek feedback (e.g., twice per year) from operational leaders (e.g., Brigade captains) regarding inclusion of mental health related content in unit debriefing. Post incident debriefs should include a focus on strategies and supports in place. Prompts can include: Who are your identified supports? How might you build enjoyable activities into your week? What are some of your engaged coping skills?
ACITY BUILDING	To facilitate access to mental health information and support networks pre- and post-incident	1 Promote social support, through identifying personal and volunteering networks	 Incorporate information that highlights the importance of social support in induction processes, including the 'Care 4 Guide' for young volunteers. Provide regular (e.g., quarterly or biannual) opportunities for young volunteers to engage informally with volunteer peers. Agencies to consider the feasibility of establishing cross jurisdiction online meet ups for young volunteers.
CAPAC		Provide information to operational leadership personnel about how to engage in positive mental health conversations in order to engage in mental health check-ins preincident as needed	Provide leadership personnel with 'Care 4 Guide' shareables relating to support, and resources for engaging in conversations about mental health (e.g., 'Are They Triple OK?' resources). Incorporate materials about mental health support in leadership personnel induction and training.
		Include adults between approximate ages of 25 to 35 in the peer support network	 Agencies actively seek to recruit peer support officers in the younger (e.g., 25-35 year-old) age range. Agencies to conduct approximately annual checks to monitor whether peer support officers include those in younger age range (e.g., approximately between 25 to 35). Where individual units do not have access to peer support officers in this age bracket, agencies may provide young volunteers with the opportunity to connect with peer supports from other jurisdictions.

Young volunteers to be made aware that peer support officers are also supported, to reduce perception of burden

Ensure that peer support officers are provided with debriefing, supervision and mental health support as required.
 Include information about how peer support officers are supported in agency-based information and discussion of peer support program.

WELLBEING PILLAR 4: INTERVENTION

GOALS CULTURE visibility of mental health as a priority COMMUNICATION BUILDING

ACTIONS

INDICATORS

To decrease stigma and increase

- Promote agency-wide discussion and visibility of mental health, promotion of support seeking, and services available, across all levels
- Leadership personnel to discuss and promote support pathways information as part of regular communications, and advise young volunteers how to access this information both electronically and in
- Demonstrate active support of those with mental health issues through
- return-to-work policies post-treatment/recovery.
 Wellbeing Champions to disseminate support pathways information via diverse communication channels (e.g., social media, email, hard copy).

Agencies to introduce the wellbeing framework and visibly promote a commitment to implementing the actions outlined

- Agency leadership express commitment to mental health of young volunteers through multiple channels (e.g., email, social media). This may include sharing of 'Care 4 Guide' and a demonstrated commitment by implementing actions in young volunteer wellbeing framework, and active involvement in suitable young volunteer activities.
- Implementation of the wellbeing framework tabled at agency leadership meetings and cross agency meetings.

To ensure that young volunteers have knowledge of and access to all provided supports

- Agency-specific wellbeing team to develop support pathways documentation for inclusion in induction materials and availability online and in hard copy
- Agency specific information outlining support pathways documentation developed. This may include support related information from the 'Care 4 Guide', along with agency specific pathways to support and mental health resources available to volunteers.
- Include support pathways documentation in young volunteer induction
- Provide peer support officers with support pathways documentation.
- Provide Wellbeing Champions with support pathways documentation for regular dissemination.

Provide young volunteers with information on mental health services available, how to access them, and assurance that support accessed is confidential

- - Include information on mental health services and the confidential
 - nature of these services in support pathways documentation.

 Leadership personnel to encourage young volunteers to complete support pathways section of 'Care 4 Guide', for example via email or during training activities.
 - Support pathways shareable from 'Care 4 Guide' to be shared on agency social media platform.

CAPACITY

To foster increased awareness, accessibility, and promotion of available supports and confidential channels of reporting

- Implement leadership training to increase knowledge of what services are available, promote support seeking, and prompt confidential support access for young volunteers as needed
- Include agency-specific support pathways documentation in leadership induction materials.
 - Include support pathways information in leadership training protocols, and volunteer recruitment and training materials.
 - Agency leadership to consider including requirements for external providers of mental health services (e.g., employee assistance programs) to have specific training and skills in providing care to young people, along with culturally responsive care.
- Develop a confidential reporting protocol, and provide access and information on how to report workplace hazards confidentially e.g., bullying or harassment
- Process for confidential reporting of workplace psychosocial hazards that includes more than one alternative channel for reporting (e.g., anonymous online form, confidential hotline, face to face with leadership)
 - Provide information on all the available channels for reporting psychosocial hazards as part of recruitment and training materials.
- Appoint a dedicated staff member to guide volunteers through the process of reporting workplace hazards
- Staff member appointment or task added to existing staff member role to provide information on process of reporting psychosocial hazards to volunteers. Examples for this may include a process document, a recorded video, or operational leadership personnel to provide information to volunteers as part of training activities.
- Provide young volunteers in rural and remote regions with information on how to access online support networks and services
- Links for online support services and resources provided via multiple communication channels (e.g., in support pathways documentation, on internet or via email, in induction and/or training materials).

 Where groups are private, nominate a contact person and provide
- contact details for young volunteers to request to join.

10 CARE 4 GUIDE TO POSITIVE MENTAL HEALTH

10.1 Care 4 Guide Knowledge Product

The Care 4 Guide to Positive Mental Health was informed by input from young volunteers via a quantitative survey conducted with young fire and emergency service volunteers in 2020, along with focus groups conducted with young volunteers in late 2020 and early 2021. The guide provides information and tips for facilitating positive mental health skills, identification of support pathways to assist in promoting connections and social support, and strategies to assist with early identification and access to mental health supports.

10.2 Care 4 Guide Development

The research team developed the guide in consultation with a group of young fire and emergency service volunteers, nominated by representatives from agencies across Australia. At least one representative per state and territory was nominated, with the representatives collectively forming the Young Volunteer Advisory Committee (YVAC). The YVAC met bi-monthly with research team representatives to provide input on project progress and planning, and content and design of the Care 4 Guide. Content of the guide was presented to the YVAC, based upon findings from the survey and focus group phases of the research project, with discussions leading to consensus agreement on content inclusion.

A shared online document was developed for the YVAC to provide feedback on the design of the guide via live updates and comments on the document. Young volunteers provided feedback on both content and the aesthetic direction of the guide. The YVAC approved the design of the completed guide following the final meeting with research team representatives held in March 2021.

Key input from the YVAC related to content included:

- That the guide incorporate a focus on mental health skills and strategies that can be developed.
- Keeping information on mental health conditions (e.g., symptoms of depression and anxiety) to a minimum, given this information is readily available elsewhere.
- The desire to share the guide with family and friends, reflecting the importance of their role in supporting the young volunteer and including resources targeted at family and friends.

Key design directions from the YVAC included:

- Ensuring the guide was brief.
- Creating a colourful and bright aesthetic.
- Including the ability to share parts of the guide on social media and different online channels and networks.

The finalised 'Care 4 Guide', co-designed with the young volunteers in the YVAC, is provided over the following pages.



Your guide to positive mental health and wellbeing as a young fire and emergency service volunteer

This guide is brought to you by



















and the members of the Young Volunteers Advisory Committee

Welcome to the Care 4 Guide

Care 4 **Self** to **Care** 4 others

Welcome!

Welcome to the **Care 4 Guide**, your guide to positive mental health and **wellbeing** as a young fire and emergency service volunteer.

This guide is based on **research** and it has been designed in **partnership** with young adult fire and emergency service **volunteers** across Australia.



Who is this for?

This guide has been designed for **you**, a young adult volunteering in fire and emergency service agencies across Australia.

What is in this guide?

Your mental health is **important**, which is why this guide is focused on skills and strategies that you can use to care for yourself **first**, so you can care for your peers and your community.



What is in this guide?

This guide contains information on positive mental health and wellbeing, strategies for developing mental health skills, and checklists so you can check in on yourself regularly. It is only for informational and educational purposes and is not therapy or any form of treatment.

How do I use this guide?

So, what is here? In this guide you'll find information on **mental health**, tips about how to develop self-compassion, ideas for **everyday mindfulness**, different kinds of coping skills, a mental health **check-in** for yourself, and a guide to help you identify the unique **support pathways** around you. There are also links to more resources on the back page of this guide.



Make this guide your own

Everyday Mindfulness

Self Compassion

Coping Skills

Self Check-In You'll notice that some of the pages have spots for you to write in. We encourage you to **screenshot** these pages, mark them up on your phone, and **save them** so you have them on hand when you need them. You can use these pages as they are or edit them to include strategies you find useful too.

You can also **share** with your friends and family, as they can help you look after your mental health.

Positive Mental Health & Wellbeing

What is mental health anyway?

Mental health is about more than just the absence of mental illness. Instead, mental health is a state of wellbeing where a person is able to cope with normal stresses in their lives and function well at work, with friends and family and make a contribution to their community.

Of course, part of mental health is also noticing the signs that you may be experiencing difficulty and getting help when needed.

"I'm on this weekend course, and you're like, oh wow, I learnt so much. And then you're really on to it for the next month, and you keep those core skills. But it's like with anything, you need to practise and we practice our...technical skills all the time. Maybe we need to practice mental health [skills], or just at least acknowledge it a little bit more."

- young volunteer, age 20

Many experts suggest that wellbeing is built from multiple elements, or building blocks.

Some of these are personal factors, or things you can build, that include:

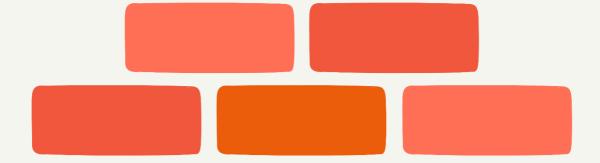


Some of the skills in this mental health guide have also been linked to wellbeing.

This is why it is important to identify your wellbeing building blocks, develop mental health skills to deal with problems as they arise, and know how to identify signs that you may need to seek help and support for your mental health.

The next pages introduce some skills that can help support your mental health to help you care for yourself so you can care for others

What are some examples of the building blocks in your life that enhance your sense of wellbeing?



The next pages introduce some skills that can help support your mental health to help you care for yourself so you can care for others.

Protecting your mental health

You have an important role

As volunteers in the fire and emergency services you have an important role to help keep the community safe and well.

Your role may also help you to build **connections** with like-minded others, do things that you enjoy, and give you a sense of giving back to the community. BUT this role also can be stressful and involve difficult experiences.

In fact, people working or volunteering in the fire and/or emergency services are considerably more likely to experience potentially traumatising events, and are also more likely to experience mental health impacts than the general Australian population.

So, it is important to do things to **protect** your mental health!



Mental health impacts

Those experiences in relation to the fire and emergency service volunteer role that may be associated with risk for mental health impacts include:

- Exposure to incidents or events that involve significant injury or loss of life
- Where there is personal relevance to the incident or event (e.g., a victim is known to you)
- Experiencing an injury yourself during a response to an incident or event
- Experiencing dangerous situations such as becoming trapped yourself when attending an incident or event
- Ongoing exposure to repeated events over time (known as cumulative trauma)

It is normal to be impacted by traumatic or distressing events. Research has shown that the best way to avoid long-term impacts is to discuss your feelings and experiences with someone you trust. If necessary, seek help promptly if you notice changes in your behaviour or feelings or impacts on your relationships with others.

Reducing the impact

Factors that may help to reduce the impact of potentially traumatising events include:

- Talking with others about your experiences in your emergency services role
- Social support (receiving support AND giving it to others)
- Keeping physically healthy and engaging in physical activity
- Getting enough sleep and eating well
- Engaging with supports and counselling
- Reducing stress in other parts of your life
- Keeping alcohol intake within recommended limits

Your mental health and wellbeing is important

Volunteering in the fire and emergency services involves developing lots of skills to ensure you can perform the role safely. To be able to function effectively in the role and contribute to your group, unit or brigade, learning and maintaining skills for your mental health and wellbeing is just as important as the operational skills you develop.

Some of the skills to help support mental health, along with tips for how to practice these skills, are included in the next pages of this guide.

"Those role models that say to you, "It's OK to speak. It's OK to not be OK." I find that that's a really big thing."

- young volunteer, age 17.

Skill Spotlight 1 - Mindfulness

Mindfulness is more than breathing

Mindfulness is about maintaining a present moment-by-moment awareness of our thoughts, feelings, sensations, and environment, without judgement. Mindfulness has been linked to positive outcomes like better mental health.

Here are a few simple and quick mindfulness exercises that you can do as you go about your day. You don't need to be sitting in silence, or in a particular position to do these mindful activities. You can do them while waiting in a queue, preparing meals, sitting at your desk at work; or just about anywhere. This skill spotlight covers three simple techniques to being more in tune with your body and your mind.

Scan your body

Body scans are a way for us to pay **mindful attention** to all parts of our body and notice how we feel in the moment. You can do this activity wherever you are standing, sitting or lying down.



Starting from your feet, notice the way they **feel**. Are they touching the ground? Feel the points of contact and pressure that your feet create.

Allow your attention to move upwards to focus on your legs and observe the **sensation** in your legs.





Bring your **awareness** up higher in your body, to your stomach, your chest, and your back. Pay attention to how each part of your body feels.

Notice how your shoulders feel, and notice the sensations in your neck, head, and face. If you notice your **thoughts** wandering, bring your awareness back to your body scan.





Lastly, notice your **breath** as you breathe in and out.

Once you have scanned from your toes to the tip of your head, take a **moment** to notice any differences in how you feel in your body.



Everyday mindfulness

Try activities that you do in your everyday life, but do them 'mindfully'. This means to focus on the activity and the sensations, moment to moment, as you do them.

Let's try mindful eating...

Pay attention to the aroma of the food

Notice the intention to swallow

Pay close attention to how that changes as you chew



Notice how your hand and arm knows to bring the food just to the right spot

Notice how the food tastes in your mouth

You can do this with lots of different activities in your everyday life, try these!



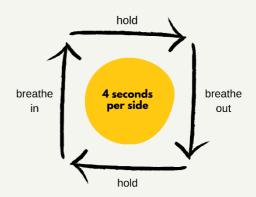






Mindful slow breathing

This exercise is something you are already great at – breathing. The aim is to slow and regulate your breathing through **square breathing**. Each side of the square should take four seconds.



Notice the sensations in your chest, stomach, and nostrils as you breathe

Skill Spotlight 2 - Self Compassion

Treat yourself as you would treat a friend

Caring for yourself is an important part of helping you care for others in your role as a fire and emergency service volunteer. Practicing care and compassion for yourself helps you to have the emotional resources you need to support and care for others, including in your volunteer role – think of it like putting the oxygen mask on yourself in an aeroplane before helping others.

Research done with fire and emergency service volunteers aged 16-25 years showed that self compassion was connected to higher wellbeing as well as lower levels of psychological distress.

X

But self compassion is more than just being nice to yourself! An important part of self compassion is practicing skills to help ourselves during difficult times and struggles. In fact, self compassion is itself a skill that can be developed with practice.

So, what is self compassion?

It has three main components

Observing thoughts and feelings in a non-judgmental way, including those that are difficult

3 SELF KINDNESS

Keeping in mind that we are not alone in experiencing suffering or difficulty

Being warm and understanding towards ourselves, particularly when we do not meet ideals we set for ourselves

Try this self compassion check

There are lots of ways to practice self compassion, but one example is to do a brief self compassion check when you notice difficult thoughts or feelings coming up. This takes three steps.



NEFF. 2012)





Consider what you can do to express warmth and understanding to yourself in this moment. What would you say to a friend who was struggling?

WHAT DO I NEED IN THIS MOMENT TO TAKE CARE OF MYSELF?

Skill Spotlight 3 - Coping

There are many ways to cope

Life sometimes involves difficult situations and problems, especially when you are a fire and emergency service volunteer. During these times your coping skills can help.

To start with, we need to understand the two broad ways people cope. There are all kinds of ways to cope, some healthier than others, but they fall under two broad categories.

Engaged coping is actively responding to the problem, along with your thoughts and feelings





Disengaged coping is about avoiding the problem and your emotions

Research shows that engaged coping is linked to higher levels of wellbeing.

Today was tough, I'm going to call my friend and tell them about it

Feelings? What feelings? I'm fine and I don't want to talk about it



Help Alex choose: engage or disengage?

Engaged coping strategies can sometimes involve confronting the problem head-on and working towards finding solutions.





Another engaged way to cope is through seeking social support, such as **connecting** with your friends and family.

You can even cope in an engaged way through expressing or **communicating** your emotions, which might involve journaling or peer debriefing.



Disengaged coping involves – you guessed it – avoiding the problem, and sometimes your feelings about it too. Some difficult situations and problems can't be resolved, and negative feelings may arise, this is a normal reaction to a stressful situation. But practicing engaged coping strategies can help you connect with support, express your emotions, and seek solutions when possible.

Here's how I stay engaged

Fill these boxes out with your own engaging coping strategies.

Confront	
Connect	
Communicate	

Skill Spotlight 4 - Checking In

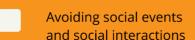
Mental health self check-in

Everyone is different and reacts in different ways, but some of the signs that you might need to seek support are:

Difficulty sleeping



Not wanting to do things you usually enjoy doing



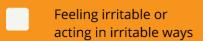


Distressing thoughts or memories about incidents or experiences coming up

Feeling teary more often than usual



Feeling keyed up or on edge more often than usual





Being vigilant or on the look out for reminders of past stressful events



If you have checked off some of these signs, and would like to seek support, please engage with your support pathways

You can identify the supports available to you and your unique support pathways on the next page

Stress check pit stop

Take a moment to notice your heart rate, your muscle tension, and your breathing rate:

Do you notice you are tense?



Actively relax your muscles

Heart racing, or breathing fast?



Slow down your breathing with mindful slow breathing

If I just am sitting at home doing nothing in particular, reading or listening to music and there's that little thought in the back of my head, "What if this? What if that? What if I had done this," or just going back over that again and again and again. That's when I start to say, "Stop, maybe something's not right," and I try to reach out to someone

- young volunteer, age 19

My Support Pathways

My friends and family

Who are your immediate social supports in your family and friends?

You can fill in this template by screenshotting it on your phone and using the markup function. Or you can print it out, fill it out by hand, and then take a photo of it, so you always have it with you. Share it in your volunteer community and help each other identify your own support pathways.

Peers in my unit/group/brigade

Who are your social supports within your volunteer unit, group, brigade?

People in my community

How about the broader community?

Support phone numbers

What about other agency supports, like chaplains and support phone numbers?

Psychologist / employee assistance

Where can you seek treatment, e.g., with an employee assistance program or a psychologist?

Leaders in my wider agency

How about leaders and other people in your wider agency?

Formal peer support program

How do you access your formal peer support contacts?

"We volunteer because we want to do something for others and give back to our communities, but we have to be in a good spot to do that first. Looking after ourselves is what lets us in turn look after others. I read books, listen to music and play video games. They can often help me get perspective or work through things before I put on my uniform again."

- young volunteer, age 24

Please share this support pathways document with those that support you (like your family and friends)

Mental Health Resources

Support lines and websites

Headspace Australia

1800 650 890

https://headspace.org.au/eheadspace/ Counselling, group support chat, and toolkit for 12-25 year olds.

Kids Helpline

1800 55 1800 (24/7) kidshelpline.com.au Counselling for young people aged 5 to 25.

Lifeline

13 11 14 (24/7) lifeline.org.au For anyone having a personal crisis.

Beyond Blue

1300 22 4636 (24/7) beyondblue.org.au Anyone feeling anxious or depressed.

MensLine Australia

1300 78 99 78 (24/7) mensline.org.au Men with emotional or relationship concerns.

Suicide Call Back Service

1300 659 467 (24/7) suicidecallbackservice.org.au Support for anyone thinking about suicide.

MindSpot

1800 61 44 34 mindspot.org.au Free service for people with stress.

OLife

1800 184 527 qlife.org.au Anonymous LGBTIQ+ peer support.

ReachOut NextStep

https://au.reachout.com/urgenthelp#nextstep Personalised support in 3 steps.

SANE Australia

1800 18 7263 www.sane.org Support for those with mental illness.

Keep track of your favourite resources, links, and apps here

Apps & interactives

R U Triple OK?

https://www.ruok.org.au/triple-ok Resources and community for police, fire, and emergency service workers and volunteers.

Smiling Mind app

https://www.smilingmind.com.au/ A free mindfulness app for practicing daily meditation.

MoodMission app

https://moodmission.com/ An app for dealing with stress, low moods and anxiety.

Self-Compassion resources

https://self-compassion.org Guided meditations, exercises, training, and self assessment, by Dr Kristin Neff.

myCompass web-based tool

https://www.mycompass.org.au/ A personalised self-help tool for your mental health, by Black Dog Institute.

ReachOut Breathe app

https://au.reachout.com/tools-andapps/reachout-breathe Smartphone app to teach mindful breathing.

Useful websites for families and friends of young volunteers

Are They Triple OK?

https://www.ruok.org.au/triple-ok

Resources and community for police, fire, and emergency service workers and volunteers, and their family and friends.

Headspace Australia

https://headspace.org.au/friends-and-family/mental-health/

Information for family and friends to learn about how to support emerging health problems.

Beyond Blue

https://www.beyondblue.org.au/the-facts/supporting-someone/

Information for family and friends supporting someone with a mental health condition.

ReachOut

https://parents.au.reachout.com/

Information about mental health, community forums, and support for parents of young adults.



References & Acknowledgements

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12 GLOSSARY

Alcohol Use Disorders Identification Test–Concise (AUDIT-C)

The Alcohol Use Disorders Identification Test—Concise (AUDIT-C) is a screening tool used to detect excessive and harmful patterns of alcohol use and risky drinking patterns in individuals (Bush et al., 1998). Respondents are asked three questions about their alcohol consumption, responding on a scale of 0–4 with their score in the range of 0–12, indicating their level of hazardous drinking. Scores higher than 3 for women and 4 for men are thought to be associated with a problematic level of drinking, with the higher the score, the more likely it is the person's drinking is affecting their health and safety.

Coping Strategies Inventory—Short Form (CSI-SF)

The Coping Strategies Inventory—Short Form (CSI-SF) was used to categorise the coping strategies of the volunteers in response to stressors (Addison et al., 2007). Coping efforts are categorised as 'engaged' strategies, involving actions that confront stressors and limit their long-term psychological and physiological impact, and 'disengaged' strategies of avoidance and limiting exposure to stressors, producing desirable short-term effects but potentially longer-term problems (Addison et al., 2007). The measure involves sixteen questions, with scores on each subscale representing a higher tendency towards the engaged or disengaged coping style (Addison et al., 2007).

Fire and Emergency Services

Australian state and territory agencies who took part in the national survey, structured interviews and/or focus groups, including Fire and Rescue, State/Territory Emergency Service, Marine Rescue, Coast Guard, Parks and Wildlife Services and Forest Fire Management.

Formal and Informal Debriefing

Formal debriefings, such as operational debriefings, are structured post-event evaluations, generally undertaken in a group setting focusing on the logistical aspects of an operation and often including information on pathways for mental health and wellbeing support (Dufty, 2013).

Informal debriefings take place when volunteers talk to peers in a non-structured format about a potentially traumatising event in an attempt to receive social support and validation (Miller, 2016).

Kessler Psychological Distress Scale (K6)

The Kessler Psychological Distress Scale (K6) was used to assess the anxiety and depression of the volunteer sample, providing a brief screen of six questions to identify those at risk for serious mental illness (SMI; Kessler et al., 2003). Although not a clinical diagnostic measure, respondents scoring 19 or more out of 30 are categorised as experiencing severe psychological distress consistent with having a probable serious mental illness (Biddle et al., 2020).

Mental Health Continuum—Short Form (MHC-SF)

The Mental Health Continuum—Short Form (MHC-SF) was used to measure the emotional, social and psychological wellbeing of fire and emergency service volunteers (Keyes, 2005). Using 14 items scored on a six-point Likert scale, the measure assesses the frequency with which respondents experience symptoms of positive mental health, providing an average wellbeing score in the range of 0–70 and a flourishing mental health indicator based on the three wellbeing subscales.

Mental Health Literacy Questionnaire—Young Adults (MHLq-YA)

Mental health literacy is considered a prerequisite for early recognition, management and prevention of mental disorders, helping to identify knowledge gaps, erroneous beliefs/stigma and self-help behaviour concerning mental health issues in individuals (Dias et al., 2018). The Mental Health Literacy questionnaire—Young Adults (MHLq-YA) is an adaptation of the Mental Health

Literacy questionnaire, with language and phrasing revised to suit a young adult population (Dias et al., 2018). Comprised of 29 questions on a five-point Likert scale, the MHLq-YA results in a mental health literacy global score in the range of 5–145, as well as scores for the four subscales of knowledge of mental health problems, erroneous beliefs/stereotypes, first aid skills and help-seeking behaviour, and self-help strategies (Dias et al., 2018).

Mindful Awareness Attention Scale (MAAS)

The MAAS assesses the construct of mindfulness, defined as a state of being attentive to and aware of what is taking place in the present (Brown & Ryan, 2003). An attribute of consciousness, mindfulness is believed to promote the maintenance and enhancement of wellbeing (Brown & Ryan, 2003). The 15 items of the measure, scored on a six-point Likert scale, are averaged to produce a total score in the range of 1–6, with higher scores reflecting greater mindfulness levels (Messer et al., 2021).

Primary Care PTSD Screen for DSM-5 (PC-PTSD-5)

The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5) is designed to identify individuals with probable PTSD, a mental health issue that develops in people who have directly experienced a traumatic event, witnessed the event as it has occurred to others, learnt the traumatic event occurred to a close family member or a close friend or experienced extreme or repeated exposure to aversive details of the traumatic event (American Psychiatric Association, 2013). The measure initially asks respondents if they have had any exposure to traumatic events in the course of their life, with those indicating a trauma history answering five additional yes/no questions about how that trauma has affected them over the past month (Prins et al., 2015).

Psychological and Critical Incident Stress Debriefing (CISD) v. Operational Debriefing

Psychological debriefings, a term often used interchangeably with CISD, are brief crisis interventions, administered within days of a traumatic event, with the fundamental principles of ventilation (an opportunity to talk about the experience), and discussion about distress and psychological symptoms related to the impact of an incident or event (Feuer, 2021; Phoenix Australia, 2020).

Critical Incident Stress Debriefing (CISD) is a seven-stage procedure in which participants examine the traumatic event cognitively and discuss their thoughts and emotions relating to the trauma in a controlled, rational manner (Paterson et al., 2015). Critical processes within the procedure are reconstructing the traumatic event, ventilation, and an educational component (Phoenix Australia, 2020).

Operational debriefings are post-operation evaluations intended to review the events and processes of the operation, focussing on what was planned, what did and did not work well, what opportunities there are for improvement and lessons learnt (Dufty, 2013).

Psychological First Aid v. Mental Health First Aid

Psychological First Aid (PFA) aims to address trauma and stress specifically in response to crises and disasters and can be learnt and exercised by both professional mental health workers and non-professional peer support teams or individuals (Feuer, 2021; Mei & McGorry, 2020). Unlike psychological debriefings, the discussion is directed towards present needs and concerns rather than a review of the incident (Feuer, 2021). PFA is broadly endorsed for its value and considered 'evidence-informed', integrating into guidelines for mental health and psychosocial support in disasters and extreme events (Shultz & Forbes, 2013).

Mental health first aid is the help provided to a peer who is developing a mental health problem or is in a mental health crisis until appropriate professional help is received or the crisis resolves (Morgan et al., 2018). People trained in mental health first aid learn how to recognise the symptoms

of different mental disorders, identify mental health crises, offer and provide initial help, and guide a person towards appropriate support (Morgan et al., 2018).

Psychosocial

Psychosocial is a term used to describe the intersection and interaction of social, cultural, and environmental influences on the mind and behaviour (American Psychological Association, 2020).

Somatic Symptoms Scale—8-Item Version (SSS-8)

The Somatic Symptoms Scale, 8 item version (SSS-8) was used to assess the tendency of volunteers to experience painful or difficult physical symptoms that may not be associated with a physical or medical condition (Gierk et al., 2014). These symptoms may relate to the physical expression of psychological distress or a clinically diagnosable mental health condition. The measure provides a total score for which the respondent's severity of somatic symptoms may be categorised from minimal to very high.

Self-Compassion Scale (SCS-SF)

Associated with psychological wellbeing, self-compassion is an essential protective factor in mental health by fostering emotional resilience (Raes et al., 2010). Self-compassion is considered to comprise of three key components; the first, self-kindness, is the ability to treat oneself with care rather than self-judgment (Raes et al., 2010). The second, common humanity, is one's ability to recognise that imperfection is a shared aspect of the human experience rather than feeling isolated by one's failures (Raes, et al., 2010). The third is mindfulness in the context of holding one's experience in a balanced perspective rather than exaggerating (Raes et al., 2010). The Self-Compassion Scale-Short Form (SCS-SF) measures these three aspects with 12 questions and responses on a five-point Likert scale, resulting in a total self-compassion score in the range of 12–60, with higher scores reflecting greater levels of self-compassion (Raes et al., 2010).

13 APPENDIX

13.1 Appendix 1—Regression Predictor Variables

Table 18 *Predictor Variables Entered into Separate Unadjusted Regression Models*

Demographic characteristics	Volunteer role characteristics	Bushfire and COVID-19 related factors	Modifiable psychological skills
Zone (metro or rural/regional)	Volunteering duration	Living in bushfire affected area	Mental Health Literacy
Gender (male/female)	Volunteering frequency	Active volunteer role in response to 2019–2020 bushfires	Coping skills (engaged/active or disengaged/avoidant)
Age	Engaged with one or more organisational support at any time point	Time spent volunteering during response	Mindfulness
Financial status (ability to raise emergency funds)	, .	Physical health impact of COVID-19 Mental health impact of COVID-19	Self-compassion

13.2 Appendix 2—Multiple Regression Analysis Tables

Table 19Multiple Linear Regression of the Wellbeing Scale (MHC-SF) for the Mental Health Analysis Sample (N = 138)

Predictor variables	Standardised coefficient		
Demographic characteristic			
Ability to raise \$2,000 emergency funds	0.01		
COVID-19 impact on mental health	-0.05		
Modifiable psychological skill factors			
Engaged coping style	0.31**		
Disengaged coping style	0.03		
Mindfulness	0.06		
Mental health literacy	0.08		
Self-compassion	0.42**		
	$R^2 = 0.43$, $F(7,130) = 15.66**$		

^{**}p<.01, *p<.05, †p<.1

Table 20Multiple Linear Regression of the Psychological Distress Scale (K6) for the Mental Health Analysis Sample (N = 138)

Predictor variable	Standardised Coefficient		
Demographic and exposure factors			
Zone (metro or rural/remote)	0.19**		
Gender	0.12*		
Ability to raise \$2,000 funds	0.01		
COVID-19 Impact on physical health	0.09		
COVID-19 Impact on mental health	0.05		
Modifiable psychological skill factors			
Engaged coping style	-0.06		
Disengaged coping style	0.21**		
Mindfulness	-0.27**		
Mental health literacy	0.01		
Self-compassion	-0.32**		
·	$R^2 = 0.57$, $F(8,129) = 20.91**$		

^{**}p<.01, * p<.05, †p<.1

Table 21Multiple Linear Regression of the PTSD Scale (PC-PTSD-5) for the Mental Health Analysis Sample (N = 138)

Predictor variable	Standardised coefficient		
Demographic and exposure factors			
Ability to raise \$2,000 emergency funds	0.15†		
Volunteer service length	0.11		
Active volunteer role during 2019–2020 bushfires	0.13		
COVID-19 impact on mental health	-0.01		
Modifiable psychological skill factors			
Engaged coping style	-0.10		
Disengaged coping style	0.23*		
Mindfulness	0.01		
Mental health literacy	-0.12		
Self-compassion	-0.10		
	$R^2 = 0.20$, $F(9,128) = 4.72**$		

^{**}p<.01, *p<.05, †p<.1

Table 22Multiple Linear Regression of the Alcohol Use Scale (AUDIT-C) for the Mental Health Analysis Sample (N = 138)

Predictor variable	Standardised coefficient		
Demographic characteristics			
Zone (metro or rural/remote)	0.11		
Gender	0.03		
Service length	0.12		
Active volunteer role during 2019–2020 bushfires	0.08		
Modifiable psychological skill factors			
Engaged coping style	-0.04		
Disengaged coping style	0.01		
Mindfulness	-0.10		
Mental health literacy	0.07		
Self-compassion	-0.08		
	$R^2 = 0.02$, $F(9,128) = 1.25$		

^{**}p<.01, *p<.05, †p<.1

Table 23Multiple Linear Regression of the Somatic Symptoms Scale (SSS-8) for the Mental Health Analysis Sample (N = 138)

Predictor variables	Standardised coefficient		
Demographic characteristic			
Zone (metro or rural/remote)	0.21**		
Gender	0.17*		
Ability to raise \$2,000 emergency funds	-0.01		
COVID-19 impact on physical health	0.10		
Modifiable psychological skill factors			
Engaged coping style	0.04		
Disengaged coping style	0.16†		
Mindfulness	-0.23**		
Mental health literacy	0.07		
Self-compassion	-0.33**		
	R ² = 0.42, F(9,128) = 11.87**		

^{**}p<.01, *p<.05, †p<.1

13.3 Appendix 3—Supports Services Availability and Accessed Status

Table 24Organisational Supports Services Availability (N = 187) and Accessed Status (N = 147) Prior to, During and/or Following the 2019—2020 Bushfire Season and in Response to COVID-19 for the Respondent Sample

Organisational Support Service ^a	Recognised availability ^b n (%) (N = 187)	Recognised availability & accessed service ^c n (%) (N = 147)	Accessed prior to the 2019/2020 bushfire season ^d n (%) (N = 147)	Accessed during or following 2019/2020 bushfire seasond n (%)	Accessed in response to COVID-19 pandemicd n (%) (N = 147)
Formal or informal debriefings with a manager or work colleague	137 (73.2)	63 (42.9)	35 (23.8)	51 (34.7)	26 (17.7)
Peer support program or group	127 (67.9)	31 (21.1)	18 (12.2)	20 (13.6)	8 (5.4)
Online training/program for mental and physical self-care	81 (43.3)	27 (18.4)	13 (8.8)	10 (6.8)	18 (12.2)
Mental health first aid training	69 (36.8)	20 (13.6)	14 (9.5)	6 (4.1)	5 (3.4)
Employee/volunteer counselling service or assistance program (EAP, or other employer provided counselling service)—FACE TO FACE	104 (55.6)	17 (11.6)	9 (6.1)	10 (6.8)	4 (2.7)
Chaplaincy service	101 (54.0)	17 (11.6)	11 (7.5)	10 (6.8)	4 (2.7)
Face-to-face training/program for mental and physical self-care	68 (36.4)	16 (10.9)	10 (6.8)	7 (4.8)	10 (6.8)
Mentoring or Buddy program	40 (21.3)	11 (7.5)	9 (6.1)	7 (4.8)	3 (2.0)
Suicide awareness and prevention education/program	45 (24.1)	7 (4.8)	2 (1.4)	2 (1.4)	5 (3.4)
Employee/volunteer counselling service or assistance program (EAP, or other employer provided counselling service)—TELEHEALTH	98 (52.4)	6 (4.1)	4 (2.7)	3 (2.0)	1 (0.7)
Well checks or annual mental health check-ups	27 (14.4)	6 (4.1)	3 (2.0)	5 (3.4)	2 (1.4)
Changes to job role/design to support recovery for mental health condition	31 (16.6)	5 (3.4)	2 (1.4)	3 (2.0)	1 (0.7)
Specialist psychological and psychiatric services—FACE TO FACE	24 (12.8)	4 (2.7)	1 (0.7)	4 (2.7)	0 (0.0)
Specialist psychological and psychiatric services—TELEHEALTH	10 (5.3)	1 (0.7)	0 (0.0)	1 (0.7)	0 (0.0)
Other service	1 (0.5)	1 (0.7)	0 (0.0)	1 (0.7)	0 (0.0)
Substance abuse program	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Anger management program	4 (2.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
None of the above offered	7 (3.7)	-	-	-	-
No services accessed Note. N = number of participants in sample		-	58 (39.5)	53 (36.1)	64 (43.5)

Note. N = number of participants in sample; n (%) = number of responses (percentage of sample).

^aParticipants were able to choose more than one option.

^bRecognised availability: participants who selected the support as being offered by their organisation.

^cRecognised availability & accessed service: number of participants who recognised the service was available and accessed it at one or more of the time points (note: each participant only counted once even if they had accessed a service at more than one time point).

^dPercent of those that accessed the service at a time point is a percentage of the number of participants responding to the question. Participants could select more than one organisational support and more than one time point.

Table 25Community Supports Accessed Status (N = 127) Prior to, During and/or Following the 2019–2020 Bushfire Season and in Response to COVID-19 for the Respondent Sample

Community Support Service ^a	Service accessed at one or more time points	Accessed prior to the 2019/2020 bushfire season ^b	Accessed during or following 2019/2020 bushfire season ^b	Accessed in response to COVID-19 pandemic ^b
	n (%)	n (%)	n (%)	n (%)
Family or Friends	82 (64.6)	66 (52.0)	78 (61.4)	68 (53.5)
General practitioner	58 (45.7)	42 (33.1)	34 (26.8)	33 (26.0)
Social Media	47 (37.0)	41 (32.3)	40 (31.5)	38 (29.9)
Counselling service— FACE TO FACE	29 (22.8)	20 (15.7)	14 (11.0)	13 (10.2)
Peer support program or group	25 (19.7)	13 (10.2)	15 (11.8)	11 (8.7)
Specialist psychological and psychiatric services— FACE TO FACE	24 (18.9)	18 (14.2)	18 (14.2)	13 (10.2)
Internet sites run by mental health organisations	24 (18.9)	14 (11.0)	10 (7.9)	13 (10.2)
Mental health first aid training	23 (18.2)	13 (10.2)	11 (8.7)	11 (8.7)
Internet blogs, forums, or chat sites that discuss mental health information	21 (16.5)	14 (11.0)	12 (9.4)	19 (15.0)
Print Media	20 (15.7)	15 (11.8)	13 (10.2)	15 (11.8)
Broadcast Media	18 (14.2)	17 (13.4)	14(11.0)	14 (11.0)
Counselling service— TELEHEALTH	17 (13.4)	8 (6.3)	8 (6.3)	11 (8.7)
Application (App) on smartphone or tablet	17 (13.4)	11 (8.7)	8 (6.3)	11 (8.7)
National telephone helplines	16 (12.6)	12 (9.4)	6 (4.7)	10 (7.9)
Face-to-face training/program for mental and physical self-care	14 (11.0)	8 (6.3)	5 (3.9)	6 (4.7)
Specialist psychological and psychiatric services— TELEHEALTH	13 (10.2)	7 (5.5)	8 (6.3)	8 (6.3)
Internet based therapy (e.g., E-couch)	11 (8.7)	6 (4.7)	6 (4.7)	7 (5.5)
Other source of information/support	5 (3.9)	3 (2.4)	2 (1.6)	4 (3.1)
No services accessed	30 (23.6)	26 (20.5)	28 (22.0)	25 (19.7)

Note. N = 127, number of participants.

Accessed Service = participants who used the service either prior, during and/or following bushfire season and/or in response to COVID-19.

 $^{{}^{\}mathrm{a}}\mathsf{Participants}$ were able to choose more than one option.

^bPercent of those that accessed the service at a time point is a percentage of the number of participants responding to the question. Participants could select more than one community support and more than one time point.