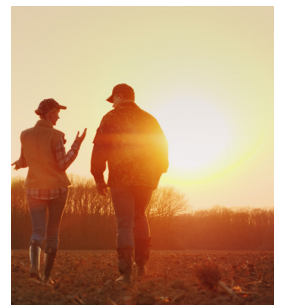
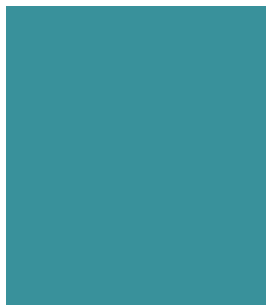
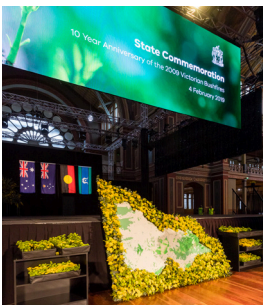


10 YEARS **BEYOND BUSHFIRES** REPORT



MARCH 2021



We are so grateful to the many people who so generously shared their life experiences with us to help increase understanding of disaster impacts and ways to improve recovery.

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Outline of disaster recovery recommendations

Community members



Consider mental health planning



Plan ahead for how to find each other



Be kind to yourself and others



We are all different



Be open to possibility of p



Changes in the natural environment can influence recovery



Remember the children



Supporting parents



Explore resources



Make decision feel right fo

School communities



Bushfire education programs



Trauma training for health professionals and educators



Access to mental health support



Information & resources for parents and caregivers



Additional le support



Programs addressing trauma symptoms



Student wellbeing programs



Recovery programs in early education settings



Access to family violence practitioners and guidance



Additional su staff and voluntee

Government and service providers



5 year recovery framework



Support with housing, finances, relationships



Flexible timing of support services



Community-wide strategies



Restore pla central to com connecti



Support in reducing anger



Restoration of the natural environment



Support local commemorative events



Organise fun family activities



Accessib childcare and activitie



the
positives



Community groups
can make a difference




Seek professional
mental health
support

Boxes with orange
border indicate a **pre
disaster action**



ns that
or you



Commemoration is
personal



arning
ts



Vocational education
& training



Strategies for the
referral of high risk
students



upport
/or
rs



Flexibility with
administrative
requirements




Support sessions for
school staff



aces
community
on



Use social indicators
of recovery



Central
communication
system



Extend services to
affected people out of
community



Involve schools in
local recovery plans



Family violence
prevention



le
and
es



Provide advice
on rebuilding vs
relocating



Services delivered
with care and
flexibility



Access to trauma-
informed mental
health care



Community-based
low intensity
interventions



INTRODUCTION

The 2009 bushfires in Victoria, Australia, are commonly referred to as the 'Black Saturday' bushfires because the worst of the fires took place on Saturday the 7th of February. These bushfires represent one of Australia's major disasters, resulting in 173 fatalities, the damage or destruction of 3,500 buildings and over 2,000 homes, the complete destruction of two townships, and significant impacts to both the natural environment and community infrastructure (1).

The Beyond Bushfires: Community, Resilience, and Recovery study was conducted to examine the impacts of the 2009 Victorian bushfires, including Black Saturday, on the mental health and wellbeing of community members, with a focus on how individual outcomes were influenced by social connections and community-level recovery. The research was extended into the 10 years Beyond Bushfires study and a range of related disaster research studies. Well over 1,000 participants generously shared their experiences for this study through either community meetings, repeated surveys (3-4, 5 and 10 years after the fires) or in-depth interviews (3-4 years after the fires). A mix of communities across Victoria with high, medium and low/no impact from the fires were included to enable us to compare and identify the differences the fires made. The study aimed to build an understanding of longer-term recovery and the ongoing impacts of a major disaster experience, to identify where support is needed for those affected and to guide preparedness and recovery from future events.

This report presents an overview of the key learnings in the 10 years since the bushfires. The results showed individual and community capacity to recover from a disaster experience and subsequent disruptions, and to adapt to changed lives and environments. There were many reports of post traumatic growth, particularly for people from high impact communities. There was also evidence of extended impacts for many on mental health and wellbeing, especially for those who had to deal with other major life stressors. Elevated levels of anger and exposure to violence were also identified. Participants tended to be more positive about their own recovery after 10 years than the recovery of their community. Particular recovery issues were identified for children, families and school communities, including potential long term academic impacts for students.

The results highlighted the influence of close friends and family, social networks and the natural environment on resilience and recovery. People benefited from clear communication systems and services that were flexible and delivered with care. People were generally satisfied with commemorative events, and mostly attended such events at the local level. Factors influencing recovery differed for those who remained living in community and those who relocated.

Recommendations are provided at the end of the report to help apply these findings to individual decision making, community-level strategies to strengthen resilience, and the targeting and timing of recovery services. An outline of the recommendations is shown on the previous page.

Corresponding academic papers are referenced throughout the report and listed at the end to provide access to more detailed accounts of the study methodology and the research findings. Updated links to our disaster research publications are also maintained on the Beyond Bushfires website (www.beyondbushfires.org.au) – under 'Research' then 'Publications'.

SO MUCH HAS BEEN LEARNT SINCE THE BLACK SATURDAY BUSHFIRES

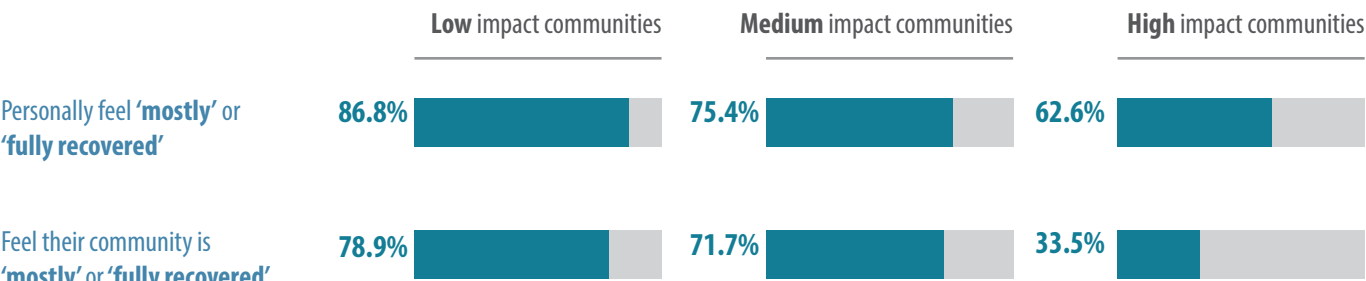


LONG TERM RECOVERY

People directly affected by the 2009 Victorian bushfires showed remarkable capacity to adapt and recover in the years afterwards. Ten years after the bushfires, 66.5% of respondents across all communities reported that they personally felt ‘mostly’ or ‘fully recovered’.

Perceptions of community recovery were much lower, with 44.1% of participants reporting that they felt that their community was ‘mostly’ or ‘fully recovered’.

Perceptions of recovery at 10 years



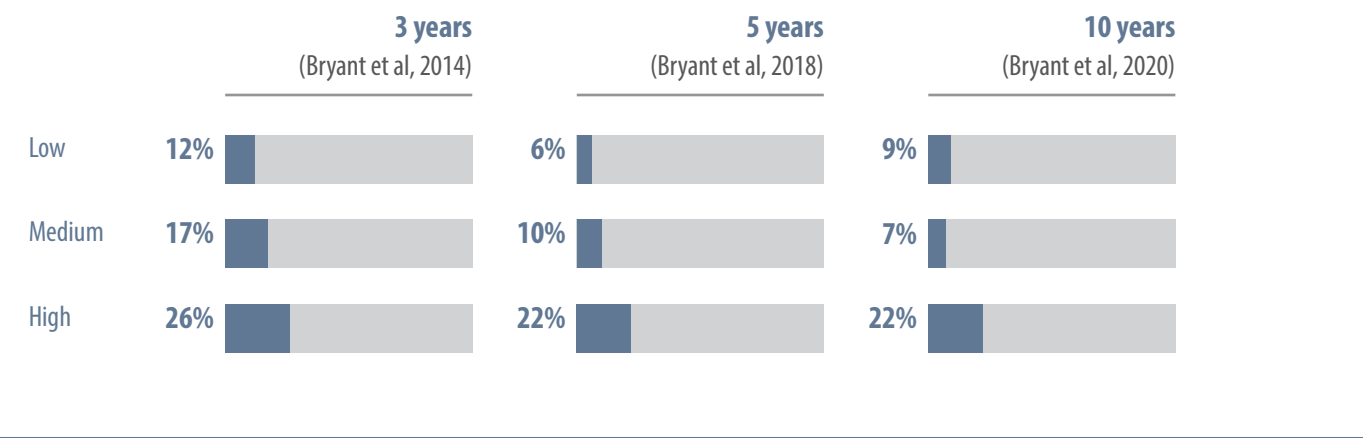
A small but notable number of participants reported that questions about personal and community recovery were not relevant for them (6% and 11% respectively) and were excluded from these figures.

Amongst people affected by disaster, ‘recovery’ can mean different things. Depending on the impact of the bushfire event and how the aftermath was being experienced, some people aimed to reclaim their lives and others needed to reinvent their lives (2).

LONG TERM IMPACTS

In addition to the evidence of recovery and resilience across the 10 years following the bushfires, there was also clear evidence that exposure to the bushfires increased the risk of experiencing a mental illness. In response to our survey questions, 26% of study participants from highly impacted communities were reporting symptoms consistent with a diagnosable mental health disorder 3-4 years after the bushfires, including posttraumatic stress disorder (PTSD), depression, and psychological distress (3). Ten years after the fires, the likelihood of having one or more of these conditions was still more than twice as high for people from high impact communities compared to those from low/no impact communities.

Rates of probable disorders across all communities - PTSD, depression, and/or severe distress



Women were more likely to experience PTSD 3-4 years after the bushfires, while men were more likely to report heavy drinking. Rates of psychological distress, depression, and resilience were comparable for men and women (3).

Not surprisingly, the risk of poor mental health outcomes was higher for those who feared for their lives during the fires or who experienced the death of a loved one (3). It may be less recognized that loss of friends or community members can also have extended impacts (4).



I went to **four funerals in that week** and there were two I didn't get to go to because I was at others... And none of those first four were for one person"

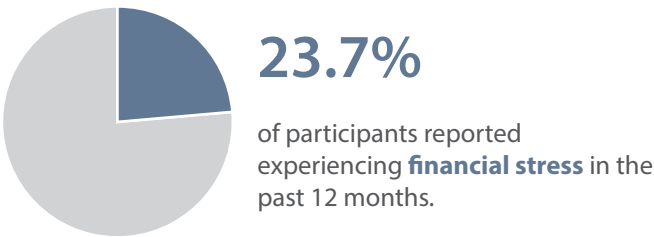
It is easy to assume with current technology that we can reach our family and loved ones at any time, but 56% of our participants were separated from family members during the bushfires and of those, 30% did not know the fate of their loved one for 24 hours or longer (5).



This separation from family during the bushfires was shown to be associated with higher levels of PTSD symptoms 3-4 years later, with personal relationship styles an important factor in individual differences (6). Those who had a tendency to be more anxious in their relationships were more vulnerable to depressive symptoms if they experienced separation from loved ones during and after the bushfires.

It was not just the experience of the fires themselves that impacted on people's mental health. Subsequent life changes undermined their ability to return to their everyday lives. **Major life stressors such as loss of income, accommodation and relationship breakdown in the years following the bushfires were associated with poorer mental health outcomes** (3, 7, 8) and were a predictor of persistent or emerging mental health issues over the next 10 years (9). Additional stressors identified by participants included the practical aspects of managing the post-disaster clean-up and rebuilding, mental health challenges, family related concerns, and the perception of injustice (10). The stressors and supports identified as most significant in the post-disaster environment were similar for men and women (10).

5 years after bushfires



10 years after bushfires



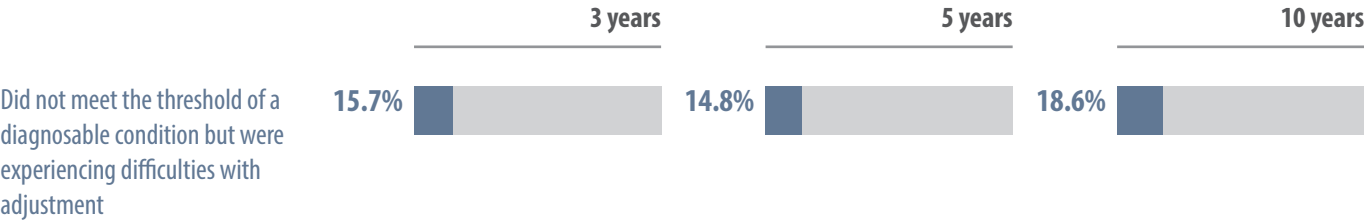
Reports of financial difficulty decreased over time, from five to ten years after the fires. Inability to pay electricity, gas or telephone bills on time due to a shortage of money was identified as the most common financial difficulty.

"In the first six months after the fires what caused the biggest problem for you?"

"Trying to **rebuild** dairy farm infrastructure, **work** ... and keep from going completely **bankrupt** while having **little to no support** from anyone outside our family"

"Just having to have face the black trees and the scarred environment day in day out. Just having to deal with things like getting our fences back up and things like that, and they still aren't. I think we were just totally in delayed, constant shock. You really thought you were functional, more and more so but you just weren't..."

In addition to those who reported symptoms of specific mental illnesses, there were many among those who had moderate to high levels of bushfire exposure, who did not quite meet the threshold of a diagnosable condition but were experiencing difficulties with adjustment over the 10 years following the fires. People with adjustment difficulties were significantly more likely to develop PTSD or depression at a later point.



Long-term experiences of adjustment disorder symptoms appear to be linked to ongoing, post-disaster stressors such as relationship stress or reduced income; and in the absence of early intervention, these symptoms can remain chronic, or escalate to more severe disorders over time.

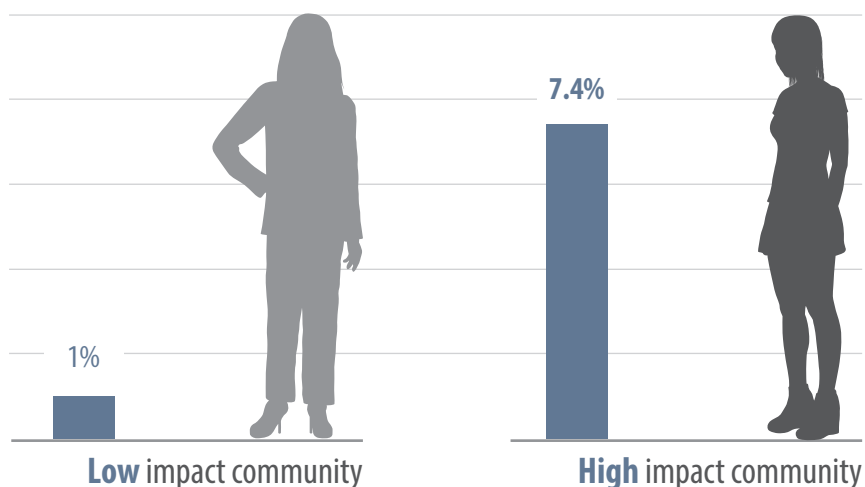
Heightened emotions, including anger, are common in post disaster communities. Qualitative interviews indicated that anger was experienced differently after the fires – it was immediate, intense and frequent, prolonged, destructive, and connected to other emotions such as shame, blame and guilt (11). Traditional gendered identities within regional areas and accompanying expectations of behaviour, seemed to influence experiences and expressions of anger including aggression and violence. However, some people felt their anger was justified due to the frustrations of delays and difficulties getting things back on track, and was sometimes harnessed as a motivational force.

“ Well sometimes you need it to get out of bed. I mean if you’re sitting on that sort of precipice and **blank depression** on one side and **feisty anger** on the other, it might be that you need to **tip over into anger** to prevent yourself from going the other way...I think that it had a really important place initially”

Even though anger can provide the energy to deal with disruptions and delays, our research showed that sudden explosive anger 3-4 years after the bushfires was a risk factor for mental health problems (8). Five years after the fires, there were around 10% of respondents from high bushfire affected areas that reported significant anger problems three-times higher than in low to moderately impacted areas (12). Anger issues were more common among women, younger people, and participants who were unemployed. These significant anger problems often co-occurred with other post-disaster mental health problems and were strongly associated with increased risk of suicidal ideation and hostile aggressive behavior.

In the first three to four years following the bushfires, reports of violence experienced by women were higher in high bushfire-affected areas (7.4%), when compared with low bushfire affected regions (1%) (13). For women, experiences of violence were also linked with income loss and poorer mental health.

Women’s experience of violence post-bushfire



SOCIAL SUPPORT AND CONNECTIONS

Our research shows that social ties make a difference to the recovery experience. In the years following the Black Saturday bushfires, participants identified a number of important supports including people in their social networks (i.e. family, friends, and neighbours), formal support from organisations (such as case support), financial and practical support for rebuilding, and their local community (10).

"What was the most useful thing for you in terms of support?"

"Friends and family providing emotional and practical support - financial, accommodation, holidays, visiting me, talking to me."

"Having the community coming together and the financial support, as well as the volunteer support."

In heterosexual couples, patterns of support-seeking and caregiving were shown to influence mental health after disaster. An avoidant relationship style (i.e. independent, uncomfortable with intimacy) in men was found to be associated with depression and PTSD for them and their female partners, while an avoidant relationship style in women was associated with poorer mental health in themselves, but not their male partners (14). There were not enough partners in non-heterosexual relationships within the study to explore if this was true for other types of relationships.

People who had more people that they were close to were less likely to report symptoms of depression 3-4 years afterwards, unless their close connections had moved out of the community or had depression themselves (15).



More close people general relates to **better mental health** and **personal wellbeing**



Risk of depression was **higher** for those connected to other **depressed people**



Risk of PTSD was associated with more **fractured social networks**

Being close to other people who were in turn connected to each other reduced the risk of PTSD. Conversely, PTSD risk was higher if fewer people named the person as a close contact, or if the participant was linked to others who were themselves not interconnected (15). PTSD was also higher among those who were named as a close contact by someone who had high levels of property loss.

Being a member of a community organization or group emerged as a strong protective factor in terms of mental health outcomes (16). There were added benefits for involvement in more than one group, but even so, moderation was important as involvement in three or more groups appeared to have a negative effect on mental health.

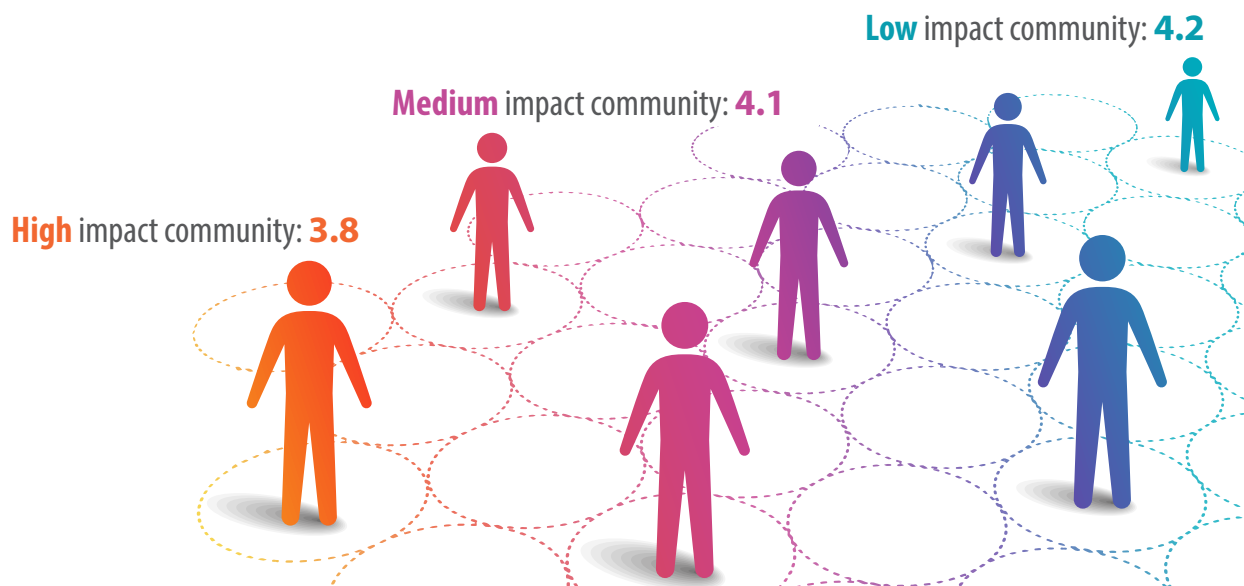


Being involved in **one or two community groups** or organisations was associated with **more positive outcomes** in terms of mental health and wellbeing

In communities in which **many people belonged to local groups** the benefits extended to other people living in that community (16).

Participants' sense of community cohesion appeared to decrease over time. Ten years after the bushfires, sense of community cohesion was significantly lower in communities that experienced higher bushfire impact, compared to communities with lower levels of bushfire impact.

Measure: Community cohesion (mean values) 10 years post bushfires



CHILDREN AND FAMILIES

It was clear in interviews with children, parents and grandparents 3-4 years after the fires that the reality of the disaster and its aftermath formed the ongoing backdrop of children's daily lives. Children from a very young age through to older youth experienced anxieties and upheavals at home, in school, in sport, in friendship groups and in the community (17).

“She had so much trouble going back to school. She couldn't think, concentrate at all. Everything seemed irrelevant that she was doing and they tried so hard. They were very helpful but she had a lot of trouble with just fitting in with the kids that she knew before there. They weren't understanding her and she just felt that all their problems were very trivial.”

-Parent

This prompted families to make adjustments to help to restore the children's sense of safety and stability (17). Children and teenagers were involved in the decision making and typically, expressed a need for either familiar people and contexts or conversely a move away from disaster affected environments.

“Well there's lots of new and nice people and it's not as much, well I don't know, it's not black, it's more better and nice.”

-Child

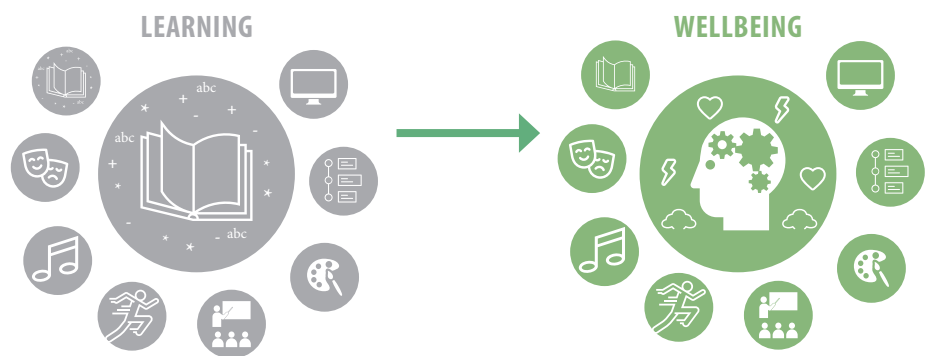
Parents spoke of parenting situations they never expected to face, and how normal challenges were amplified (18). Finding ways to manage the trauma reactions experienced by their children often required new understandings, skills or strategies. Valued aspects of parenting, like patience and tolerance, having answers and being reassuring, or being present physically and emotionally, were compromised by the demands of rebuilding and recovery that were competing for their time and energy as well as their own trauma responses. It took some parents several years before they felt they had been able to settle their families into a new normal, while others still felt they were dealing with ongoing impacts at 6-7 years.

Grandparents, educators and community members provided important additional support to the family efforts to provide a stable environment for children.

In related studies we conducted, supported by the Teachers Health Foundation and the Victorian Department of Education and Training, educators and school support services reported a necessary shift in school environments from a focus on learning to a focus on restoration of wellbeing, with school staff providing care and support for students and families well beyond normal expectations (19).

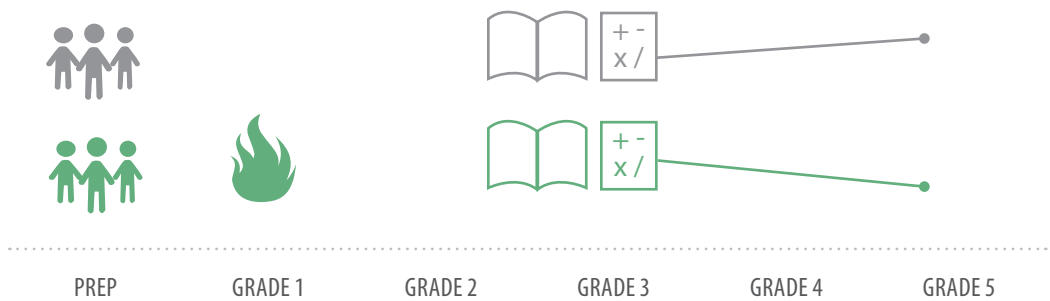


Shift in school focus post bushfires



For some children from bushfire impacted communities, there were lasting impacts on academic performance. In related research, we followed children who were in year 1 at rural schools in Victoria when the bushfires occurred. It showed that for many of the students from the highly impacted schools, expected progress in both reading and numeracy from year 3 to year 5 (2 to 4 years after the Black Saturday bushfires) was less than children from communities with lower levels of bushfire impact (20).

Bushfire academic impacts



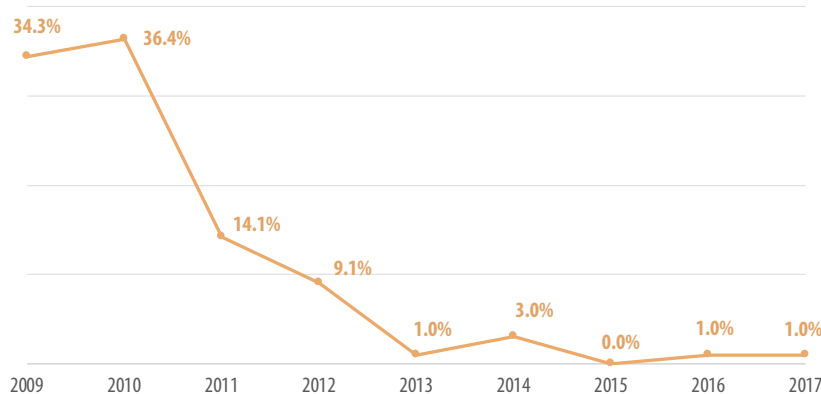
These learning delays were then reflected in lower academic scores across all subjects that extended through to year 9, suggesting that a disaster experience early in schooling had lasting impacts on academic outcomes (21). The students who began their schooling with the Black Saturday bushfires were in year 11 & 12 in 2020, finishing their schooling in a year marked by bushfires across Australia and pandemic restrictions.

Our review of recovery-funded community programs for children and families in the four years after the 2009 bushfires showed that they predominantly targeted secondary school aged students, and many were focused on individual, mental health support (22). While it was promising to see that there were services and programs promoting social connections and opportunities for youth leadership, there were virtually no services specifically aimed at restoration of a sense of safety and stability or catering for preschool children. There were also very few programs providing support for parents. The majority of services were delivered in the second and third years after the fires.

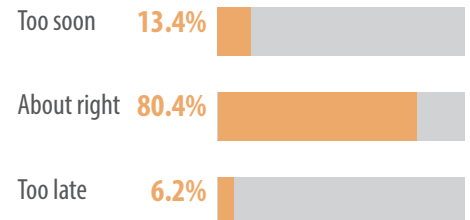
ATTACHMENT TO PLACE AND RELOCATION

When surveyed ten years after the Black Saturday Bushfires, approximately one third of participants reported that their home was damaged during the Black Saturday bushfires and uninhabitable. The majority (61.2%) rebuilt their property or were in the process of rebuilding ten years after the fires. However, 38.2% of participants reported that they did not rebuild their house. Amongst the participants who did rebuild, over 90% of people commenced rebuilding within the first four years of the bushfires, with the majority beginning in 2009 or 2010. Generally, people were satisfied with their rebuilt house, irrespective of whether the design was based on their original property or a new design. There was a weak association between rebuilding earlier and being more satisfied, however most people felt the timing of their rebuild was about right.

Most rebuilds commenced in the first two years after the fires.

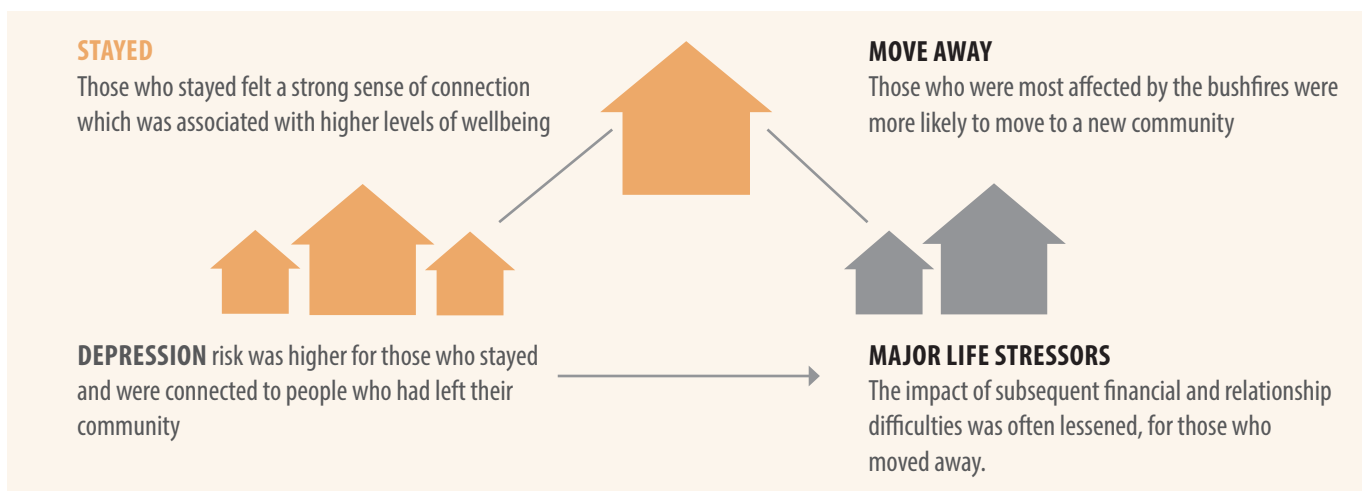


Subjective appraisal of timing of rebuild.



Following the bushfires, some residents chose to rebuild and remain in their communities, while others chose to relocate elsewhere (23). People who lost their property were more likely to move away but it was a difficult choice. They reported feeling guilty about leaving their community but the physical changes to the local environment, memories associated with the bushfires and aftermath, and social and community tensions were reasons given for moving. Those who stayed did report feelings of abandonment when their friends and neighbours moved away and it impacted on their sense of community (23) and mental health (15).

Overall, the levels of wellbeing of those who stayed living in the community and those who moved away were about the same 3-4 years later, but for different reasons. Those who chose to stay identified a sense of shared experience with their community and a strong connection to both place and people. However, the negative and stressful events that occurred afterwards significantly impacted their wellbeing. For those who relocated elsewhere, the opposite was observed: the severity of the original bushfire experience was still impacting their wellbeing 3-4 years later, but they were less affected by the individual and community-level disruptions and challenges that follow a disaster event.



The **natural environment** had deep personal significance to many of those residing in bushfire impacted communities (24). For some, this relationship with the environment corresponded with profound feelings of loss and grief at damage to the natural landscape. However, the regeneration and regrowth of the environment was also a powerful symbol of hope and healing for many.

We acknowledge the work of colleagues who have highlighted that bushfires cause additional pain and loss for Aboriginal people due to cultural connections to the landscape and intergenerational experiences of trauma, and that much can be learnt from Aboriginal peoples' expertise in healing of country and community (25).



Most participants in the Beyond Bushfires study reported a **strong attachment to the environment**, which was associated five years after the fires with **reduced psychological distress**, lower rates of probable major depression and fire-related PTSD, and **higher levels of resilience, post-traumatic growth and life satisfaction** (24).

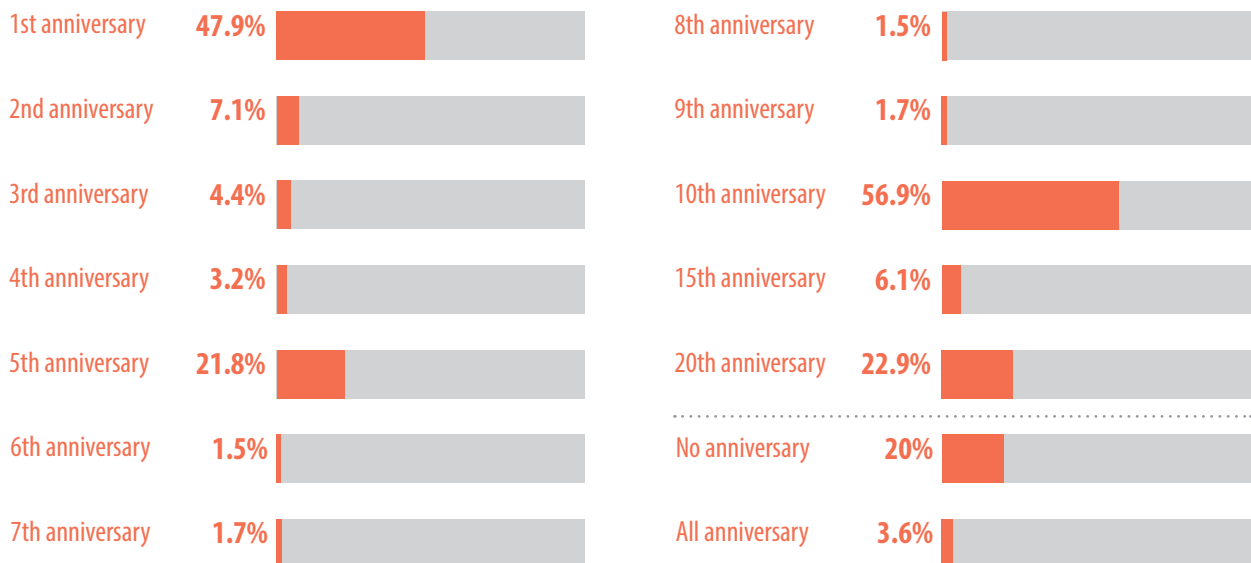


COMMEMORATION

Residents of impacted communities identified their relationships with others in their community as like family. As a result, the deaths of friends and community members were experienced both acutely in the early period after the bushfires and as an ongoing stressor in the following years. This grief was experienced both privately and publicly within the broader community (4).

A decade after the Black Saturday bushfires, approximately half of respondents reported that they had attended a formal local commemorative event for the bushfires in the preceding years, compared to less than one in ten who participated in a formal state-wide commemorative event.

Which anniversaries should have formal state-wide commemorative events?



When asked which anniversaries should be acknowledged with formal state-wide commemorative events, respondents were most likely to nominate the one and ten year anniversaries.

10 Year Anniversary of the 2009 Victorian Bushfires

State Commemoration

4 February 2019

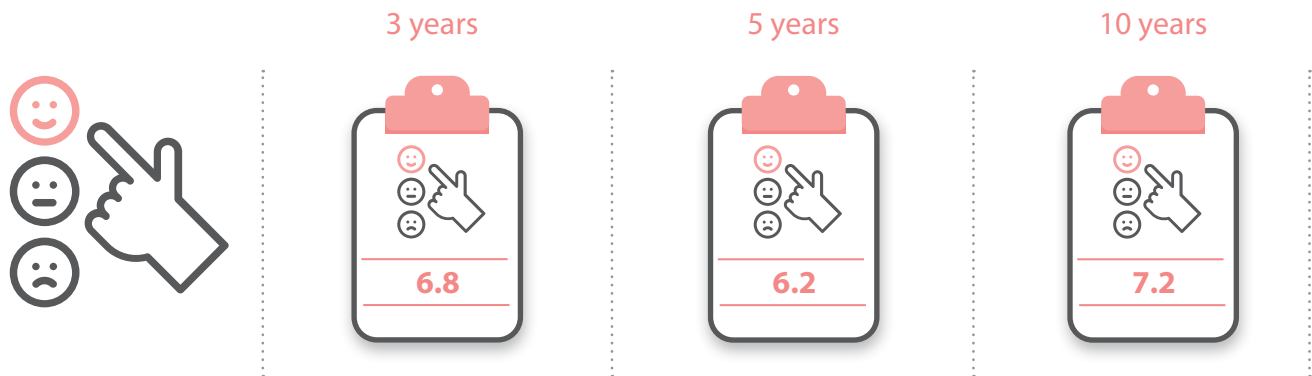


LIFE SATISFACTION AND GROWTH

Improvement in sense of community over time was shown to enhance people's wellbeing five years after the bushfires.

While mental health improved, life satisfaction significantly decreased from three to five years after the bushfires, before increasing again ten years after the bushfires, suggesting a U-shaped pattern. However, despite this gradual improvement ten years after the bushfires, satisfaction was still lower for participants in high bushfire impacted communities compared to low bushfire impacted communities.

Life satisfaction (mean values) 3 - 10 years post bushfires



People reported comparing themselves to others who were also impacted by the disaster, and were aware that others were assessing them. For some people this process was helpful and orienting, but for others it was exhausting and stressful (2).

The dual roles for those living in disaster affected communities and also working as recovery workers were particularly challenging and need further exploration to identify how people in those circumstances can be best supported.

It is a recognised phenomenon that many people who experience a major trauma, report subsequent positive transformations in their lives. From five to ten years after the bushfires, reports of post-traumatic growth were stable over time and were higher amongst high impacted communities compared to low impacted communities. Further research is needed to identify opportunities to contribute to post-traumatic growth.



The sense of belonging to a community. Our relationship is a lot different now to what it was - for the better."

- male participant



I think everybody in the community became very close, feeling of comradery and support."

- female participant

People identified a number of things that made it more challenging in the aftermath of a disaster. These included not feeling in control of their lives, or when people or services were unhelpful, or didn't 'get it'. Conversely, the things they named as helpful were having good connections, looking after themselves (although difficult), feeling in control of their lives, and when other people and services were proactive, humanistic, and empathic in their approach (2).

People found the online environment helpful for peer-to-peer interactions, 'insider information', insights into coping with psychosocial consequences of the disaster, and to further their overall understanding of disaster recovery (26). They were less likely to use the online environment to access formal support services, although this of course this is likely to have changed for those recovering from the 2019/2020 bushfires due to changed delivery of services during pandemic restrictions.

Communication and caring were identified as two critical factors (27):

- Clear and regular communication was essential for making informed decisions
- A caring manner in the delivery of services and support was repeatedly described as a positive influence on recovery.

APPLYING THESE FINDINGS TO SUPPORT DISASTER RECOVERY



RECOMMENDATIONS FOR COMMUNITY MEMBERS

These recommendations have been co-developed by the research investigators and partners, based on the findings from the 10 years Beyond Bushfires and related disaster research studies being led by University of Melbourne.

1. **Consider mental health planning.** When planning for bushfire emergencies, be mindful that your decision will impact on both your physical and mental health. Exposure to a bushfire for you and your family can increase risk of mental health problems.
2. **Plan ahead for how to find each other.** Separation from family members during a disaster is highly stressful. This stress can have a lasting impact, even when everything turns out (relatively) okay. Have a plan about where or how you will reconnect, especially if communication and road systems are affected. The Australian Red Cross provides the Register Find Reunite service.
3. **Be kind to yourself and others.** It can take more than five years for some people to recover from a disaster experience and its aftermath, particularly in high impact communities.
4. **We are all different.** People can respond differently to the same experience and have different recovery needs, including within families.
5. **Be open to the possibility of positives.** Positive outcomes can come from a disaster experience, even for those who have had the most severe losses. This is referred to as posttraumatic growth.
6. **Community groups can make a difference.** Being involved in community groups can lead to better mental health outcomes for many. However, share the load: Don't leave it to just a few people to make sure these local groups keep going.
7. **Seek professional support.** If you or someone close to you is having ongoing mental health or emotional difficulties, there are mental health professionals available to help.
8. **Changes in the natural environment can influence recovery.** Many people find spending time in the bush and watching it regrow and recover helpful for their own wellbeing.
9. **Remember the children.** Even very young children can be affected by the disaster and what is happening around them for years afterwards. Ensure children and young people of all ages feel safe and stable, and involve them in recovery decisions and activities in age appropriate ways.
10. **Supporting parents.** Being a parent can shape recovery experiences in positive and challenging ways, and parenting may even feel different and more difficult. Remember other parents have felt this too, though it might not always seem easy to talk about. Sometimes it's about doing the best you can in tough situations. Being there for others when you can, or reaching out when support is needed, can help restore the village it takes to raise a child.
11. **Explore resources.** There are a number of helpful resources available for communities, parents, and children from many organisations, including our partner organisations Emergency Management Victoria, the Australian Red Cross, and local and state government.
12. **Make decisions that feel right for you.** Rebuilding early can have benefits, but don't feel rushed to make important decisions that may need more time and consideration. There are benefits and challenges to both staying in community or relocating. Staying is probably best if connection to place and community is important to you. Moving away may help if the community rebuilding processes are too stressful.
13. **Commemoration is personal.** Spend the day and week of the disaster anniversary in whatever way works for you. Commemorating anniversaries is helpful for many people as a way of acknowledging the losses that occurred, but preferences about how to mark anniversaries vary.

RECOMMENDATIONS TO SUPPORT SCHOOL COMMUNITIES

1. Provide **school-based bushfire education programs** that teach children and teenagers how to live in bushfire risk environments and involve them in local bushfire preparedness and recovery initiatives.
2. Provide **training for health professionals and educators** in disaster and trauma impacts.
3. Provide **support sessions** for school staff and early learning educators before students return and at key recovery intervals to support staff wellbeing and their capacity to meet the needs of students.
4. Provide **access for impacted schools to experienced psychologists and relevant health professionals** with appropriate expertise in disaster and trauma impacts, and/or training and mentoring.
5. Provide **appropriate information and resources for parents and caregivers** including support information for their own health and wellbeing as well as for their children (see the Australian Red Cross resources - 'Parenting: coping with crisis' and 'Guide to resources for children and families')
6. Provide schools with **access to additional learning supports**, particularly for:
 - a. Students in early primary school targeting numeracy and reading.
 - b. Students in upper primary and secondary school addressing all academic domains.
7. Provide secondary school students with vocational education and training (VET) to **support transition to the workplace**.
8. Establish appropriate strategies and services for the referral of **high risk students**.
9. Provide both **school and community-based trauma support programs** for students showing sub-clinical signs of trauma.
10. Provide access to **evidence informed universal school-based programs** to promote all students' social and emotional wellbeing mental health post disaster.
11. Provide appropriate **psychosocial recovery programs for early learning settings**.
12. Ensure schools have **access to family violence practitioners** and guidance on referral options.
13. Appoint **additional support staff and/or volunteers** to educational settings to help meet the extra administrative, social, emotional and learning demands post disaster.
14. **Adjust departmental administrative requirements** and timelines for disaster affected educational settings to acknowledge the additional demands on staff and students.

RECOMMENDATIONS FOR GOVERNMENT¹ AND SERVICE PROVIDERS

1. Establish a staged **5 year framework** for recovery from major disasters to account for extended mental health impacts and support short and long term recovery, resilience and community connectedness.
2. Provide advisory and support services within bushfire affected communities that focus on **reducing the compounding impacts of major life stressors** (e.g. financial advice, guide to building regulations, relationship counselling, job retraining).
3. **Deliver services with care and flexibility** to accommodate diversity in experiences and responses. Allow people to recover at their own pace, including at least 4 years for people to begin rebuilding.
4. Embed **community-based strategies** in disaster mental health planning, in addition to mental health services, to maximise the contribution of social networks and community groups to recovery
 - a. **Support the supporters:** Provide community information sessions about post-trauma support strategies to help people to take care of themselves and their family and friends.
 - b. **Community groups:** Support the capacity of local groups to continue operating. This may require funds for facilities, equipment and/or activities.
 - c. **Promote connection:** Initiate opportunities for people throughout the community to become involved and connected with each other in new ways, to build ties within and outside existing groups.
 - d. **Community group leaders:** support leaders with the practical and emotional demands of leadership, including strategies for dealing with extreme emotions, to ensure their mental health and wellbeing is not compromised by their efforts to maintain group activities.
5. Prioritise **restoration of places central to community connection**, such as schools, community halls, sports and arts facilities and thriving local businesses
6. Use social indicators of individual and community wellbeing and resilience, such as **patterns of community group membership**, for recovery planning.
7. Establish a **cross-sectoral communication system** or online platform that is maintained for up to five years after each major disaster event with information about relevant resources, services and research for all affected people, including those within and outside of impacted communities (e.g. family members of those who died; holidaymakers trapped in fires) .
8. **Extend trauma support services** to those highly impacted but not living in affected communities – with information disseminated through the proposed communication system (see above).
9. Involve **school communities** in systemic and local recovery plans.
10. Increase provision of **family violence prevention** strategies and support services in high impact communities.
11. Build capacity of government staff and service providers to **recognise and address anger**. Provide impacted communities with support in understanding, managing and potentially reducing anger whilst appreciating its potential force as a motivating and protective recovery factor.

¹ 'Government' refers to all tiers of government (local, state and national) responsible for relevant policy and services, according to the location, nature and scale of the disaster event.

RECOMMENDATIONS FOR GOVERNMENT AND SERVICE PROVIDERS

12. Prioritise **restoration of the natural environment**, collaborating with local residents and Aboriginal and Torres Strait Islander groups in the co-development of local initiatives to restore and protect the environment and the land.
13. Support local **commemorative events** as these are valued by many as a way of acknowledging the anniversaries of disaster events. Personal needs and preferences vary widely but formal state-wide commemorative events are likely to be considered most relevant for the one and ten year anniversaries.
14. Organise **fun family activities** to provide opportunities for families to have a break from the complex demands of rebuilding and to create some positive memories from this time in their lives.
15. Provide **accessible childcare and activities for children** to enable parents to contribute to recovery processes including community meetings.
16. Provide information to people about their **rebuilding or relocating** options and the sorts of stressors and benefits they are likely to face in each scenario.
17. Ensure adequate provision of mental health services where providers have appropriate **training in trauma-related mental health treatment**.
18. Fund evidence-based task-shifting models where trained health care providers (such as community nurses or community health workers) can deliver **low intensity interventions for people with adjustment difficulties**.

RECOMMENDATIONS FOR RESEARCH

Further research is needed to build evidence in the following areas:

1. Recovery from exposure to **multiple cascading and overlapping hazard events**
2. The role of **community organisations in social and economic recovery**
3. **Indigenous peoples' experiences** of disaster recovery
4. Individual and community-level strategies to promote **post-traumatic growth**
5. Impacts and opportunities for **high risk children and youth**
6. Supporting the **wellbeing of recovery workers** who have also personally experienced the disaster
7. **Diversity and equity** in recovery
8. **Climate anxiety** and disaster resilience

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Updated links to Beyond Bushfires and related research publications are available on:

www.beyondbushfires.org.au

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APPENDIX 1: ABOUT THE BEYOND BUSHFIRES STUDY

WHO CONDUCTED THE RESEARCH?



10 Years Beyond Bushfires

Research team

- Professor Lisa Gibbs
- Professor Richard Bryant
- Professor Louise Harms
- Professor Meaghan O'Donnell
- Dr Karen Block
- Dr Colin Gallagher
- Greg Ireton
- John Richardson
- Professor Colin MacDougall
- Dr Connie Kellett
- Alana Pirrone
- Robyn Molyneaux
- Phoebe Quinn
- Hannah Morrice
- Dr Lauren Kosta
- Dr Kate Brady
- Louise Mitchell
- Andrew Coghlan
- Fyowna Norton
- Vaughn Brandenburg
- Tim Hamilton
- Agathe Randrianarisoa
- Dr Sean Cowlshaw

Funding partners

- Emergency Management Victoria
- Australian Red Cross
- Victorian Department of Health and Human Services

Partner organisations

- Phoenix Australia Centre for Posttraumatic Mental Health
- Social Research Centre

Children and Disasters Advisory Committee

We acknowledge the significant ongoing contributions from our Children & Disasters Advisory Committee who provide guidance to our research studies relating to children and disasters and co-developed the recommendations in this report for school communities.

The late **Professor Elizabeth Waters**, previous Principal Investigator, is acknowledged for her leadership role in establishing the initial Beyond Bushfires study.

The investigators gratefully acknowledge the generosity of the research participants in sharing their time and experiences, and the support from community organisations and local governments.



The 10 years Beyond Bushfires research was preceded by the original Beyond Bushfires research study conducted from 2010-2016.

**Original Beyond Bushfires
Research team**

- Professor Lisa Gibbs
- Professor Richard Bryant
- Professor Louise Harms
- Professor David Forbes
- Dr Karen Block
- Dr Colin Gallagher
- Greg Ireton
- John Richardson
- Professor Philipa Pattison
- Professor Colin MacDougall
- Dr Dean Lusher
- Elyse Baker
- Dr Connie Kellett
- Alana Pirrone
- Robyn Molyneaux
- Dr Lauren Kosta
- Dr Kate Brady
- Dr Marian Lok
- Dr Gisela Van Kessel
- Vale Professor Elizabeth Waters

**Study partners on the original Beyond Bushfires
Australian Research Council Linkage Grant:**

- Victorian Department of Health
- Australian Red Cross
- Australian Rotary Health
- Australian Government Department of Human Services
- Phoenix Australia: Centre for Posttraumatic Mental Health
- Central Hume Primary Care Partnership
- Bendigo Loddon Primary Care Partnership
- North East Primary Care Partnership
- Outer East Primary Care Partnership
- Central West Gippsland Primary Care Partnership
- Lower Hume Primary Care Partnership

Additional support:

- University of Melbourne
- University of New South Wales
- Swinburne University
- Flinders University
- University of Sydney
- Jack Brockhoff Foundation

HOW DID WE CONDUCT THE RESEARCH?

From the beginning, we approached this study as a partnership. We believed that was the only way to ensure the research utilised the range of expertise (community, service provider, academic and government) needed to capture the complexity of the post disaster environment and to achieve results that would generate meaningful outcomes (28). We invited a range of communities with different profiles to participate in the study. They varied in level of bushfire impact (from no direct impact to high levels of impact), size of community, distance from Melbourne, and the average income and education of residents. This helped us when we were analysing the results to recognise what was arising from the bushfire impact and what may reflect the influence of other factors. We visited key community groups in each location to discuss the study and tried to keep in contact throughout. This helped us to recognise similarities and differences between communities, and the things we learnt and the feedback we received influenced decision making at each stage of the study.

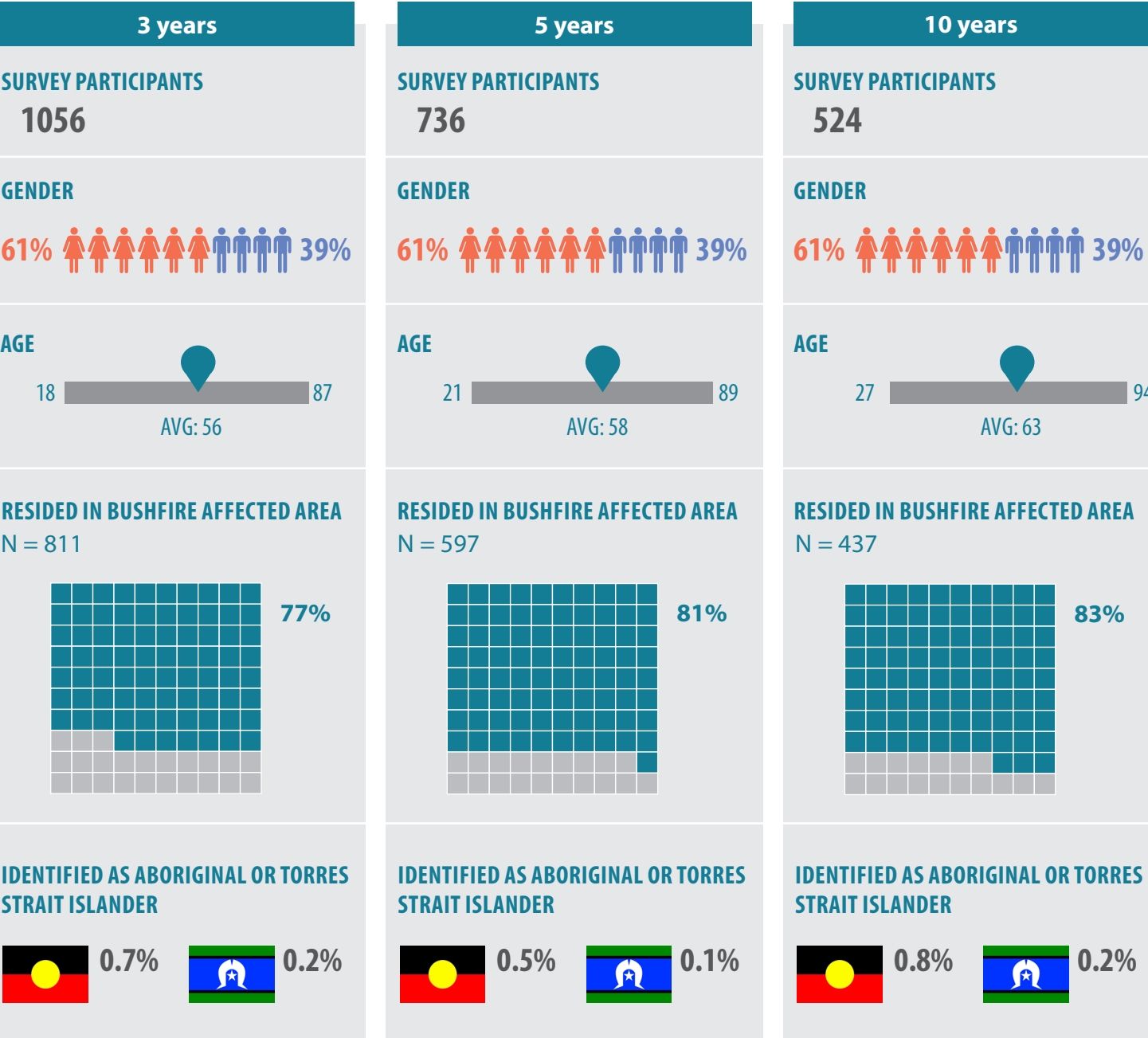
The Beyond Bushfires research was conducted over a number of stages using different research methods (29). We circulated a survey from December 2011 to January 2013 to people living in the selected communities and those who had relocated, and 1,056 people participated either by phone interview or online. At the end of the survey, 966 agreed to be recontacted, resulting in 736 completing the survey again in 2014. Additional funding for 10 years Beyond Bushfires enabled us to re-send the invitations in 2019 to the 966 who agreed to be recontacted, resulting in 524 survey completions in Wave 3. We also conducted 35 in-depth interviews with people aged from 4-66 years in 2013 and 2014. In our interviews, we asked people to show us what was important to them in their communities and walked with them around their homes, properties, local parklands and towns as they shared their stories.

There were also a number of linked PhD research studies and other funded research conducted to further our understanding of disaster resilience and recovery. Our research continues in our efforts to reduce the impacts of disasters on peoples' health and wellbeing.

WHO PARTICIPATED?

Participants in the main study did not differ between high, medium and low impact communities in terms of sex, age, country of birth, or employment status.

Our results from Wave 1 and 2 of the study showed that the vast majority of the survey respondents were glad they had completed the survey even among the small proportion who felt distressed while they were doing it (30).



35 IN-DEPTH INTERVIEWS WITH PARTICIPANTS AGED FROM 4-66 YEARS



