

Mental Health Interventions Following Disasters

February 2020

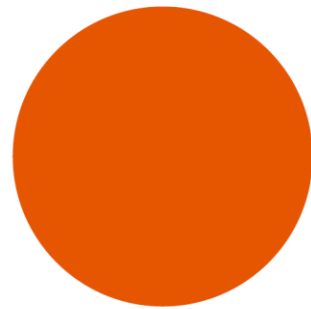


Table of contents

Evidence and Recommendations	3
Expected Mental Health Consequences Following Disasters	3
Recommended Immediate Phase Strategies	4
1. Avoid psychological debriefing	4
2. Offer practical support and good quality information	4
3. Strengthen social support networks	4
Recommended Intermediate Phase Strategies	5
1. Establish outreach programs	5
2. Provide problem-solving and resilience focused interventions	5
3. Offer technology-enabled mental health services	5
Recommended Long-Term Strategies	7
1. Integrate mental health care into disaster planning	7
2. Provide GP training for mental health care	7
3. Ensure mental health support and funding is long-term	7
4. Encourage community activism	7
5. Provide support systems for emergency responders	8
References	9

Evidence and Recommendations

Best Practice Mental Health Interventions to Deploy Following Disasters

In recent years, a large number of Australians have been impacted by disasters, including the drought, bushfires and floods. Severe psychological distress is common after these types of catastrophic natural disasters.¹ In the immediate aftermath of a disaster, many people will experience intense reactions, however, for most these reactions will decline over time.² A consistent finding from multiple studies of previous disasters is that while the majority of impacted individuals are resilient and able to recover, there will be a significant minority will develop long-term mental health problems.³⁻⁶

The following summary provided presents the best available evidence in terms of what can be anticipated after a large-scale disaster and the specific mental health interventions that are needed in both the short and long term. As outlined in detail below, for those at higher risk, social and community support, outreach programs, as well as psychological interventions with an emphasis on problem-solving skills and resilience-training are recommended. Longer-term strategies include integrating mental health care into disaster planning, GP training, community activism and support for emergency responders.

Expected Mental Health Consequences Following Disasters

- In the immediate aftermath of a disaster, it is normal for many people to experience intense stress reactions. These reactions are not necessarily pathological. Research on disaster survivors has consistently demonstrated that most people recover without professional intervention within a number of months, and maintain a healthy level of functioning over time.^{7,8}
- While most people eventually recover over time, a sizeable proportion will experience mental health problems in the months or even years after the initial event. The most common mental health conditions reported across a range of disaster events are post-traumatic stress disorder (PTSD), depression, anxiety, substance abuse, and complicated grief. Some may also experience heightened suicidal risk, intense negative affect, acute stress, physical health or somatic concerns, and poor sleep quality.^{5,9,10}
- Women, children, those with greater exposure to the disaster, and those with low or negative social support, and prior mental health conditions have been found to be at higher risk of post-disaster mental health problems.¹⁰ Ongoing post-disaster stressors, such as rebuilding challenges as well as social and economic disruption, can also contribute to mental health problems.⁴
- Despite a range of effective treatments readily accessible, most people with mental health conditions are reluctant to seek help. There is some evidence that men, young people, the elderly, as well as individuals with low educational status are least likely to seek treatment.¹¹
- The psychological impacts of major disasters can be long lasting and widespread. Long term studies after the Ash Wednesday bushfires in South Australia showed that the mental health impact could still be detected in the children of affected families twenty years after the fires.¹² There was also evidence of increased domestic violence after the Black Saturday bushfires in Victoria.¹³

Recommended Immediate Phase Strategies

1. Avoid psychological debriefing

In the past, it was commonly believed that providing psychological debriefing to victims of disasters or traumatic events within 48 hours of the event could help prevent psychopathology. However, there is now ample evidence that psychological debriefing is not helpful and may even cause more harm than good.¹⁴ Multiple studies have found that early debriefing may impair the natural recovery process and risks retraumatizing the individual.¹⁵ Therefore, psychological debriefing is no longer recommended in the immediate aftermath of disasters or traumatic events.

2. Offer practical support and good quality information

Acute stress reactions within the first few weeks should not necessarily be regarded as pathological or in need of professional intervention. Most affected individuals are likely to simply need support and resources in the early phases post-event, rather than clinical treatment. Prioritizing practical support and provision of resources (food, shelter, money, communication) is recommended to re-establish psychological comfort and safety.¹⁰ Other forms of practical support include emotional reassurance, assistance with daily living tasks, and information on how to access much needed resources. It is vital that good quality evidence about normal responses to trauma and pathways to recovery is made readily available and that a sense of hope and both self and collective efficacy is promoted.¹⁶

3. Strengthen social support networks

There is overwhelming evidence that social support is a major protective factor after disasters and can act as a buffer against psychological distress.^{17,18} Sources of support can include kin, friends, neighbours, co-workers and the wider community. Supportive and well-resourced communities are ideally placed to assist those in need, disseminate essential information and advocate for external aid following disasters.¹⁹ Affected communities need to be provided with resources and support to unite in ways that best fit their existing context, culture and history. Further support should also be provided to those currently isolated to help them engage and broaden their community networks.

Recommended Intermediate Phase Strategies

Once the initial post-disaster period comes to an end, priorities should shift to identifying and supporting those at-risk of developing mental health problems. Unfortunately, one of the most significant barriers to mental health care is that most people in need of help are reluctant to seek help. Following the Black Saturday bushfires, more than a third of those with the most severe levels of mental health symptoms did not receive any formal assistance despite considerable efforts being put into developing and promoting local mental health supports.⁴ There are several promising strategies that have been shown to address some of the most important barriers to care.

1. Establish outreach programs

A coordinated and systematic outreach response to 'screen and treat' those most directly affected by the disaster can help identify those in need of care. This approach, which was used successfully following 2005 London bombings, is able to assist people with trauma-related disorders access help in an easy and timely manner.²⁰ Outreach programs could also be provided to service providers and primary health networks to help them support affected individuals and communities.²¹ Any type of screening or identification program should only be provided once there are appropriate services available in the affected regions to provide care.

2. Provide problem-solving and resilience focused interventions

Psychological interventions based on problem-solving skills and resilience can provide affected individuals with coping skills to manage post-disaster stressors.^{22,23} This approach is consistent with a strong body of evidence indicating that brief problem-solving programs delivered to people affected by adversity can markedly reduce anxiety and depression and is endorsed by the World Health Organisation.²⁴ While it may be difficult for a swift mental health response in the immediate aftermath of large-scale disasters, particularly in the event of infrastructure damage, research suggests that psychological interventions can be effective in the months to years following the disaster, especially when used in combination with some form of screening for those at-risk.⁷ The Black Dog Institute and its partners have developed and tested a range of these types of programs, which can be made available at scale if needed.²⁵⁻²⁸

3. Offer technology-enabled mental health services

Technology-enabled mental health services such as mobile apps, telehealth, and online treatment is an efficient and practical means of delivering treatment to affected individuals and communities. These services have the added advantage of being able to overcome much of the stigma that can impede traditional help-seeking. These measures have shown some promise in reaching more people as well as reducing distress in individuals affected by disasters and mass violence.²⁹⁻³¹ *eMHprac* is a resource guide for practitioners that provides an overview of various Australian online and teleweb programs. The Black Dog Institute's Online Clinic (<https://onlineclinic.blackdoginstitute.org.au/>), is a free resource that allows any individual to gain a mental health

report and a tailored mental health plan based on their individual symptoms, including links to evidence-based online and app based treatment programs and an optional report for their GP. Community networks should be informed of available online resources that can help address issues of access and availability in regional and remote areas. After major disasters it is often useful to have a single website that members of the public can access both information and evidence-based interventions.

Recommended Long-Term Strategies

1. Integrate mental health care into disaster planning

Disasters and hazards will continue to test Australians in various ways over the coming years. To better prepare for these events, the mental health response needs to be adequately funded and planned to be in place over many years. Mental health care needs to be integrated into future disaster planning, and provision of services needs to be strengthened for communities at higher risk.³² Community networks should be targeted and supported to assist in future disaster planning and dissemination of information and resources. A national framework should be established to guide national and state responses for mental health services to be implemented in the wake of a disaster. The absence of such a framework will result in reactive strategies that may not adhere to best practices. This framework will ensure evidence-based policies and practices can be implemented at the correct staging of a disaster and post-disaster response.

2. Provide GP training for mental health care

GPs are often the first point of contact for patients with mental health conditions and are the most common providers of mental health services. Typically, in the aftermath of a disaster there will be an increased demand in this type of service. Some GPs may be insufficiently equipped with adequate resources and skills to meet this demand. GPs in affected areas should be provided with additional training in post-trauma mental health, so they can be better equipped to detect and manage those with emerging symptoms. The Black Dog Institute delivers a range of accredited training programs for GPs to expand their knowledge and skills in the area of mental health, including Dealing with Depression in Rural Australia and Advanced Training in Suicide Prevention. Phoenix Australia also provide a range of evidence-based training for GPs and other health professionals, including Psychological First Aid, Trauma-focused Therapy and Trauma Informed Care.

3. Ensure mental health support and funding is long-term

Studies of communities impacted by previous disasters, such as the Black Saturday bushfires and Hurricane Katrina show that rates of mental illness will continue to rise for at least the first twelve months after an incident.^{6,33} This means that it is vital that any additional mental health support is provided over a long term period. Additional support will need to be provided both to the primary care and to more specialised mental health teams within affected areas.

4. Encourage community activism

While national goodwill towards communities affected by disasters are heightened in the immediate aftermath, this effect eventually ceases overtime. Affected individuals and communities are often left feeling isolated and overwhelmed in dealing with the long-term consequences of a community permanently changed by the disaster. However, constructive community activism can help facilitate partnership and collaborative efforts with government and industry that may lead to social and economic enhancement.⁷ Additionally, community

participation can empower those affected to rebuild their future and foster communal resilience to better prepare for future disasters.

5. Provide support systems for emergency responders

Special consideration needs to be given to the emergency responders who risk their lives to protect and help communities affected by disasters. With the exposure to considerable and cumulative trauma, emergency responders will require ongoing focused support.^{34,35} Appropriate systems need to be in place to effectively monitor their mental health and well-being and ensure that they get the best available help when needed. Disaster planning strategies should include evidence-based approaches to better prepare emergency responders for the psychological effects of their work as well as provide resources that are adapted specifically for this distinct occupation group. Following previous large-scale disasters, such as the 9/11 terrorist attacks in New York and the 2005 London Bombings, comprehensive monitoring programs were established for emergency responders to ensure that their mental health was closely monitored and that they were linked to good quality treatment and support if needed.^{20,36,37} Given the large numbers of volunteer emergency responders involved in Australia's recent bushfire events, this type of national monitoring and support program is urgently needed.

References

1. **Norris FH, Friedman MJ, Watson PJ, Byrne CM, Diaz E, Kaniasty K.** 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981-2001. *Psychiatry* 2002; **65**(3): 207-39.
2. **Galea S, Vlahov D, Resnick H, et al.** Trends of probable post-traumatic stress disorder in New York City after the September 11 terrorist attacks. *Am J Epidemiol* 2003; **158**(6): 514-24.
3. **McFarlane AC, Clayer JR, Bookless CL.** Psychiatric morbidity following a natural disaster: an Australian bushfire. *Soc Psychiatry Psychiatr Epidemiol* 1997; **32**(5): 261-8.
4. **Bryant RA, Gibbs L, Gallagher HC, et al.** Longitudinal study of changing psychological outcomes following the Victorian Black Saturday bushfires. *Aust N Z J Psychiatry* 2018; **52**(6): 542-51.
5. **Bryant RA, Waters E, Gibbs L, et al.** Psychological outcomes following the Victorian Black Saturday bushfires. *Aust N Z J Psychiatry* 2014; **48**(7): 634-43.
6. **Bonanno GA.** Loss, trauma, and human resilience: have we underestimated the human capacity to thrive after extremely aversive events? *The American psychologist* 2004; **59**(1): 20-8.
7. **Bonanno GA, Brewin CR, Kaniasty K, Greca AML.** Weighing the Costs of Disaster: Consequences, Risks, and Resilience in Individuals, Families, and Communities. *Psychological Science in the Public Interest* 2010; **11**(1): 1-49.
8. **Greenberg N.** Military and Disaster Psychiatry. *International Encyclopedia of the Social & Behavioral Sciences* 2015.
9. **Schlenger WE, Caddell JM, Ebert L, et al.** Psychological reactions to terrorist attacks: findings from the National Study of Americans' Reactions to September 11. *JAMA* 2002; **288**(5): 581-8.
10. **Goldmann E, Galea S.** Mental health consequences of disasters. *Annu Rev Public Health* 2014; **35**: 169-83.
11. **Magaard JL, Seeralan T, Schulz H, Brütt AL.** Factors associated with help-seeking behaviour among individuals with major depression: A systematic review. *PLOS ONE* 2017; **12**(5): e0176730.
12. **McFarlane AC, Van Hooff M.** Impact of childhood exposure to a natural disaster on adult mental health: 20-year longitudinal follow-up study. *Br J Psychiatry* 2009; **195**(2): 142-8.
13. **Parkinson D.** Investigating the Increase in Domestic Violence Post Disaster: An Australian Case Study. *J Interpers Violence* 2019; **34**(11): 2333-62.
14. **Wessely S, Deahl M.** Psychological debriefing is a waste of time. *Br J Psychiatry* 2003; **183**: 12-4.
15. **Rose S, Bisson J, Churchill R, Wessely S.** Psychological debriefing for preventing post traumatic stress disorder (PTSD). *Cochrane Database Syst Rev* 2002; (2): CD000560.
16. **Hobfoll SE, Watson P, Bell CC, et al.** Five essential elements of immediate and mid-term mass trauma intervention: empirical evidence. *Psychiatry* 2007; **70**(4): 283-315; discussion 6-69.
17. **Kaniasty K, de Terte I, Guilaran J, Bennett S.** A scoping review of post-disaster social support investigations conducted after disasters that struck the Australia and Oceania continent. *Disasters* 2019; **n/a**(n/a).
18. **Bryant RA, Gallagher HC, Gibbs L, et al.** Mental Health and Social Networks After Disaster. *Am J Psychiatry* 2017; **174**(3): 277-85.

19. **Hikichi H, Aida J, Tsuboya T, Kondo K, Kawachi I.** Can Community Social Cohesion Prevent Posttraumatic Stress Disorder in the Aftermath of a Disaster? A Natural Experiment From the 2011 Tohoku Earthquake and Tsunami. *American journal of epidemiology* 2016; **183**(10): 902-10.
20. **Brewin CR, Fuchkan N, Huntley Z, et al.** Outreach and screening following the 2005 London bombings: usage and outcomes. *Psychol Med* 2010; **40**(12): 2049-57.
21. **Fu C, Underwood C.** A meta-review of school-based disaster interventions for child and adolescent survivors. *Journal of child and adolescent mental health* 2015; **27**(3): 161-71.
22. **Wade D, Crompton D, Howard A, et al.** Skills for Psychological Recovery: Evaluation of a post-disaster mental health training program. *Disaster health* 2014; **2**(3-4): 138-45.
23. **Berkowitz SJ, Stover CS, Marans SR.** The Child and Family Traumatic Stress Intervention: secondary prevention for youth at risk of developing PTSD. *J Child Psychol Psychiatry* 2011; **52**(6): 676-85.
24. **Rahman A, Hamdani SU, Awan NR, et al.** Effect of a Multicomponent Behavioral Intervention in Adults Impaired by Psychological Distress in a Conflict-Affected Area of Pakistan: A Randomized Clinical Trial. *JAMA* 2016; **316**(24): 2609-17.
25. **Joyce S, Shand F, Lal TJ, Mott B, Bryant RA, Harvey SB.** Resilience@Work Mindfulness Program: Results From a Cluster Randomized Controlled Trial With First Responders. *J Med Internet Res* 2019; **21**(2): e12894.
26. **Deady M, Johnston DA, Glozier N, et al.** Smartphone application for preventing depression: study protocol for a workplace randomised controlled trial. *BMJ open* 2018; **8**(7): e020510.
27. **Rahman A, Riaz N, Dawson KS, et al.** Problem Management Plus (PM+): pilot trial of a WHO transdiagnostic psychological intervention in conflict-affected Pakistan. *World Psychiatry* 2016; **15**(2): 182-3.
28. **Dawson KS, Bryant RA, Harper M, et al.** Problem Management Plus (PM+): a WHO transdiagnostic psychological intervention for common mental health problems. *World Psychiatry* 2015; **14**(3): 354-7.
29. **Ruggiero KJ, Price M, Adams Z, et al.** Web Intervention for Adolescents Affected by Disaster: Population-Based Randomized Controlled Trial. *J Am Acad Child Adolesc Psychiatry* 2015; **54**(9): 709-17.
30. **Steinmetz SE, Benight CC, Bishop SL, James LE.** My Disaster Recovery: a pilot randomized controlled trial of an Internet intervention. *Anxiety Stress Coping* 2012; **25**(5): 593-600.
31. **Reifels L, Bassilios B, Pirkis J.** National telemental health responses to a major bushfire disaster. *Journal of Telemedicine and Telecare* 2012; **18**(4): 226-30.
32. **Australian Government of Health.** eMHprac: E-Mental Health in Practice. 2020. <https://www.emhprac.org.au/>.
33. **Kessler RC, Galea S, Gruber MJ, Sampson NA, Ursano RJ, Wessely S.** Trends in mental illness and suicidality after Hurricane Katrina. *Molecular Psychiatry* 2008; **13**(4): 374-84.
34. **Harvey SB, Milligan-Saville JS, Paterson HM, et al.** The mental health of fire-fighters: An examination of the impact of repeated trauma exposure. *Aust N Z J Psychiatry* 2016; **50**(7): 649-58.
35. **Milligan-Saville J, Choi I, Deady M, et al.** The impact of trauma exposure on the development of PTSD and psychological distress in a volunteer fire service. *Psychiatry Res* 2018; **270**: 1110-5.
36. **Pietrzak RH, Feder A, Singh R, et al.** Trajectories of PTSD risk and resilience in World Trade Center responders: an 8-year prospective cohort study. *Psychol Med* 2014; **44**(1): 205-19.

37. **Berninger A, Webber MP, Cohen HW, et al.** Trends of elevated PTSD risk in firefighters exposed to the World Trade Center disaster: 2001-2005. *Public Health Rep* 2010; **125**(4): 556-66.



**Black Dog
Institute**

Contact us

Black Dog Institute
Hospital Rd
Randwick NSW 2031

T 02 9382 4530
blackdoginstitute.org.au

