

Article

Barriers and Enablers to Emergency Preparedness and Service Continuity: A Survey of Australian Community-Based Health and Social Care Organisations

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Abstract

Community-based organisations (CBOs) play a crucial role supporting clients during emergencies yet often lack adequate preparation. This study examined how Australian CBOs perceived and enacted dual responsibilities: ensuring service continuity during emergencies and facilitating person-centred preparedness for high-risk populations. A national cross-sectional online survey of community-based health and social care organisations was conducted between December 2021 and April 2022, employing strategic outreach and snowball sampling. Among 244 respondents, disability services (69%) and housing and homelessness services (27%) were the most common providers. Many organisations showed strong emergency preparedness, including comprehensive insurance, staff empowerment, and adaptive service delivery. Barriers to business continuity plans (BCPs) included resource constraints and limited emergency information access. Organisations with established networks and collaborations with emergency services demonstrated greater capacity for sustained service delivery ($p < 0.001$). Logistic regression analysis revealed local networking with emergency service agencies was positively associated with CBOs' ability to support client preparedness ($p < 0.001$), while lack of tools ($p = 0.007$) and training ($p = 0.037$) limited capacity to facilitate person-centred emergency planning for high-risk populations. Embedding business continuity planning within operations and strengthening cross-sector collaboration can enable CBOs to fulfil their aforementioned dual responsibilities, while advancing sustainable organisational resilience and inclusive disaster risk reduction.

Keywords: community-based organisations; business continuity planning; person-centred emergency preparedness; service continuity; inclusive planning; sustainable organisational resilience; disaster risk reduction



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1. Introduction

High-risk populations, such as people with a disability, elderly and frail people, and those experiencing homelessness, are disproportionately affected by all kinds of natural and human-made hazards [1–3]. In Australia, systemic deficiencies, such as social isolation and discrimination, marginalise high-risk populations from mainstream social, economic and cultural participation [4,5]. These barriers impede their ability to prepare for, cope with, and recover from disasters as well as the COVID-19 pandemic [1,5–7]. Moreover,

high-risk populations are more likely to live in areas susceptible to disasters [8–11]. They are also overwhelmingly excluded from emergency preparedness efforts at a community level [12]. In addition, the health and well-being of high-risk populations can deteriorate rapidly during and after emergencies due to disruptions in their regular healthcare access and social support networks [13–16].

Community-based organisations (CBOs) play a vital role in mitigating these risks. Through their routine services, they maintain a trusting relationship with high-risk clients and hold detailed knowledge of individuals' needs, local hazards, and community resources [17]. This optimal position allows them to respond to both existing and newly affected clients, providing targeted support, such as homelessness assistance, job-loss assistance, financial aid, and trauma counselling during and after an emergency event [18,19].

Research indicates that community-based organisations often lack adequate preparation to effectively respond to natural hazards, human-made hazards, and health-related emergencies [19]. Small and medium-sized organisations face significant risk of prolonged business disruption or permanent closure due to damage to physical infrastructure (e.g., buildings, telecommunications, utilities, transport), workforce shortages (staff and volunteers), supply chain disruptions and increased operational costs [20]. Such disruptions can incur serious consequences, including homelessness, financial hardship, deprivation, hunger, adverse health outcomes and social isolation [19]. In a worst-case scenario, these disruptions can even be life-threatening, particularly for individuals who rely heavily on service providers for their daily personal and healthcare needs [19].

To minimise the likelihood of service disruption, CBOs must develop their resilience and create an effective business continuity plan (BCP) that details the measures to overcome specific challenges in maintaining essential services during and after an emergency event [21,22]. Business continuity plan (BCP) refers to a set of strategies, policies, and procedures that is carefully designed and regularly updated to guide an organisational response during service disruptions [23]. Its primary objective is to ensure the uninterrupted delivery of essential services until normal operations can be fully resumed [23]. The key elements of a BCP include a shared understanding of emergencies and their potential impacts; identifying essential services; conducting risk assessments; and regular testing and reviewing of the plan to adapt to emerging challenges [18,23,24].

Recognising the critical role of CBOs in strengthening emergency resilience among high-risk populations, the Australian National Disability Insurance Scheme (NDIS) Quality and Safeguarding Commission introduced a legislative amendment on 15 November 2021 [25]. This amendment states that all NDIS-registered providers should work with their clients to undertake risk assessments and should include preparedness strategies in their individual support plans [25]. This legislation also establishes the need for service providers to engage in emergency management and disaster recovery planning to ensure continuity of support and services to their clients [25].

However, it is unclear how CBOs perceived the importance and relevance of these roles. Furthermore, limited research has explored the barriers and facilitators that influence Australian CBOs' ability to fulfil these responsibilities in ways that support sustainable organisational resilience and inclusive disaster risk reduction. To address these knowledge gaps, a national survey of Australian community-based health and social care organisations was conducted between December 2021 and April 2022. This cross-sectional survey sought to understand how CBOs perceived and enacted their dual responsibilities: enabling personal preparedness with high-risk client and ensuring service continuity following a hazard event. This survey was designed to answer the following questions:

1. How have extreme hazard events impacted CBOs' businesses and their clients in the past ten years?

2. What are CBOs' intentions and capabilities for facilitating personal emergency preparedness with high-risk clients?
3. What strategies have CBOs taken to prepare their business for emergencies?
4. What organisational characteristics and preparedness strategies are instrumental to service continuity?
5. What are the facilitators and barriers to the fulfilment of the aforementioned dual responsibilities?

By identifying organisational strategies that support continuity of care and inclusive emergency planning, this research contributes to sustainability by strengthening social infrastructure, reducing vulnerability, and promoting equitable access to essential services during crises. These resilience-building practices align with the Sendai Framework for Disaster Risk Reduction 2015–2030, which promotes inclusive risk governance, prioritisation of high-risk populations, and integration of disaster risk into sustainable development [26]. They also reflect Australia's commitment to a resilient and sustainable future, as articulated in the National Midterm Review of the Sendai Framework, which advocates for coordinated, risk-informed approaches to address systemic deficiencies and embed disaster risk reduction into routine decision-making across all sectors [27].

Within the context of service continuity in community-based health and social care organisations, the term “emergency” refers to any incident that disrupts service provision, including natural hazard emergencies (e.g., flood, bushfire, cyclones), human-made emergencies (e.g., housefire, chemical spills), infectious disease outbreaks, epidemics, and pandemics [28]. To maintain consistency throughout the paper, these events will be collectively referred to as “emergency” or “emergencies”.

2. Materials and Methods

2.1. Questionnaire Design

The design of the questionnaire was informed by a scoping review [24] that examined how community-based service providers can enable emergency preparedness for clients in the community and individual interviews with 18 Australian service providers on their experience of implementing personal emergency preparedness with their clients [29]. The survey consisted of three sections: “organisation profile”; “enabling emergency preparedness with clients”; and “business continuity planning”. The first section collected information about the respondent and their organisation, including the respondent's job title and organisational characteristics such as sector (public, private, not-for profit), size, business structure, primary services, main client groups, number of active clients, typical service delivery mode (direct, indirect, or a combination), and emergencies that have affected the organisation in the past decade.

The next section of the questionnaire assessed intentions and capacities of CBOs to facilitate emergency preparedness actions for high-risk clients and their families. Ten activities were established as key indicators of how well organisations enable their high-risk clients to prepare for emergencies.

Additionally, respondents were presented with seven potential barriers identified from literature and asked to rank the top three factors that most limited their engagement in supporting clients with emergency preparedness. These seven barriers were: “It is not in our organisation's mission statement or strategic plan”; “There is no emergency preparedness policy in our organisation”; “Our staff do not have adequate training in emergency preparedness”; “We don't have the adequate tools to engage in emergency preparedness planning with clients”; “We do not have enough time to include emergency preparedness activities as part of our services”; “There is insufficient funding for us to include emergency preparedness responsibilities as part of our services”; and “Clients are

unwilling to engage in emergency preparedness". Internal consistency reliability for this section was examined using Cronbach's alpha (α) to evaluate whether the items collectively measured a coherent underlying construct.

The last section assessed organisational emergency preparedness with a focus on service continuity planning. Respondents were asked to indicate their level of agreement with a series of statements related to organisational emergency preparedness. Example statements included: "Our staff (and volunteers) are well prepared to cope with an emergency event at home and at work"; and "Our organisation is well networked with emergency service agencies, such as the police, fire brigade, State Emergency Services (SES) and/or ambulance services". Internal consistency reliability for this section was also examined using Cronbach's alpha (α) to confirm that the items measured a coherent underlying construct. This section also included open-ended questions to identify challenges in developing and implementing a comprehensive business continuity plan aimed at maintaining client support before, during, and after an emergency. Additionally, respondents were asked to specify the resources, tools, or training needed to strengthen their business continuity planning.

The questionnaire was reviewed and tested by service providers to ensure understanding and appropriateness. Only minor refinements were made to the survey layout prior to its dissemination. The final version of the questionnaire is available in Supplementary Material. This survey study was approved by the Human Research Ethics Committee at The University of Sydney (Project number: 2021/113).

2.2. Data Collection

Potential participants were community-based social and healthcare organisations across Australia. To capture diverse perspectives from the sector, survey invitations were distributed to a wide range of organisations identified through several national registries, including Health direct (a government-supported directory of health and community services), the National Disability Insurance Scheme (NDIS)-registered provider directory, and the Department of Social Services (DSS) grants service provider directory. Invitations were also extended through peak bodies representing disability and community service providers, as well as housing and homelessness service networks.

Recruitment occurred through multiple channels, including direct email invitations, social media posts, and dissemination at stakeholder engagement meetings, workshops, and webinars on disaster risk reduction. A snowball sampling approach was also applied, with participating organisations invited to share the survey through their networks. While participation was voluntary and not based on random selection, this multi-source recruitment strategy was designed to maximise diversity and representation across service types, organisational sizes, and jurisdictions. The survey was administered via a web-based, self-administered platform between December 2021 and April 2022.

2.3. Data Analysis

Descriptive statistical analyses were conducted using Microsoft Excel spreadsheet to explore sample characteristics and distribution of responses. Categorical characteristics were described using frequencies and percentages. Numerical variables were described using mean and standard deviation (SD). Missing data were not imputed; analyses were conducted using available data only.

Inferential statistical analyses were conducted using STATA SE (version 14). Multi-variate regression analyses were carried out to explore factors associated with two types of outcomes: (1) the full implementation of each activity that enables high-risk clients

to prepare for emergencies; (2) the organisation's ability to deliver an adequate level of services to clients during emergencies.

Logistic regression analyses were used to examine factors associated with the full implementation of activities supporting personal emergency preparedness among high-risk clients. To prepare the outcome variables, survey responses were recoded to create binary variables. Specifically, the original response options ("Done all of this already", "Done some of this already", "Could do this in the future", and "Could not do this") were collapsed into a dichotomous variable: responses of "Done all of this already" were coded as "Yes", while all other responses were coded as "No".

Independent variables in these models included organisational characteristics (e.g., sector, size, type of services provided, past emergency experiences, remoteness), as well as potential barriers to emergency preparedness engagement with the people they support (e.g., inadequate training, inadequate tools). Barrier rankings were converted into numeric scores, with 3 points assigned to the top-ranked barrier, 2 points to the second-ranked barrier, and 1 point to the third-ranked barrier. Measures of organisational business continuity planning (e.g., collaboration with other organisations for emergency preparedness, assisting emergency services to understand clients' needs) were also included.

Ordered logistic regression analyses were conducted to examine factors associated with the organisation's ability to deliver an adequate level of services to clients during emergencies. This outcome variable was based on the survey item: *"How much do you agree or disagree with the following statement: We are able to deliver an adequate level of services to our clients in case of natural hazards, pandemics, and other types of emergencies (e.g., house fires, power outages, telecommunication breakdowns)"*. Responses were measured on a five-point Likert scale ranging from "Strongly disagree" to "Strongly agree".

Independent variables for this analysis included indicators of organisational preparedness actions outlined in part three of the questionnaire, such as staff preparedness, staff decision-making capacity, networking with emergency services, advocacy for client needs, community collaboration, business continuity plan, and insurance coverage.

An "other" option was provided to respondents to describe the barriers that had not been included in the ranking question. The "other" responses and all non-numeric responses to the open-ended questions were thematically analysed using NVIVO software (version 12), which is specifically designed for qualitative and mixed-methods research [30]. Two researchers (IY and BS) independently coded the responses to open-ended questions and identified the common themes. Afterwards, the research team members (MV, IY, BS and FN) worked together to discuss and interpret the findings from the independent coding. All team members (MV, JC, IY, BS and FN) agreed on the final themes that emerged from qualitative analysis.

3. Results

3.1. Organisation and Client Profile

Of the 244 responding organisations, about half of them (51%) were not-for-profit organisations; 47% registered as a company, and 39% were in medium sized organisation with employee numbers between 20 and 199. Just over half of those surveyed (55%) stated that they typically provide direct service delivery to their clients. Disability service (69%) was identified as the most provided service, followed by housing and homelessness services (27%). Most of the responding organisations (76%) reported that their main client group were people with disability. Other frequently reported client groups included people experiencing mental health issues (35%) and people experiencing homelessness (29%) (see Table 1).

Table 1. Organisation and client profiles.

Organisation Profile N (%)			
State	Service sector *		
Queensland	95 (39)	Disability	136 (69)
New South Wales	72 (30)	Housing, homeless	65 (27)
Victoria	43 (18)	Allied health	39 (20)
Western Australia	10 (4)	Aged care	39 (20)
South Australia	10 (4)	Children, youth and family	30 (15)
Australian Capital Territory	6 (2)	Nursing	18 (9)
Tasmania	6 (2)	Medical	8 (4)
Northern Territory	2 (1)	Other	22 (11)
Organisation type	Remoteness †		
Not-for-Profit	122 (51)	Metropolitan areas	139 (57)
Private	101 (42)	Regional centres	39 (16)
Public	16 (7)	Large rural towns	23 (10)
Size of organisation			
Micro (<5 employees)	43 (18)	Medium rural towns	16 (7)
Small (5–9 employees)	63 (26)	Small rural towns	20 (8)
Medium (20–199 employees)	93 (39)	Remote communities	4 (2)
Large (200 or more employees)	40 (17)	Very remote communities	1 (0)
Business structure	Service delivery mode		
Company	113 (47)	Indirect service (e.g., administration, program development)	9 (4)
Incorporated association	61 (26)	Direct service delivery with clients, family or carers	133 (55)
Sole trader	24 (10)	Combination of direct and indirect service delivery	98 (40)
Joint venture	6 (3)	Other	3 (1)
Trust	8 (3)		
Partnership	2 (1)		
Other	24 (10)		
Client profile N (%)			
Main client base *	Client age categories *		
People with disability	183 (76)	Children (<15)	126 (52)
People with a mental health issue	85 (35)	Youth (15–24)	171 (70)
People experiencing homelessness	69 (29)	Adult (25–64)	217 (89)
Families and informal carers	66 (28)	Elderly (65>)	134 (55)
Aboriginal and Torres Strait Islander people	56 (23)		
Cultural and Linguistic Diversity people	55 (23)		
People experiencing domestic violence	54 (23)		
People with problematic drug and/or alcohol use	32 (13)	Number of active clients	
LGBTQI community	32 (13)	Minimum	0
Refugees and migrants	30 (13)	Maximum	130,000
Other	29 (12)	Average	1307

Note: Asterisk (*) indicates data elicited from a multi-select multiple choice question. Dagger (†) indicates remoteness classification based on the Modified Monash Model (MMM) [31]. The MMM categorises areas by population size and access to services into the following categories: MM 1 = Metropolitan (≥70% of population), MM 2 = Regional centres (>50,000 residents), MM 3 = Large rural towns (15,000–50,000 residents), MM 4 = Medium rural towns (5000–15,000 residents), MM 5 = Small rural towns (1000–5000 residents), MM 6 = Remote communities (<1000 residents), and MM 7 = Very remote communities (populated islands located >5 km offshore from the mainland) [31].

3.2. Service Continuity and Clients' Wellbeing

Only 7% of those surveyed reported that their organisations had not been impacted by any hazard events in the past ten years. Others were mostly impacted by pandemic (81%), flood (33%), severe storm or cyclone (29%), and bushfire (23%) (see Figure 1).

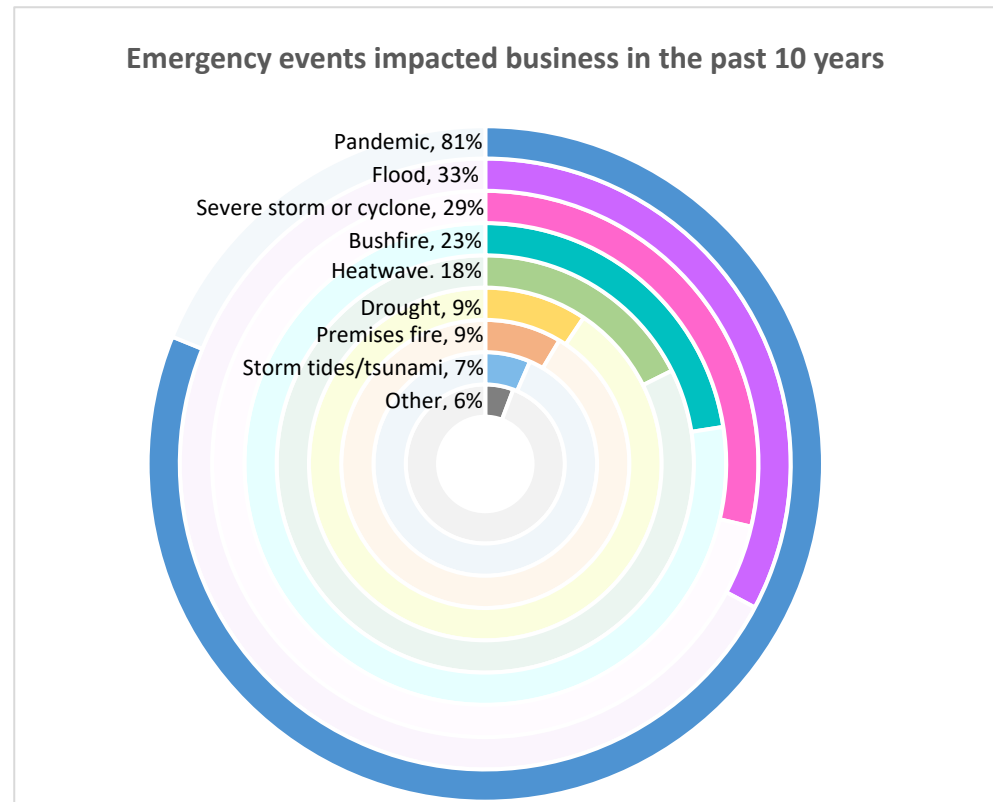


Figure 1. Emergency events impacted business in the past 10 years (Data elicited from a multi-select multiple choice question).

When asked how the past hazard events impacted on business and clients, the following themes recurred throughout the responses, which are detailed in Table 2 and discussed here.

Table 2. Impacts of emergency events on business and clients.

Themes	Indicative Quotes
Infrastructure and property damage	"Flood closed roads which prevented staff and clients from getting to the facility"-Nursing service provider, PID-05
	"Cyclone damaged multiple buildings-Relocation of offices; stress to both staff and client"-Housing and homelessness service provider, PID-31
	"Breakdown of electrical equipment due to roof leaking, Not being able to cook or use fridges. The impact was on the clients rather than the organisation."-Housing and homelessness service provider, PID-38
	"Several property fires over the 10 years...Future impact likely to be far greater as insurers are now refusing to insure social housing due to the increased risk."-Housing and homelessness service provider, PID-06
	"House fire-property was not able to be tenanted for 4 months."-Housing and homelessness service provider, PID-21

Table 2. Cont.

Themes	Indicative Quotes
Utility and Supply Chain Disruptions	<i>"Business continuity impacts due to Wi-Fi and power outages during severe storms in 2021"-Multiple service provider, PID-239</i>
	<i>"Electricity was off for five days. We usually have hot summers; this year we had a consistent highest temperature of 40 degrees. Many of our crisis accommodation dwellings do not have air-conditioning. We have supplied portable breeze air, but these do next to nothing during the hottest part of the days."-Housing and homelessness service provider, PID-19</i>
	<i>"Cyclone isolated clients and staff from access services and work. During this period power as not connected which caused issues who required power to run essential equipment to maintain their health and well-being"-Disability service provider, PID-248</i>
	<i>"COVID pandemic caused burden of sourcing PPE / RATs etc"-Disability service provider, PID-443</i>
Increased demand for services and supports	<i>"Increased service requests for provisions of material aid and brokerage, Increased demand on referrals to crisis accommodation and or emergency housing arrangements"-Housing and homelessness service provider, PID-20</i>
	<i>"Increase in client support before and after events to support clients which results in an increase in staff workloads and reduces availability to support clients with usual service delivery."-Housing and homelessness service provider, PID-08</i>
	<i>"Increased needs for mental health, domestic violence and employment support."-Multiple service provider, PID-399</i>
	<i>"Pandemic has clearly impacted clients' financial circumstances as level of need for services is higher than ever, with accompanying increases e.g., domestic violence, use of alcohol and other drugs."-Multiple service provider, PID-415</i>
Workforce and staffing challenges	<i>"Staff being impacted by weather events personally. . . impacting on their ability to work and support the service/clients. . .Reduced staffing."-Housing and homelessness service provider, PID-08</i>
	<i>"Impacted on the ability of the staff to travel to family homes to provide services due to issues such as road closures; unsafe local conditions; public health orders; impact on staff availability due to personal caring responsibilities etc"-Multiple service provider, PID-169</i>
	<i>"Pandemic impact has been mostly staff resilience and resulting in 23% turnover in our workforce up from 7%. Unplanned leave also remains high. Overall impact on the organisation is that teams are now greener and less experienced resulting in a drop in outputs and performance measures, decrease in quality, and an increase in risk. Senior managers now less strategic and much more operational which will likely have longer term impact on the future of the business."-Housing and homelessness service provider, PID-06</i>
	<i>"COVID left us unable to service many of our clients for a considerable time, and on re-entry with mandating vaccinations we lost a considerable amount of employees"-Multiple service provider, PID-434</i>
Isolated clients in need	<i>"Flood and cyclones isolated clients and staff from access services and work. During this period power as not connected which caused issues who required power to run essential equipment to maintain their health and well-being"-Disability service provider, PID-248</i>
	<i>"Telehealth is not always appropriate for children, people with intellectual disability or high needs."-Allied health service provider, PID-30</i>
	<i>"Older people and those with disability have been left isolated and frightened, often unable to engage with services due to stigma"-Multiple service provider, PID-444</i>
	<i>"People sleeping rough that had no housing to safely stay in especially in high peak of COVID or lockdowns, peoples housing were impacted by floods and left homeless"-Housing and homelessness service provider, PID-14</i>
	<i>"Isolation and deteriorating mental health conditions."-Neighbourhood centre, PID-410</i>
	<i>"Constantly changing Health Order made operational management challenging. . . No guarantees that any referral we made could be supported by other organisations as the sector is under strain."-Multiple service provider, PID-399</i>

Note: PID refers to Participant ID assigned during data collection.

3.2.1. Infrastructure and Property Damage

Damage to facility infrastructure impacted business continuity, with even incidents like roof leaks leading to electrical equipment breakdowns and disruptions to basic services. Similarly, damage to facility vehicles during hazard event impacted transportation services

for clients. Sometimes organisations had to relocate to temporary locations for extended periods, posing challenges to their ability to support their clients. Similarly to natural hazard emergencies, human-made emergencies such as premises fires also impacted service continuity. Premises fires in supported accommodation properties led to prolonged vacancies, impacting the business financially. Participants highlighted that these challenges extended beyond property damage and repair costs, encompassing future risks like insurers growing reluctance to cover housing properties due to frequent fire incidents in the past decade.

3.2.2. Utility and Supply Chain Disruption

Prolonged power and Wi-Fi outages in times of emergencies disrupted business operations and posed significant risks for clients relying on power-dependent equipment to maintain their health and well-being. Additionally, many emergency accommodations lacked air conditioning, causing significant discomfort and potential health risks for the clients moved to the temporary shelters during hot summer with temperatures soaring to 40 degrees. Similarly, supply chain disruptions during the COVID-19 pandemic hindered access to essential supplies such as personal protective equipment (PPE) and rapid antigen test (RAT) kits. These supply shortages interrupted service provision, increased operational costs, and reduced the ability to respond effectively during emergencies.

3.2.3. Increased Demand for Services and Support

Services faced challenges in providing increased support needs, including increased requests for material aid, crisis accommodation, emergency housing arrangements, mental health support, domestic violence support, and employment assistance. This surge in demand enhanced staff workload and strained the organisations' capacity to maintain consistent care and support for their clients.

3.2.4. Workforce and Staffing Challenges

Workforce and staffing challenges were primarily due to staff being personally affected by emergency events, difficulties in traveling to workplace and client locations due to road closures. Furthermore, during the COVID-19 pandemic, prolonged service interruptions combined with vaccination mandates led to considerable employee losses in some organisations. To overcome staff shortage organisations often increased staff workhours and recruited locum staff, resulting in workforce fatigue and additional financial costs, respectively. Moreover, organisations experienced a loss of organisational knowledge due to high staff turnover, making it challenging to maintain a well-trained and informed workforce. These factors adversely affected the organisations' capacity to deliver targeted support, particularly by experienced staff with specialised expertise in client care and complex needs.

3.2.5. Isolated Clients in Need

Emergency events disrupted physical access to services and support, leaving clients in need isolated. Isolation during the COVID-19 pandemic significantly impacted clients' psychosocial well-being, contributing to increased distress and worsening mental health conditions. The pandemic caused widespread service interruptions, prompting many providers to transition to telehealth or remote work. This shift was not always suitable for all clients, particularly the elderly, children, and individuals with disabilities.

Furthermore, the constantly changing health orders during the pandemic complicated operational management and increased safety risks for clients. Housing service providers faced challenges to support homeless individuals during peak COVID periods and lockdowns. The routine methods of outreach and support services became increasingly difficult to implement due to social distancing requirements. Additionally, the ability to make

effective referrals was compromised, with no guarantees that other organisations could support the referrals.

3.3. Enabling Emergency Preparedness with High-Risk Clients

This section of the survey sought to investigate respondents' intentions and capacities to facilitate emergency preparedness with high-risk clients through the activities outlined in Table 3. Cronbach's alpha of 0.89 indicates that the ten activities reliably measure a single underlying construct. To briefly summarise, the two most common activities that had been implemented fully were: "Identify clients who are at risk in an emergency (59%)" and "Make referrals to community services that can help them to enhance their emergency preparedness (43%)". On the other hand, the two most frequently reported activities that respondents felt they could not implement were: "Practice emergency drills with clients (26%)" and "Provide formal support or education to clients to increase their active participation in emergency preparedness (14%)".

Table 3. Intentions and capacities of community-based organisations to facilitate emergency preparedness activities with high-risk clients ($n = 244$).

Emergency Preparedness Activities with Clients	Done All of This Already	Done Some of This Already	Could Do This in the Future	Could Not Do This
Identify clients who are at risk in an emergency, e.g., chronic, physical and mental health condition affecting mobility, geographical location, barriers to access mainstream sources of information about impending danger (technology, communication and language barrier).	59%	34%	4%	2%
	+Assoc.: Organisation size ($p = 0.037$), have been helping emergency services understand clients' needs ($p = 0.002$). –Assoc.: Allied health sector ($p = 0.047$), omission from organisation's mission statement ($p = 0.011$).			
Make referrals to community services that can help them to enhance their emergency preparedness, e.g., local emergency service personnel and council.	43%	34%	19%	5%
	+Assoc.: CALD clients ($p < 0.001$), have been helping emergency services understand clients' needs ($p < 0.001$)			
Assess clients to identify their level of emergency preparedness , e.g., awareness of local hazard risks, access to emergency information and alerts, understanding their role and responsibility in an emergency.	32%	41%	23%	4%
	+Assoc.: Disability service sector ($p = 0.009$), have been impacted by storm tides/king tides in the past 10 years ($p = 0.021$), have been helping emergency services understand clients' needs ($p < 0.001$)			
Assess clients to identify their personal strengths and support needs during emergencies to minimise risk, e.g., communication, technology, transport, living situation, personal supports, assistance animals, social connectedness, and health (medical management).	39%	38%	19%	5%
	+Assoc.: Public sector ($p = 0.012$), disability service sector ($p = 0.006$), have been collaborating with other CBOs to prepare for emergencies ($p = 0.019$) –Assoc.: Allied health sector ($p = 0.025$), inadequate training in emergency preparedness ($p = 0.037$)			
Provide preparedness information, tools or resources to clients, their families or carers , e.g., information on local bushfire or flood risk, council preparedness resources, community service resources such as the Australian Red Cross emergency preparedness plan.	29%	36%	27%	9%
	+Assoc.: Have been helping emergency services understand clients' needs ($p = 0.001$)			
Explore preparedness information, tools, and resources with clients to encourage them to take steps to prepare, e.g., learn about local disaster risks together with your client, recognise gaps in knowledge (yours and theirs), and develop skills to stay informed during an emergency, such as how to find information about bushfires and floods, etc.	21%	35%	35%	10%
	–Assoc.: public sector ($p = 0.024$), Inadequate tools to engage in emergency preparedness with clients ($p = 0.007$)			
Develop an emergency preparedness plan for or with clients that is tailored to their support needs in emergencies, e.g., household, or personal emergency checklist and kit, emergency supplies, supported accommodation, and a communication strategy (including contact list).	29%	33%	30%	8%
	+Assoc.: Nursing sector ($p = 0.002$) –Assoc.: Allied health sector ($p = 0.010$)			
Strengthen support networks of clients. Build social connectedness to the key people your client will most likely rely on, so that they have a group of willing people to call on to provide support in an emergency, e.g., neighbours, friends, local neighbourhood centres, and a buddy system that pairs people with trusted local community members who can assist them in an emergency.	31%	43%	16%	10%
	+Assoc.: Public sector ($p = 0.037$), small organisation ($p = 0.037$), children, youth and family service sector ($p = 0.020$), have been impacted by drought ($p = 0.047$) or storm tides/king tides ($p = 0.048$) in the past 10 years, have been well networked with emergency service agencies ($p < 0.001$) –Assoc.: Have not been impacted by any hazard events in the past 10 years ($p = 0.047$), lack of time to include preparedness activities ($p = 0.012$)			

Table 3. Cont.

Emergency Preparedness Activities with Clients	Done All of This Already	Done Some of This Already	Could Do This in the Future	Could Not Do This
Provide formal support or education to clients to increase their active participation in taking steps to prepare for emergencies, e.g., helping them with programs such as the Person-Centred Emergency preparedness (P-CEP) Workbook, and using planning guides such as the Australian Red Cross ‘REDI PLAN’.	16%	31%	39%	14%
	– Assoc.: Inadequate tools to engage in emergency preparedness with clients ($p = 0.010$)			
Practice emergency drills with clients, their families or carers to increase their familiarity, sense of preparedness and confidence, e.g., evacuating in a wheelchair, with a ventilator, and access to medication and ongoing care.	20%	17%	37%	26%
	+Assoc.: Have been impacted by premises fire in the past 10 years ($p = 0.012$), have been collaborating with other CBOs to prepare for emergencies ($p = 0.045$) – Assoc.: Allied health sector ($p = 0.037$), number of clients ($p = 0.045$), inadequate training in emergency preparedness ($p = 0.017$), remoteness ($p = 0.027$)			

Note: Percentages represent descriptive results. Inferential findings (“+Assoc.”/“–Assoc.”) are based on binary logistic regression analyses examining factors associated with the full implementation (“Done all of this already”) of each emergency preparedness activity. “+ Assoc.” indicates a positive association with full implementation (higher odds), and “–Assoc.” indicates a negative association (lower odds). Only statistically significant associations ($p < 0.05$) are shown.

Table 3 also presents factors significantly associated with the full implementation of each activity, as identified through binary logistic regression analyses. Notably, organisations that reported networking with local emergency service agencies and helping these agencies understand clients’ needs during and immediately after an emergency event had higher odds of fully implementing a range of activities supporting clients’ emergency preparedness. In contrast, organisations operating in the allied health sector and those reporting inadequate tools or training in emergency preparedness had lower odds of full implementation across several activities.

Respondents were asked to rank the top three barriers that limited their organisation from engaging in emergency preparedness with their clients. After converting the rankings into scores, as described in Section 2, the barriers that received the highest scores were “There is insufficient funding for us to include emergency preparedness responsibilities as part of our services”, “We do not have enough time to include emergency preparedness activities as part of our services”, and “Clients are unwilling to engage in emergency preparedness.” Interestingly, insufficient funding and clients’ unwillingness were not identified as significant factors that would have negative influence on the implementation of the enablement activities outlined in Table 3.

Open-ended responses revealed diverse organisational strategies and challenges in enabling emergency preparedness of high-risk clients. The strategies adopted by organisations include engaging with clients’ formal and informal support networks and providing high-risk clients with educational materials (e.g., the Person-Centred Emergency preparedness (P-CEP) booklet) and resources (e.g., emergency supply packs) (see Table 4). While dissemination of emergency preparedness materials demonstrates an intention to promote preparedness, it is crucial to recognise that the mere distribution of preparedness materials does not equate to comprehensive preparedness support. Effective engagement necessitates a person-centred approach that encompasses active facilitation, discussion, and capacity-building tailored to individual risk profiles and support needs [24,32].

In addition, participants cited various factors limiting organisational engagement in emergency preparedness planning with their clients. The following themes recurred frequently in the participant’s responses: Emergency preparedness is considered “out of scope”; and Challenge in engaging with clients with cognitive impairment and people experiencing homelessness (see Table 4).

Table 4. Strategies and barriers in supporting emergency preparedness for high-risk clients.

Themes	Indicative Quotes
Adopted practices to support high-risk clients' emergency readiness	
Raising emergency awareness and resource sharing	<i>"Wherever possible we educate our tenants about emergency preparedness and last year distributed the Person-Centred Emergency preparedness (P-CEP) booklet to all our Tenants along with general emergency information and emergency supplies. Our staff contacted local councils and made up emergency packs in preparation for the weather period."</i> -Housing and homelessness service provider, PID-16
Engaging with clients' formal and informal support networks	<i>"All our clients have impaired decision making. . . . our manager keeps in close contact with the clients' families and supports during any emergency. This has worked well managing the impact of the pandemic."</i> -Disability service provider, PID-110 <i>"Key to supports are tenants' informal networks. We therefore seek to house tenants who have lived locally for a long time so that they have this."</i> -Housing and homelessness service provider, PID-24
Barriers to engage in emergency preparedness with high-risk clients	
Emergency preparedness is considered "out of scope"	<i>"As Plan Managers, we provide administrative supports and have very limited in-person contact"</i> -Disability service provider, PID-67
	<i>"Many of our clients are case managed by agencies external to our services. Clients have developed strategies with them"</i> -Disability service provider, PID-103
	<i>"I work with clients under the care of parents or carers so do not need to do this as they do"</i> -Disability service provider, PID-286
	<i>"We currently work to address the goals of the client. The client's goal is not to be prepared for an emergency-and if it was, we would identify what barriers they currently have and what to do to get ready."</i> -Allied health service provider, PID-53
	<i>"We operate within contracted deliverables and whilst we encourage clients to have emergency plans. . . . we do not have resources or the agreement in our contracts to resource this."</i> -Carer service provider, PID-189
Challenge in engaging with clients with cognitive impairment and people experiencing homelessness	<i>"Most of our clients are short term"</i> -Nursing service provider, PID-05
	<i>"We are a "virtual" organisation using Cloud technology. We do not operate from business premises"</i> -Disability service provider, PID-221
	<i>"Our clients have complex intellectual disabilities with very limited capacity to comprehend or retain any instructions issued prior to any event. They rely on the training provided to staff due to mobility and other health related issues."</i> -Disability service provider, PID-131
	<i>"Most clients have significant cognitive disability which limits their participation in emergency planning"</i> -Disability service provider, PID-333 <i>"Participants and families have a fear surrounding emergencies and emergency response and prefer to stay at home, in a controlled environment"</i> -Disability service provider, PID-158 <i>"We can have all the planning and processes in place but how we reach out effectively to clients has been most difficult."</i> -Housing and homelessness service provider, PID-35

Note: PID refers to Participant ID assigned during data collection.

3.3.1. Emergency Preparedness Is Considered "Out of Scope"

Participants identified several factors contributing to this perspective. They emphasised that organisational focus on addressing clients' primary and immediate support needs, often do not align with emergency preparedness objectives. Additionally, various service-related constraints reportedly impede their ability to incorporate comprehensive emergency preparedness measures with high-risk clients. For example, the contractual delivery model narrows the scope of services, limiting service providers' ability to participate in emergency preparedness measures. The short-term nature of client engagements further complicates long-term planning efforts, as providers lack sufficient time to develop and execute robust emergency strategies. Moreover, virtual operations models also hindered in-person engagement which some respondents viewed as crucial for effective emergency preparedness planning.

3.3.2. Challenge Engaging with Clients with Cognitive Impairment and People Experiencing Homelessness

Respondents cited that emergency preparedness conversations sometimes trigger anxiety and discomfort for clients with cognitive challenges, as these discussions often involve envisioning distressing or uncertain scenarios. This uncertainty can amplify fear

and stress, leading to clients' reluctance to engage. Furthermore, clients with intellectual disabilities often struggle to comprehend or retain emergency instructions, adding an additional layer of complexity to emergency preparedness. Similarly, engaging people experiencing homelessness in emergency preparedness activities presents notable challenges. The transient nature of clients in housing and homelessness services was reported as a challenge to identify, engage, and follow up with this high-risk group. One housing service provider noted that despite having comprehensive emergency planning in place, they struggle to effectively reach out to clients, underscoring the multifaceted challenges in emergency preparedness for individuals experiencing homelessness.

3.4. Factors Influencing Organisational Emergency Preparedness and Business Continuity Planning

This section of the survey assessed organisations perceived capacity and readiness to maintain service delivery and support clients during emergencies. The internal consistency of the eight items outlined in Figure 2 was high (Cronbach's $\alpha = 0.83$), indicating that the statements collectively measured a coherent underlying construct of organisational emergency preparedness.

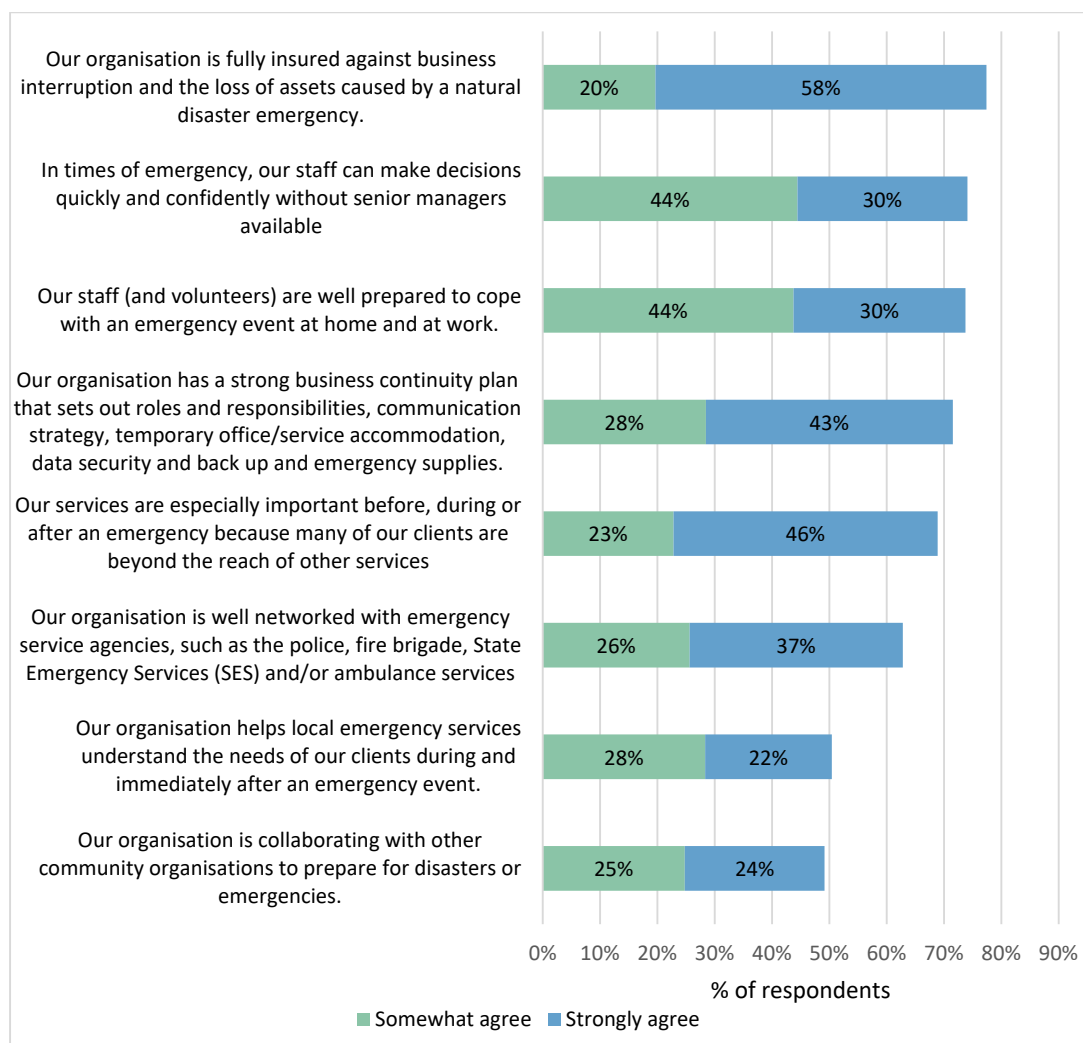


Figure 2. Emergency management strategies employed by community-based health and social care organisations ($n = 244$).

More than three quarters (78%) of respondents strongly agreed or agreed that they were able to deliver an adequate level of services to their clients during natural hazards,

pandemics and other types of emergencies. Our multivariate ordered logistic regression modelling revealed that this ability was positively associated with: “our services are important to clients as they are beyond the reach of other services” (AOR = 7.77, $p < 0.001$, 95% CI: 2.62–23.09 in the “strongly agree” group, in reference to “strongly disagree” group), “our staff is able to make quick and confident decisions without senior managers available in times of emergency” (AOR = 7.88, $p = 0.045$, 95% CI: 1.05–59.02 in the “strongly agree” group, in reference to “strongly disagree” group), and “our organisation is well networked with emergency service agencies” (AOR = 8.44, $p < 0.001$, 95% CI: 3.05–23.36 in the “strongly agree” group, in reference to “strongly disagree” group).

The majority of responding organisations demonstrated a high level of organisational emergency preparedness that could minimise the likelihood of service disruption during a hazard event. The top two box bar chart (see Figure 2) presents the percentages of “strongly agree” and “agree” responses from the five-point Likert scale questions concerning emergency management strategies. The most implemented strategy was “fully insured against business interruption and the loss of assets caused by a natural disaster event (77%)”, while the least implemented strategy was “collaborating with other community organisations to prepare for disasters or emergencies” (49%).

Respondents also highlighted several factors influencing organisational emergency preparedness and service continuity planning through the open-ended question. Participants identified several factors facilitating their organisational emergency preparedness and service continuity (see Table 5). For instance, prioritising emergency preparedness, leveraging past disaster experiences, and conducting regular risk assessments with clients to address their specific support needs enabled organisations to maintain essential services during emergencies.

Table 5. Enablers to develop and implement organisational emergency preparedness and business continuity plan.

Themes	Indicative Quotes
Setting emergency preparedness and business continuity planning as priority	“Our service is required to complete annual seasonal preparedness and to maintain a business continuity plan as part of our department of families, fairness and housing funding. This is a priority for our service.”-Multiple service provider, PID-239
	“We have an Emergency and Disaster Management Plan and Policy, Evacuation Plan together with a Risk Management and Business Resilience Policy. Implementation of these Policies and Plans would not provide any great challenges before, during and after a disaster.”-Disability service provider, PID-127
	“We do risk assessments for our clients to manage specific emergencies due to their living conditions and abilities. ... risk management is part of our normal job. Our coordinators assist our clients to do risk management plans”-Disability service provider, PID-128
Community and peer support	“In the pandemic we lost 80% of our volunteers who deliver our meals to clients, but we received a lot of community help which was great. There were several community organisations that helped regularly for several months.”-Meal service provider, PID-231
	“Networking between colleagues also helped as it was specific to our workplace and created continuity within our plans.”-Allied health service provider, PID-249
Government support	“We are funded to provide assistance through the state government when emergencies arise”-Aged care service provider, PID-113
	“During COVID 19, we received instructions from government departments, and we follow their guidelines.”-Disability service provider, PID-128
Smooth transition to remote work	“Due to our staff being able to deliver their service remotely (not including face to face meetings) our service is generally uninterrupted by disaster (i.e., COVID).”-Disability service provider, PID-61
	“All our office and management staff have the ability to work from home if required. Our data system is all online and support workers also have access to this thru their phones. We are well equipped to deal with business continuity due to a disaster.”-Disability service provider, PID-304
Drawing on previous disaster experience	“As a state-wide service provider with over 40 years in service delivery we have experienced many natural disasters. From this experience we have an understanding of how we continue to provide services.”-Housing and homelessness service provider, PID-43
	“We already have a system of providing alternative workers or contracting out work so direct support to clients can continue with minimal disruption. This has worked effectively during the COVID-19 pandemic.”-Multiple service provider, PID-56

Note: PID refers to Participant ID assigned during data collection.

Several organisations reported greater resilience by successfully transitioning to remote work, maintaining ongoing awareness of potential threats, and leveraging support from government, community and peer networks to sustain services during emergencies. These enablers highlight the importance of proactive preparedness, flexible strategies and community collaboration in minimising the impacts of emergencies and ensuring service continuity.

Participants also reported several factors impeding their ability to enhance organisational resilience through developing and implementing BCP. Frequently mentioned barriers and indicative quotes are outlined in Table 6. Each of these barriers are discussed in detail here.

Table 6. Barriers to develop and implement organisational emergency preparedness and business continuity plan.

Themes	Indicative Quotes
Challenges in planning for a rapidly changing environment	<i>"No idea how to do this, would need support"</i> -Allied health service provider, PID-18
	<i>"lack of knowledge or what to include."</i> -Disability service provider, PID-25
	<i>"With a predominately casual staff base, training staff and communicating information to make sure everyone follow the plan in the case of an emergency will be challenging. . ."</i> -Disability service provider, PID-60
	<i>"The challenge is relevant and up to date information and systems that can be accessed 24/7 by appropriate members of staff. Business continuity cost money to ensure that systems are robust and flexible."</i> -Multiple service provider, PID-70
	<i>"There are also infrastructure issues associated with the elderly living in remote areas; there are areas where there is simply no towers to connect via mobile phones. Without communications, we are unable to provide support to our clients at any of these times."</i> -Multiple service provider, PID-415
Resource constraints	<i>"The main challenge is the resources and time required to prepare a plan based on scenarios of possible high risk situations."</i> -Disability service provider, PID-205
	<i>"Having available staff.... staffing is limited at present and current workload makes it difficult to include additional activities"</i> -Housing and homelessness service provider, PID-11
	<i>"The main challenges for our service is the fact that we run on a very tight budget due to funding not meeting the need of the number of clients we support and house. There is no scope or ability of an already fatigued team to provide more support to additional clients who contact the service in need of help at the time of a disaster."</i> -Housing and homelessness service provider, PID-40
	<i>"It is challenging to maintain such deep knowledge during periods of high staff turnover and new staff take a very long time before they have the depth of knowledge in the organisational business to respond accordingly."</i> -Housing and homelessness service provider, PID-06
	<i>"A certificate III in Disability or Aged Care does not produce support staff who are capable of complying with these standards and there is no funding for providers to adequately train the workers."</i> -Multiple service provider, PID-37
Limited access to emergency information and guidelines	<i>"Staffing with emergency Assessment and planning skills is a major challenge."</i> -Multiple service provider, PID-243
	<i>"Our Housing Programs provided emergency packs-this limited what we could provide in the kits. I believe there should be funds made available to provide basic emergency kits for all Tenants in our program."</i> -Housing and homelessness service provider, PID-16
	<i>"Not knowing how widespread an area will be affected, how many staff will be affected in ways that may prevent them attending work. . . Lack of alternative emergency accommodation that meets the basic needs of clients. . .Capacity of evacuation centres to cope with people living with disability-everything from disability access to being able to manage behaviours of concern in this environment. . .Lack of community engagement in review of State Emergency Plan and legislation"</i> -Disability service provider, PID-333
Inadequate drills and revisions	<i>"Constructing a plan that covers all potential disasters is very challenging and then having a plan that is not rehearsed can be troublesome."</i> -Multiple service provider, PID-436
Lack of collaboration with other organisations	<i>"Each organisation wants to remain independent and reluctant to work with others."</i> -Multiple service provider, PID-21
	<i>"As a micro-organisation, we also have limited interaction with emergency services to support the development of a plan that involves these services, therefore our focus has been mainly on staff safety, well-being (as well as their family considerations) and developing an environment where staff can work remotely whilst continuing to deliver supports across robust IT platforms."</i> -Disability service provider, PID-67
	<i>"The local hospital refused our residents during the bushfire disaster. This caused enormous anger and disruption."</i> -Disability service provider, PID-223
	<i>"Our organisation is small and works with several other large providers (e.g., residential disability care) and their decisions directly impact clients and our ability to offer services."</i> -Disability service provider, PID-461

Note: PID refers to Participant ID assigned during data collection.

3.4.1. Challenges in Planning for a Rapidly Changing Environment

The constantly changing environment posed significant challenges in anticipating risks, updating and executing the service continuity efforts. Planning was especially challenging for services that work with diverse client groups and in a range of locations. Rapidly evolving circumstances necessitated frequent updates to risk assessments demanding additional time and resources, while also amplifying administrative burdens and coordination difficulties with government and emergency agencies. Additionally, constantly changing public health policies, vaccination mandates during the COVID-19 pandemic presented significant challenges in maintaining operational stability and workforce availability. Furthermore, with rapid transition to virtual care provisions, service providers faced communication issues, especially with elderly clients in remote areas with little to no technological support.

3.4.2. Resource Constraints

Participants reported that resource constraints including limited time, inadequate financial support, and insufficient knowledge and expertise in emergency preparedness planning hindered organisational capacity to develop and implement a comprehensive BCP. Maintaining a skilled workforce was an additional challenge, particularly during times of high staff turnover. During emergencies, CBOs often relied on casual or locum workers, many of whom were unfamiliar with internal emergency protocols and lacked prior training, leading to inconsistencies and/or delays in response efforts. In addition, time and financial constraints also limited organisations' capacity to offer emergency preparedness training to their staff and engage in organisational emergency preparedness initiatives.

3.4.3. Limited Access to Emergency Information and Guidelines

Without clear, comprehensive emergency information and guidance, many CBOs were unable to anticipate and plan for potential emergencies. Concerns were also raised about obtaining up-to-date information about accessible emergency accommodation that can adequately meet their clients' needs, particularly for individuals with disabilities. Organisations reported minimal to no involvement in developing and reviewing local and/or state emergency plans and related legislation, creating a disconnect between high-level planning and the realities experienced by CBOs.

3.4.4. Inadequate Drills and Revisions

Despite having a comprehensive BCP in place, CBOs often find it challenging to regularly practice and review the plan. This difficulty reportedly stems from resource constraints, competing priorities, or a lack of dedicated personnel to oversee BCP management. This lack of routine testing and revisions potentially increases the risk of the plan becoming inadequate or failing to address emerging risks during actual emergencies.

3.4.5. Lack of Collaboration with Other Organisations

Organisations often operated in silos limiting opportunities for collective planning, resource sharing, and developing integrated strategies that could strengthen organisational resilience. Participants also expressed concerns about inadequate support from other healthcare organisations, noting instances where local hospitals refused to approve referrals or admit patients in times of emergency, further complicating the response efforts. Limited engagement with emergency services further compounded these issues, contributing to disruptions in communication and coordination among these key stakeholders and hindering effective preparedness and response efforts.

3.5. Resources Needs for Developing and Implementing Business Continuity Plan

Respondents identified several key resources, and support needs essential for developing and implementing BCP, which are detailed in Table 7 and discussed in this section.

Table 7. Resources, tools or training needed to develop and implement a business continuity plan.

Themes	Indicative Quotes
Strengthening cross-sector collaboration and peer support	<i>"Implementing a strong communication method that could be relied on if essentials services (phone /electricity) were interrupted."</i> -Housing and homelessness service provider, PID-37
	<i>"Sharing of stories and approaches online would also assist."</i> -Housing and homelessness service provider, PID-46
	<i>"More education on how to make and implement these plans better and make them user-friendly and not a manual that people do not wish to touch as it's too daunting a task."</i> -Multiple service provider, PID-243
	<i>"Shared resources and partnerships with local councils around emergency plans"</i> -Housing and homelessness service provider, PID-7
	<i>"More of a focus of the Peak organisations in being able to support organisations to develop and implement BCP's might assist smaller organisations. Sharing of stories and approaches online would also assist."</i> -Housing and homelessness service provider, PID-46
Tailored training and leadership support	<i>"Emergency Services should be required to factor enabling continuity of services to people with disability into their plans. This would necessitate them knowing the needs of members of various communities and ensuring that these needs can continue to be met."</i> -Disability service provider, PID-333
	<i>"Specialist advice from someone who has experience in a range of disasters to overlook the business continuity plan etc to ensure that it somewhat addresses the situation that would arise within the business and community."</i> -Disability service provider, PID-436
	<i>"Training of both front-line staff as well as managers in the basics helps to install confidence that is drawn on through an emergency. Ta basic understanding of the risk, contractual, statutory and legal obligations that are drawn on to make informed but rapid decisions is critical when responding to a crisis."</i> -Housing and homelessness service provider, PID-6
	<i>"Training to ensure we have covered all basis of the plan; tools to use a guideline and funding to allow the staff and participants to practice an emergency plan."</i> -Disability service provider, PID-87
	<i>"Online training to understand what was required step by step. . .Feedback & assistance to solve difficult issues."</i> -Allied health service provider, PID-249
Financial support	<i>"Funding prior to disasters to prepare not after"</i> -Housing and homelessness service provider, PID-14
	<i>"Funding for individual assessments with our clientele. Funding for developing resources required and personnel to engage with all appropriate locally based stakeholders that need to be included when developing individualised plans and emergency preparation."</i> -Disability service provider, PID-08
Accessible tools and templates	<i>"Any easy to use online template for a person-centred emergency preparedness plan would be beneficial as many of our clients may be able to access this themselves."</i> -Multiple service provider, PID-37
	<i>"Some kind of template to ensure that we do not forget an important element"</i> -Disability service provider, PID-66
	<i>"We would appreciate there being some resources or tools available from the government departments and emergency services to assist micro-organisations develop stronger business continuity plans."</i> -Disability service provider, PID-67
	<i>"Framework for a good plan would be helpful, to ensure all areas covered"</i> -Multiple service provider, PID-201
	<i>"Having access to draft templates that guide the organisation to plan for the most likely scenarios which will affect business continuity. Access to eLearning training packages for staff to increase awareness and underpin practical tasks in disaster preparedness, action and recovery for staff and clients."</i> -Disability service provider, PID-205
	<i>"An off the shelf template of a business continuity plan prefilled that can be amended for individual circumstances or leads the user through the development of the plan with prompts or options to select would be very helpful. For some business the business continuity plan is critical and will be complex, for others like ours which are smaller and only have one or two services could be considered essential and need to continue during an emergency situation, the business continuity plan can be much simpler."</i> -Multiple service provider, PID-115

Note: PID refers to Participant ID assigned during data collection.

3.5.1. Strengthening Cross-Sector Collaboration and Peer Support

Respondents highlighted the need for strategic partnerships across the sectors to enhance organisational capacity to engage in emergency preparedness and service continuity planning. This included calls for shared resources and partnerships with other community organisations and local councils to leverage collective expertise and capabilities. They also

underscored the critical role of peak bodies in providing guidance and resources to enhance organisational capacity in developing and implementing comprehensive BCPs.

Moreover, the importance of peer support was also highlighted, with suggestions for creating an online platform where organisations could share success stories and best practices for service continuity. Respondents further emphasised the importance of emergency sectors proactively building relationships with local community organisations to ensure the unique needs of people with disabilities are recognised and addressed by embedding disability-inclusive practices into emergency management systems.

3.5.2. Tailored Training and Leadership Support

Equipping staff with specialised training in emergency risk analysis and educating them with the legal and operational obligations were considered essential for enabling timely, informed decision-making in crisis situations. Participants stressed the significance of expert advice from individuals with practical experience in various disaster scenarios to help review and strengthen business continuity plans. They underscored the necessity for practical tools, step-by-step guidance, and dedicated funding to support regular training, drills, and preparedness planning and implementation activities. Online training, leadership support and real-time feedback from experienced individuals were also proposed as effective means to enhance staff capacity to address implementation challenges.

3.5.3. Financial Support

Participants stressed the importance of pre-disaster investment to enable proactive preparedness and service continuity measures. They underscored the necessity for dedicated funds to create personalised emergency plans, especially for clients with complex needs, and to involve relevant stakeholders in the planning process. Participants also emphasised the crucial need for ongoing financial investment in developing accessible and user-friendly education and training materials to enhance staff preparedness and enable organisations to respond effectively to various crisis scenarios.

3.5.4. Accessible Tools and Templates

There was a strong demand for practical tools and templates that ensure no critical element of BCP is overlooked, while also promoting inclusive and sustainable business continuity planning. Participants highlighted the need for user-friendly templates, checklists, and planning frameworks that are accessible online, adaptable to various service sizes, and effectively guide users through essential preparedness elements. Additionally, respondents asked for sector-specific resources from agencies such as the Department of Health, and emergency services to aid small organisations in developing robust business continuity plans.

4. Discussion

This study marks the first national exploration of the dual responsibilities of community-based health and social care organisations in Australia, concentrating on their role in facilitating person-centred emergency preparedness for high-risk clients and ensuring service continuity during emergencies. This survey offers a foundational opportunity to understand the capabilities of Australian CBOs in emergency preparedness and to advance their contributions to sustainable development strategies that uphold the principle of “leave no one behind” (UN General Assembly A/RES/70/1) [33]. This principle connects the Sustainable Development Goals with inclusive disaster risk reduction, underscoring the importance of engaging high-risk groups in resilience-building efforts [33].

The findings from this study provide insights into the impact of emergency events on CBOs and their clients, the factors influencing organisational emergency preparedness

and service continuity planning, and CBOs' intentions and capabilities for enabling emergency preparedness with high-risk clients, along with the factors affecting these efforts. Additionally, findings highlight organisational characteristics and preparedness strategies that were instrumental for maintaining service continuity. To support interpretation and application of these findings, Table 8 summarises key findings mapped to the study's research questions and focus areas.

Table 8. Summary of findings mapped to the study's research questions and focus areas.

Key Findings	
1. Impacts of hazard events on CBOs and their clients	
- Infrastructure and property damage - Utility and supply chain disruptions - Increased demand for services and supports - Workforce and staffing challenges - Isolated clients in need	
2. CBOs' intention and capability in enabling emergency preparedness with high-risk clients	
Most implemented activities:	
- Identifying at-risk clients - Making referrals to support services	
Least implemented activities:	
- Practice emergency drills with clients - Provide formal support or education to clients	
3. Strategies CBOs taken to prepare their business for emergencies	
Most implemented strategy:	
- Full insurance coverage against business interruption and asset loss	
Least implemented strategy:	
- Collaboration with other community organisations	
4. Organizational characteristic and preparedness strategies instrumental for business continuity	
- Having a strong business continuity plan - Staff empowered to respond quickly without relying on senior leadership - Lack of alternative services in the region - Established networks and collaborations with emergency services	
5. Facilitators and barriers to the fulfilment of the dual responsibilities	
Ensuring service continuity during emergencies	
Barriers:	Enablers:
- Challenges in planning for a rapidly changing environment - Resource constraints (e.g., limited time, staffing, budget and emergency preparedness expertise) - Limited access to emergency information (e.g., lack of up-to-date information on accessible accommodation options) - Inadequate drills and revisions of plans - Lack of collaboration with other organisations	- Prioritising emergency preparedness and business continuity planning - Regular risk assessments with clients to address their support needs - Community and peer support - Government support (e.g., financial aid, timely and well-communicated guidelines) - Smooth transition to remote work - Previous disaster management experience
Facilitating person-centred emergency preparedness for high-risk populations	
Barriers:	Enablers:
- Insufficient funding - Inadequate time - Clients' unwillingness to engage in emergency preparedness - Emergency preparedness is considered "out of scope" - Challenge in engaging with clients with cognitive impairment and people experiencing homelessness	- Networking with local emergency service agencies and helping these agencies understand clients' needs - Raising emergency awareness and resource sharing - Engaging with clients' formal and informal support networks
6. Resources needs for developing and implementing business continuity plan	
- Strengthening cross-sector collaboration and peer support - Tailored training and leadership support - Financial support - Accessible tools and templates - Online platform to share success stories, best practices, and resources	

4.1. Impact of Emergency Events on Business and Clients

Our findings reaffirm existing evidence [34,35] that emergency events exert multifaceted impacts on community-based organisations and their clients. Participants frequently cited infrastructure damage, supply chain disruptions, and workforce shortages as key factors that hinder a CBOs' capacity to deliver uninterrupted services. These operational challenges were compounded by a surge in service demand during and after emergencies, placing additional strain on already stretched resources. Findings from this study indicate that emergency events also exacerbated access barriers for clients seeking essential support, as displacement, road closures, and transportation difficulties were frequently cited as impediments to care access.

In addition, survey respondents expressed concern about the high-risk populations during emergencies. They noted that when service access was disrupted during the COVID-19 pandemic, telehealth was often unsuitable for children, older adults, individuals with intellectual disabilities and individuals living in remote areas without reliable phone networks, National Broadband Network (NBN) infrastructure or internet access. Moreover, participants reported that they were unable to refer patients, as other services were similarly impacted during emergencies.

Respondents described how rapidly changing public health directives during COVID-19 pandemic created operational uncertainty, making it difficult to coordinate care across organisations. In some cases, referrals were unable to proceed due to widespread strain across the sectors, further exacerbating barriers to service access. This aligns with existing literature [36–38], which indicates that disruptions to interconnected support systems disproportionately affect populations dependent on multiple services to maintain their health and well-being. These complex and interdependent challenges underscore the importance of strengthening organisational resilience through proactive emergency preparedness and business continuity planning [39,40].

4.2. Organisational Emergency Preparedness to Ensure Service Continuity

Participants in this study demonstrated a high level of organisational emergency preparedness. Key preparedness measures implemented included comprehensive insurance coverage, staff empowerment for rapid decision-making, and workforce capacity building to effectively address stress and uncertainty amid service interruption. In addition, several organisations demonstrated resilience by successfully implementing BCP actions such as transitioning to remote work, maintaining ongoing awareness of potential threats, and leveraging existing resources from government and community networks to sustain services during emergencies. These findings align with existing literature, emphasising the role of CBOs' in ensuring financial stability [35]; dedicating resources and efforts in development and implementation of comprehensive BCP [41]; and enhancing staff capability [35] and adaptability in the face of service interruptions [40].

The multivariate ordered logistic regression analysis conducted in this study identified additional preparedness strategies that were instrumental for maintaining service continuity. Notably, organisations capable of delivering essential services when regional support systems were unavailable demonstrated a significantly higher likelihood of providing adequate level of services during emergencies ($p < 0.001$). Similarly, CBOs with established networks and collaborations with emergency service agencies exhibited enhanced capacity for sustained service delivery during crises ($p < 0.001$). These insights can assist CBOs in prioritising their preparedness efforts by emphasising internal capacity building and fostering strategic partnerships to enhance their overall resilience and ability to sustain service disruptions.

While many participating organisations demonstrated strong preparedness, several organisations reported interconnected barriers impeding their capacity to develop and implement BCPs. Resource constraints were frequently cited, with survey respondents highlighting challenges in allocating sufficient time, personnel, and financial resources to develop and implement BCPs. Respondents reported that activities such as conducting drills and revising plans require dedicated time and staff that are often difficult to allocate amid competing service demands. Furthermore, siloed approaches among health and social care organisations were also cited as a key barrier. This isolation amplified the effects of limited resources and information access, as organisations missed opportunities to share knowledge and resources, and ensure coordinated responses during crises.

Another key barrier cited by participants in this study was the challenge of preparing for dynamic and evolving emergency scenarios. This reflected a lack of knowledge and skills needed to develop comprehensive business continuity plans that can anticipate, accommodate, and adapt to complex conditions. The Sendai Framework for Disaster Risk Reduction (2015–2030) reinforces the need for comprehensive preparedness by advocating for an all-hazards approach to emergency planning, which includes understanding diverse risks, strengthening disaster risk governance, and investing in system-wide resilience [26,42]. These principles offer valuable direction for enhancing organisational capacity to plan for uncertainty and respond effectively to a broad range of emergencies [26,42].

Survey participants noted that infrequent drills and revisions of existing plans constrained CBO's capability to identify and address gaps in existing BCPs before emergencies. Limited access to emergency information and guidelines, combined with minimal participation in the decision-making process of local or state emergency plans, contributed to a significant information deficit. These knowledge and communication gaps, coupled with resource constraints, hindered the ability of CBOs to ensure essential services for clients and allocate their already limited resources effectively.

Recognising these challenges, several organisations identified the need for cross-sector collaboration and the development of accessible emergency preparedness tools and resources that can be adapted across diverse organisational contexts. This reflects insights from prior research [40,42], which highlight that strategic partnerships with local networks can enhance organisational capacity by promoting collective resilience and shared resource management. Prior study recommended that organisations should pre-identify alternative suppliers and establish partnerships with nearby suppliers to mitigate supply chain disruptions [40]. These actions leverage community assets while fostering shared responsibility, partnerships, and coordinated emergency responses [40,42].

In addition, existing literature suggests that regularly reviewing and updating risk information and response strategies, along with incorporating lessons from past emergencies and/or best practices, is crucial for minimising the impact of emergencies [43,44]. This proactive approach ensures that emergency plans remain effective, relevant, and adaptable to evolving threats, ultimately enhancing the organisations' resilience and ability to mitigate potential disruptions to business continuity [43,44].

Participants in this study also recognised the critical role of peak bodies in providing guidance and resources to enhance organisational capacity in developing a comprehensive BCP, highlighting the emphasis of peer support and collaboration in enhancing organisational resilience. They underscored the need for dedicated funding to support regular training, drills, and preparedness planning and implementation activities. Furthermore, participating CBOs identified the need for an online platform where they could share success stories, best practices, and resources to support smaller organisations in developing robust business continuity plans. They also emphasised the necessity of emergency sectors

proactively building relationships with local CBOs to ensure that the unique needs of people with disabilities are recognised and addressed by embedding disability-inclusive practices into emergency management systems.

Findings from this study reinforce the value of this collective approach, which not only streamlines the development of effective communication methods during disruptions but also fosters a culture of preparedness and awareness among staff and clients.

4.3. Person-Centred Emergency Preparedness with High-Risk Clients

The intentions and capacities to facilitate person-centred preparedness with high-risk clients varied across organisations. Findings from this study indicate that while many organisations concentrated their efforts to actively identify high-risk clients, they often encountered difficulties in conducting emergency drills and providing formal support to their clients to take an active role in emergency preparedness. Our logistic regression analysis revealed that networking with local emergency service agencies and facilitating their understanding of the clients' needs during and after emergency events were positively associated with various enablement activities ($p < 0.001$). In contrast, the lack of adequate tools ($p = 0.007$) or training ($p = 0.037$) in emergency preparedness emerged as a significant barrier, negatively affecting an organisations' capability to ensure person-centred preparedness for high-risk populations.

Survey respondents also emphasised the need for practical tools, step-by-step guidance, and dedicated funding to support regular training, drills, preparedness planning and implementation activities. Furthermore, our study identified that engagement in person-centred preparedness activities with high-risk clients was significantly lower among allied health professionals. This finding underscores a critical gap in the inclusion and capacity-building of allied health professionals within emergency preparedness frameworks.

Previous research has demonstrated that despite their essential role in supporting high-risk clients and maintaining continuity of care, allied health professionals are often excluded from formal emergency preparedness planning [41,43,45]. This highlights the need to integrate them into inclusive emergency management systems by recognising and leveraging their existing capabilities [41,43,45]. Building on these insights, our findings underscore the need to strengthen allied health participation through tailored training and interprofessional collaboration—ensuring emergency planning is inclusive and responsive.

Participants identified several other constraints impeding the ability of CBOs to enable emergency preparedness for high-risk clients including insufficient funding, lack of time, and clients' reluctance to engage in preparedness activities. Additional barriers identified through the open-ended question suggest that emergency preparedness with high-risk clients is frequently regarded as “out of scope” by many organisations, as it is not included in their objectives.

In addition, organisations reported challenges in engaging in emergency preparedness activities with high-risk clients that require tailored approaches to emergency preparedness due to their unique support needs. For instance, clients with cognitive impairments may require extra support to comprehend or retain information about emergency preparedness. These insights reinforce the need for tailored communication strategies, repeated reinforcement, and the integration of client's families and support networks in the emergency preparedness process.

These findings resonate with the results from a recent study that examined Australian individual service providers' personal emergency preparedness, and their perspectives on their various roles in disaster risk reduction, including their capacity and willingness to facilitate preparedness planning with clients [46]. That study reported that limited funding, inadequate tools, and the exclusion of emergency planning from job descriptions were

negatively associated with service providers' ability to facilitate emergency preparedness with high-risk clients [46].

However, our logistic regression analysis found no significant association between insufficient funding or client unwillingness and the organisations' ability to engage in emergency preparedness activities with high-risk clients. This finding warrants further investigation to understand the complex dynamics at play. Prior research has established the importance of integrating emergency preparedness activities for high-risk clients into existing operational frameworks through policy reform [42,47], strategic planning [42,48], and workforce knowledge and practical skills [24,46].

5. Recommendation

While financial, human, and skill limitations are common challenges for CBOs, this study underscores the need to prioritise emergency preparedness and business continuity planning as core organisational responsibilities. The Sendai Framework for Disaster Risk Reduction 2015–2030 provides a robust foundation for this approach, emphasising the strengthening of disaster risk governance, investment in resilience, and enhanced preparedness for effective response [26]. By adopting this framework's principles in community-level action, organisations can transition from reactive crisis management to proactive preparedness strategies that empower high-risk populations and build sustainable organisational resilience [39]. A BCP plays a vital role in this transition, enabling organisations to anticipate, prepare for, respond to disruptions and maintain essential services [39,49].

Evidence suggests that effective business continuity plans must be context-specific, adapted to local conditions, and tailored to client needs [26]. However, without continuous review and update, a comprehensive BCP can fall short during emergency [39]. This entails implementing a systematic review process that assesses existing strategies, identify potential gaps or weaknesses, and incorporates new insights or best practices [39,49]. By integrating BCP review into routine operations, organisations can ensure their plans remain relevant and responsive to evolving threats and client needs.

Disaster risk reduction requires empowering high-risk individuals with the knowledge, resources, and active support needed to plan for and respond to emergencies [26]. It also demands their meaningful inclusion across all stages of the disaster management cycle to ensure that strategies are effective and person-centred [26,42]. This study highlights the tension between the perceived roles and responsibilities of Australian community-based health and social care organisations in emergency preparedness planning for high-risk clients. Despite their direct client interactions, they often perceive emergency preparedness is beyond their scope as it was not included their organisational policy [46].

Addressing this policy gap, recent amendments in Australia's National Disability Insurance Scheme legislation mandates disability service providers to actively engage their clients in emergency preparedness planning and management [50]. Furthermore, the upcoming national policy amendments under Australia's new Aged Care Act, set to take effect in November 2025, reinforce the sector's pivotal role in fostering person-centred emergency preparedness [51]. These reforms explicitly acknowledge the rights of older individuals to engage actively in planning and decision-making throughout all phases of the disaster management cycle [51]. By reinforcing the aged care sector's obligation to facilitate inclusive preparedness and ensure continuity of care during crises, the legislation aligns with broader national initiatives to integrate person-centred approaches within emergency management frameworks.

Our study reveals a notable skills deficit among providers in facilitating disaster preparedness planning. To address this, it is imperative to equip providers with comprehensive tools, training, and capacity-building measures to effectively lead inclusive

preparedness conversations and planning with high-risk individuals [24]. Future research should explore effective strategies for engaging individuals with limited cognitive abilities to equip service providers with evidence-based communication approaches, tailored risk assessment methods, and techniques for developing personalised emergency preparedness plans for this high-risk population.

To address the existing constraints in skill and expertise faced by CBOs in tailoring inclusive preparedness planning, the Australian government has recently developed a comprehensive set of toolkits and resources to facilitate the integration of inclusive emergency management into the routine practices of community organisations [52]. The Disability Inclusive Emergency Management (DIEM) Toolkit, particularly the Organisational Emergency Preparedness Profile, offers practical support for organisations to self-assess and document their current level of emergency preparedness, capabilities, and potential to contribute to disability-inclusive emergency management [52]. This self-evaluation process enables organisations to establish a foundation for forming strategic partnerships with emergency planners, thereby enhancing collaborative efforts and driving progress in inclusive planning and accessible resource allocation [52].

To facilitate the implementation of the DIEM Toolkit, the Australian government has also introduced e-learning modules aimed at assisting organisations in adopting disability-inclusive emergency management practices [52]. These modules feature interactive activities, case studies, and practical guidance to help translate the toolkit's principles into actionable steps, especially for those engaged in emergency planning, response, and recovery across government, community, health, and disability sectors [52]. CBOs can further enhance their preparedness by incorporating inclusive planning into their regular operations and advocating for organisational policy reforms that promote inclusive disaster risk reduction.

In addition, participants in this study frequently expressed concerns about their limited skills in business continuity planning, and emphasised the need for simple, practical resources to guide organisations in developing effective BCP strategies. Notably, several resources are already available to support this need, including the Business Continuity and Disaster Management Planning Template developed by the Community Services Industry Alliance (CSIA) in 2017 [53]. Other examples of available resources include the Australian Council of Social Service (ACOSS) Business Continuity Plan Guide [54] and the Western Australian Council of Social Services (WACOSS) Service Continuity Toolkit [55]. These resources offer templates, scenario planning tools, and sector-specific guidance to help organisations manage service disruptions and maintain continuity of care.

Despite the availability of abovementioned tools and resources, their limited uptake suggests that many providers remain unaware of them or lack the capacity to implement them effectively. This concern was reflected in the experiences of participating CBOs, who frequently reported uncertainty about where to access relevant tools and how to apply them in practice. This highlights the need for targeted dissemination, training, and integration into routine organisational practices to ensure these tools are translated into meaningful action across the sector.

To advance service continuity and strengthen emergency preparedness, organisations should prioritise cross-sector collaboration as a core strategy for capacity building. Adopting a collaborative approach enables coordinated action, knowledge exchange, and the co-production of locally tailored solutions that extend beyond siloed practices [56]. The exchange of resources, stories, and best practices through online platforms can further strengthen organisational capacity to sustain service delivery during crises and enhance overall emergency preparedness.

Prior studies suggest that several barriers can hinder effective collaboration including fragmented communication among stakeholders [42]; absence of role clarity across sectors [42]; unequal resource distribution [42]; and differences in organisational commitments, values, and cultures [57]. Addressing these challenges requires strategic efforts to clarify stakeholder roles across sectors; improve resource equity by supporting grass-roots organisations; and promote inclusive collaboration models, such as open calls for partnerships to co-develop solutions based on existing community resources [42].

Successful engagement must also leverage existing community leadership, preferences, and capacities, ensuring that good practices are sustained throughout the emergency management cycle [42]. Moreover, cross-sector collaboration is often hindered by hierarchical governance structures, as top-down decision-making practices limit frontline organisations' ability to co-create strategies and tailor responses to local needs [42,58]. Addressing this issue requires a networked governance arrangements that facilitate both vertical and horizontal collaboration directly or indirectly among diverse sectors with high heterogeneity [58].

6. Strengths and Limitations

The significance of this research is amplified by its targeted sampling approach, which captured nuanced insights from a diverse range of community-based health and social care organisations. Recruitment was conducted through multiple strategic channels, including invitations via government service registries, peak bodies, and professional networks. Snowball sampling further extended reach through participants' networks. As there is no single, comprehensive national database of community-based organizations, a probabilistic sampling strategy was not feasible. We acknowledge that this non-probabilistic approach may introduce self-selection bias and network effects, as organisations with greater engagement or awareness of emergency preparedness may have been more likely to respond.

Nevertheless, the sector-informed recruitment approach was designed to capture real-world insights and practical knowledge of organisations actively engaged in service delivery during emergency events. Furthermore, the use of an online survey enabled broad geographic and organisational participation, enhancing respondent diversity and offering a more comprehensive understanding of organisational preparedness, capacity, and support needs.

This research has several limitations. While responses were retrieved from 244 organisations, the composition of the sample may limit the generalisability of findings across the broader community services sector. Organisations operating in the disability sector (69%) and housing and homelessness (27%) were most represented. The sample also reflected substantial participation by not-for-profit entities (51%) and medium-sized organisations (39%). This distribution likely reflects sector-specific engagement patterns and the operational contexts and priorities of predominantly represented organisations. Future research should consider strategies to achieve more balanced sectoral and organisational representation to strengthen the applicability of findings across diverse sectors.

The timing of data collection also presents some limitations. First, the survey was conducted during the post-COVID period (December 2021 to April 2022), meaning some responses may reflect crisis-specific conditions rather than enduring organisational practices. Second, given the time elapsed since data collection, certain findings may not fully reflect current sector priorities or preparedness behaviours. However, to the best of the authors' knowledge, no new Australia-wide survey of community-based health and social organisations examining the dual responsibilities of CBOs has been conducted since the time of data collection. This underscores the value of the current dataset, which has been

further contextualised through comparison with recent research findings and relevant Australian government initiatives, ensuring that interpretations remain responsive to the contemporary community services context in Australia.

Finally, the survey was not anonymous. Many respondents completed the survey on behalf of their organisations in director or senior management roles. This raises the possibility of strategic response bias, whereby participants may have intentionally misrepresented or exaggerated responses to influence policy, funding, or legislative directions in ways that benefit their organisations. Future studies could strengthen validity by triangulating self-reported data with objective indicators, such as audits of preparedness plans, administrative data, or other documentary evidence if such records are available.

7. Conclusions

Community-based health and social care organisations play a vital role in ensuring service continuity and enhancing emergency preparedness for their clients. By building strong organisational resilience and integrating comprehensive business continuity planning into their routine operations, these organisations can reduce the impact of emergencies on the business and clients. Furthermore, aligning local actions with national and international frameworks will allow them to significantly reduce disaster risk and ensure that preparedness efforts are both inclusive and sustainable. A key aspect of this initiative is empowering staff by providing them with the skills, confidence, and tools necessary to effectively implement continuity and preparedness strategies.

Fostering a culture of continuous learning and adaptability can enable organisations to innovate and remain resilient in emergencies. The recent introduction of DIEM resources offers practical, inclusive approaches that help organisations incorporate emergency planning into routine practice, thereby strengthening resilience across various care settings. While it may take time for organisations to fully engage with the new toolkits, these resources are vital for addressing longstanding challenges related to service continuity and disaster preparedness. Nonetheless, persistent issues such as limited financial resources, workforce shortages, and expertise gaps highlight the importance of dedicated efforts in strengthening collaboration across sectors. Through strategic partnerships across government, health, disability, and community sectors, organisations can share existing resources and knowledge to collectively tackle the systemic barriers.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/su172310649/s1>. The Supplementary File S1 details the final version of the survey questionnaire used in the study, including all items, response options, and instructions provided to participants.

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Abbreviations

The following abbreviations are used in this manuscript:

ACOSS	Australian Council of Social Service
BCPs	Business Continuity Plans
CBOs	Community-based Organisations
CSIA	Community Services Industry Alliance
DSS	Department of Social Services
DIEM	Disability Inclusive Emergency Management
MMM	Modified Monash Model
NBN	National Broadband Network
NDIS	National Disability Insurance Scheme
P-CEP	Person-Centered Emergency Preparedness
PPE	Personal Protective Equipment
RAT	Rapid Antigen Test
SESS	State Emergency Services
WACOSS	Western Australian Council of Social Services

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