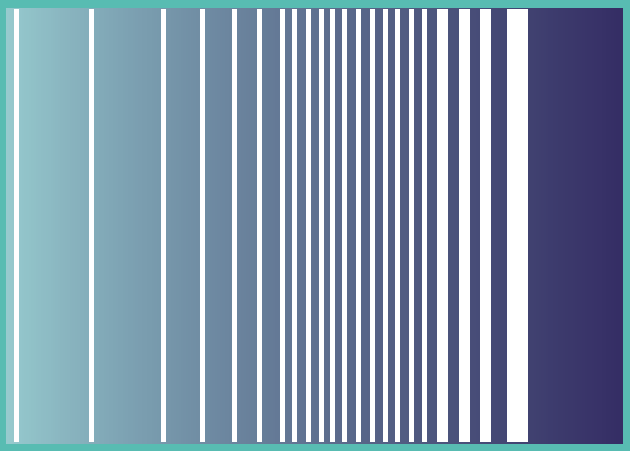
SCOPING STUDY

Emergency Management Capabilities for DIDRR



THE UNIVERSITY OF SYDNEY

The function of this synthesis report is to provide the results of a three-part scoping study on emergency management capabilities for Disability Inclusive Disaster Risk Reduction (DIDRR) in research, policy, and practice.

Included in this report are recommendations that will give specific direction to the National Emergency Management Agency (NEMA) about tools, methods, and programmatic guidance on how to include people with disability in emergency management planning.

Findings and priorities for action are intended to support decision-making by NEMA to direct their National DIDRR Project plans and activities.

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Companion Documents:

There are two companion documents that should be read in conjunction with this report. They are:

A. Emergency Management Capabilities for DIDRR: Scoping Study Part 1 Evidence-Gap Map
B. Emergency Management Capabilities for DIDRR: Scoping Study Part 3 Resource-Gap Map

How is this Report Structured?

Introduction

The introduction clarifies the issue, statement of purpose, study context and conceptual framework guiding this scoping study.

Overview of Study Questions, Methods and Findings

A high-level overview of the study questions, methods and findings provides:

- a summary of findings from the three-part scoping study focused on emergency management capabilities in DIDRR research, policy, and practice.
- identifies priorities for actions grouped into three areas:
  - inclusive plans
  - inclusive information
  - Inclusive practices
- details what's missing and recommends what needs to happen next. Here, emphasis is placed on recommendations that centre on the least developed DIDRR Mechanism: Data & Evidence

Detailed Study Findings

The main body of this report provides detailed findings on each study component. Each part is organised as follows:

- Research Questions
- Method
- Limitations
- Findings
- Recommendations

The recommendations made in each part of this report provide a suite of strategies to guide the emergency management sector as they strive to develop and improve DIDRR into the future. Each set of recommendations takes into consideration the study limitations and directs the reader to specific actions that have greatest relevance in the Australian context.

Appendices

The detailed findings reported in Part 1 and Part 2 of this report reference numerous summary tables that are included as appendices.

Companion Documents

There are two companion documents that should be read in conjunction with this report. They are:

- An Evidence-Gap Map of the Peer Reviewed Research on Emergency Management Capabilities in DIDRR.
- A Resource-Gap Map of good practice resources relevant to emergency management DIDRR.

Introduction

Australia's National Strategy for Disaster Resilience[1] calls on individuals and community organisations to share responsibility with emergency managers to increase whole-of-community resilience to disaster. The National Disaster Risk Reduction Framework[2] further advocates for the development of shared but defined responsibilities so that individuals and community organisations can contribute to disaster risk reduction within their capabilities. Lack of methods, tools, and programmatic guidance for how to include people with disability and their support networks presents significant risk to the safety and well-being for people with disability before, during and after emergencies.

A growing literature confirms that people with disability are among the most neglected during disaster events, with particularly restricted access to social networks and other sources of support. People with disability:

- are two to four times more likely to die in a disaster than the general population[3]
- experience higher risk of injury and loss of property[4]
- have greater difficulty with evacuation and sheltering[5]
- require more intensive health and social services during and after disaster events[6].

These impacts stem from a range of factors including stigma and discrimination that marginalises people with disability from mainstream social, economic, and cultural participation. Multiple categories of social vulnerability intersect with disability. This amplifies risk in emergencies. Research on the experience of Australians with disability in disasters showed that perceptions of being a burden to others are exacerbated in emergencies. These self-perceptions influence individual choices that heighten risk during and after a disaster. Disability Inclusive Disaster Risk Reduction (DIDRR) cannot be achieved without challenging the social discrimination, marginalisation and institutional neglect experienced by people with disability[7]. The reader is directed to the Clearing a Path report for more information on these issues in the Australian context[3].

This report:

- focuses on what the emergency management sector is doing toward the development and implementation of DIDRR,
- identifies current evidence, and gaps in research, policy, and practice, and
- makes recommendations for what should happen next.

1 https://www.homeaffairs.gov.au/emergency/files/national-strategy-disaster-resilience.pdf
2 https://www.homeaffairs.gov.au/emergency/files/national-disaster-risk-reduction-framework.pdf
3 Fuji, K. (2012). The great east Japan earthquake and persons with disabilities affected by the earthquake: Why is the mortality rate so high? *Interim report on JDF Support Activities and Proposals.* Tokyo: Japan Disability Forum
4 Alexander, D. (2015). Disability and disaster: An overview. In I. Kelman *.., L.M. Stough (eds). Disability and Disaster. Disaster Studies. Palgrave Macmillan, London
5 Malpass, A., West, C., Quaill, J., & Barker, R. (2019). Experiences of indivisuals with disabilities sheltering during natural disasters: An integrative review. *Australian Journal of Emergency Management*, 34(2), 60-65
6 Twigg, J., Kett, M., Bottomley, H., Tan, L.T., & Nasreddin, H. (2011). Disability and public shelter in emergencies. *Environmental Hazards*, 10(3 – 4), 248-261. Doi:10.1080/17477891.2011.594492
7 https://www.daru.org.au/resource/clearing-a-path-to-full-inclusion-of-people-with-disability-in-emergency-management-policy-and-practice-in-australia

Purpose

The function of this synthesis report is to provide the results of a three-part scoping study on emergency management capabilities for Disability Inclusive Disaster Risk Reduction (DIDRR) in research, policy, and practice.

This synthesis report aims to:

- present evidence of emergency management DIDRR capabilities obtained from (a) the international peer reviewed research; (b) review of emergency management plans and guidance documents; and (c) supply associated examples and illustration of existing resources supporting the development of "good practices".
- provide direction to the National Emergency Management Agency (NEMA) about tools, methods, and programmatic guidance on how to include people with disability in emergency management planning.

This synthesis report centres on the relevance of the findings to the Australian emergency management context.

Recommendations are framed within contemporary theory informing development of the interdisciplinary field of DIDRR. This theory, which emphasises human rights and capability-focused approaches to DIDRR aligns with Australia's vision of shared responsibility which is embedded in national policy frameworks for disaster risk reduction.

Study Context

This scoping study took place within a broader context of DIDRR development in Australia that has been ongoing since 2015[8]. The unique feature of this research program is continual engagement that brings multiple stakeholders to learn and work together in participatory action research cycles to co-produce new ways of working and support knowledge integration into policy and practice decision-making.

Since 2015, this participatory research program has engaged multiple stakeholders (individuals and groups) in numerous action-oriented projects to co-produce methods, tools, and programmatic guidance on DIDRR development and test operations at the local community level. This has been achieved by integrating scientific knowledge and top-down directives (e.g., international and national-level legislation, frameworks, strategies) with bottom-up initiatives (e.g., Disability Inclusive Emergency Planning Forums held in partnership with local councils; Person-Centred Emergency Preparedness Peer Leadership Program).

This work has relied on local knowledge and ongoing consultation with multiple stakeholder input at all levels of government. Multiple inputs have been provided by:

- people with disability, their representative organisations, and carers (unpaid, informal service providers),
- formal (paid) services providers from the community, health, and disability sectors, including mental health, aged care, housing and homelessness services, children and family services, etc.,
- government stakeholders at all levels, and
- national representatives from the emergency services sector.

[8] Villeneuve, M. (2021). Building a Roadmap for Inclusive Disaster Risk Reduction in Australian Communities. Progress in Disaster Science. https://doi.org/10.1016/j.pdisas.2021.100166

This research has been supported by national and state-level advisory committees and ongoing consultation with key stakeholders (e.g., The Australia-New Zealand Emergency Management Community Engagement Technical Group and the Social Recovery Reference Group). National forums have supported nation-wide engagement in DIDRR supported by the Collaborating4Inclusion research team and their ongoing partnership networks[9].

This scoping study on Emergency Management Capabilities in DIDRR contributes to this larger program of research through the systematic review of research evidence, policy and practice with a targeted focus on the emergency management sector and what is known/needed to develop their capability in DIDRR.

Prior research has already examined through multiple methods:

- the enablers and barriers to DIDRR from the perspective of people with disability and carers[10].
- the roles, tools, capacity and training needs of service providers in the community, health, disability, and social welfare sectors[11].
- factors that impact disability inclusion in emergency management planning and community engagement from the perspective of government and emergency services personnel including those in resilience and recovery roles[12].

The Collaborating4Inclusion program of research, informed by thousands of stakeholders from across Australia, has co-produced novel approaches to the integration of people-centred approaches to DIDRR development. The outputs of this research have been used to advance individual and shared responsibilities for DIDRR in Australian communities through the incremental awareness about and responsiveness to the support needs that people with disability have in emergencies.

Since 2015, this partnership research program has co-produced the tools and contributed to the requirements for action. In Australia, these requirements are now embedded in:

- Australia's Disability Strategy 2021 – 2031,
- The NDIS Quality and Safeguarding Commission Legislative Amendment, and
- Practice Standards on disaster and emergency management planning for the disability services sector.

The Person-Centred Emergency Preparedness Planning for COVID-19 for People with Disability was taken up by the Australian Government Department of Health and integrated into the pandemic response planning. It was translated into Easy Read and disseminated nationwide. In March 2022, the Department of Health issued an update of the guide to include vaccinations and treatments for COVID-19.

Australia's progress on DIDRR is also promoted internationally. Indicative examples include:

- The Queensland DIDRR Framework and Toolkit was shared as an example of implementing DIDRR at the local community level. It was shared in the European Disability Forum guidance document for DIDRR practitioners in Europe and Central Asia[13].
- Australia's DIDRR approach and tools were included in the revised United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) DIDRR eLearning course that is currently under development and testing across four Asian countries.

[9] Indicative examples include: 2019 National forum on Preparedness for people with disability most at risk in natural disasters led by the Department of Home Affairs National Recovery Projects; 2021 National Disability Inclusive Emergency Planning Forum hosted by People with Disability Australia; 2022 Disability Sector High Risk Weather Season Preparedness Briefing hosted by NEMA; 2023 AIDR Leave Nobody Behind Webinar Series and upcoming first National Forum on DIDRR to be held in June 2023.

[10] Villeneuve, M., Abson, L., Pertiwi, P., Moss, M. (2021). Applying a person-centred capability framework to inform targeted action on disability inclusive disaster risk reduction. *International Journal of Disaster Risk Reduction*. https://doi.org/10.1016/j.ijdrr.2020.101979

[11] Subramaniam, P., Villeneuve, M. (2020). Advancing emergency preparedness for people with disability and chronic health conditions: Ascoping review. Disability & Rehabilitation. DOI:10.1080/09638288.2019.1583781.https://www.tandfonline.com/eprint/IkDjn4Rkwke5fqsePWIp/full?target=10.1080/09638288.2019.1583781

[12] https://knowledge.aidr.org.au/resources/leave-nobody-behind-webinar-series/#gov

[13] European Disability Forum (2021). Disability-inclusive Disaster Risk Reduction (DiDRR): A quick reference guide for practitioners in Europe and Central Asia. https://recovery.preventionweb.net/publication/disability-inclusive-disaster-risk-reduction-didrr-quick-reference-guide-practitioners

- The Australian-designed DIDRR tools and resources are included in Prevention Web, the United Nations Agency for Disaster Risk Reduction (UNDRR) platform that indexes resources from many international organisations for information sharing on DRR.
- The Person-Centred Emergency Preparedness Framework and Toolkit is being utilised in programs in Indonesia and the Pacific Islands.
- The Person-Centred Emergency Preparedness approach has informed a Family Centred Emergency Preparedness program of research in Minnesota, United States.

In keeping with the co-production approach to integrated knowledge translation, all information, resources, and materials that chart Australia's progress on DIDRR have been made freely available and in multiple formats to increase access, uptake, and use. All resources, including research instruments, reports, and publications can be found at www.collaborating4inclusion.org. They are also widely disseminated by partners across Australia.

The research program is led by Associate Professor and Deputy Director Michelle Villeneuve and her team at **The University of Sydney Impact Centre for Disability Research and Policy (CDRP)**. CDRP has a significant track record in disability-inclusive and industry partnership research. CDRP works to change the disadvantage that occurs for people with disability, using data-informed models of policy and practice to address social and economic participation in society, and health and well-being outcomes.

https://www.sydney.edu.au/medicine-health/our-research/research-centres/centre-for-disability-research-and-policy.html

It was feasible to conduct this three-part scoping study in a very short period (October 2022 – January 2023) because of the foundational research program and significant multiple stakeholder input. The scoping study reported on here was informed by a sophisticated understanding of the issues underpinning the research questions and extensive engagement with multiple stakeholders over a seven-year period.

How do we know DIDRR when we see it?

The Disaster Risk Management (DRM) cycle has four interdependent and overlapping phases referred to as: Prevention, Preparedness, Response and Recovery (PPRR). The DRM cycle is defined in terms of how governments and emergency services anticipate and manage risk. This includes how they work with individuals, families, and communities so that everyone is prepared and safeguarded from emergencies and their ability to recover from them[14]. People with disability and their support needs must be considered in all four phases.

Disability Inclusive Disaster Risk Reduction (DIDRR) means making sure that people with disability have the same opportunity to access emergency preparedness information, to participate in emergency preparedness programs in their community, and to be included as a valuable stakeholder in local community disaster risk reduction programs[15].

Effective DIDRR depends on government and emergency services personnel learning and working together with people with disability, their family and allies to remove barriers through principles of accessibility, participation, collaboration and non-discrimination[16].

DIDRR is an emerging cross-sector practice requiring social innovation to develop responsive disaster risk practices that focus on the support needs of people with disability in emergencies and that place people with disability at the centre of development and change[17].

The contributions that individuals and communities make to preparing for emergencies promotes whole-of-community resilience to disaster[18]. To be included, people with disability need information, tools, and effective mechanisms to support their full participation and contribution to DIDRR across all DRM phases.

[14] https://knowledge.aidr.org.au/resources/handbook-australian-emergency-management-arrangements/
[15] Pertiwi, P., Llewellyn, G., & Villeneuve, M. (2019). People with disabilities as key actors in community-based disaster risk reduction. Disability & Society, 34 (9 – 10), 1419-1444.
[16] https://collaborating4inclusion.org/wp-content/uploads/2019/05/Emergency-Preparedness_brochure_August2017_WEB_ACCESS.pdf
[17] https://oxfordre.com/publichealth/display/10.1093/acrefore/9780190632366.001.0001/acrefore-9780190632366-e-343;jsessionid=17CA7E48CD509B7C432D7795875FDB5A
[18] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6696247/

DIDRR Mechanisms

Four process-oriented mechanisms guide the development of cross-sector actions on DIDRR[19].

Table 1. Four DIDRR Mechanisms

Mechanism	Characteristic Features
Representation and Participation	People with disability have representation and are meaningfully included as participants in emergency management and disaster recovery planning and practices.
Accessibility and Capability	People with disability are provided with accessible information, resources, and support that is tailored to their support needs to increase their capability to prepare, respond, and recovery from disaster.
Learning and Capacity Development	Multiple stakeholders learn and work together to co-design, implement, monitor, and evaluate disaster risk reduction activities that address the support needs of people with disability before, during, and after disaster
Data and Evidence	Data on the preparedness, capabilities, and support needs of people with disability is used to make decisions about how to better include and support people with disability in disaster risk management before, during and after disaster.

Person-Centred and Capability-Focused Approaches to DIDRR

Since 2015, Australia has been leading knowledge and practice development on DIDRR through participatory and action-oriented research targeting the co-production of new tools and collaborative approaches for embedding DIDRR mechanisms into the practices of multiple stakeholders who share responsibility for building whole-of-community resilience to disaster[20]. This includes people with disability and their support networks.

The **Person-Centred Emergency Preparedness (P-CEP)** framework and process tool has been central to Australia's progress on DIDRR[21]. P-CEP offers a new approach for enacting DIDRR; shifting emphasis to preparedness by people with disability in partnership with emergency personnel and supporting shared responsibility for development and change toward inclusive emergency management.

The Australian P-CEP was **developed through a co-design process** involving multiple stakeholders, including people with disability and their support networks, emergency personnel, and policy decision-makers. P-CEP helps match emergency planning to the supports people need for their health and safety in emergencies.

The P-CEP integrates factors that facilitate personal emergency preparedness together with principles of person-centred planning to enable emergency managers to learn about the preparedness, capabilities, and support needs of people with disability and work together with people and their support networks to: (a) enable emergency preparedness that is tailored to their support needs; and (b) identify and remove barriers that increase risk for people with disability in emergencies.

[19] https://collaborating4inclusion.org/wp-content/uploads/2019/11/DIDRR_Framework_document_FINAL.pdf
[20] https://www.sciencedirect.com/science/article/pii/S2590061721000260
[21] https://oxfordre.com/publichealth/display/10.1093/acrefore/9780190632366.001.0001/acrefore-9780190632366-e-343;jsessionid=17CA7E48CD509B7C432D7795875FDB5A

The P-CEP focuses on function, not an individual's impairments, as the basis for removing barriers that increase risk for people with disability and **takes an all-hazards approach** by incorporating self-assessment and tailored preparedness for disasters triggered by natural hazard events and other emergencies (e.g., house fire, pandemic).

The P-CEP Framework and Process Tool has three components: (1) a **capability framework** consisting of eight elements to support self-assessment of strengths and support needs; (2) **principles** guiding the joint effort of multiple stakeholders to enable tailored emergency preparedness planning; and (3) four **process steps** enabling the developmental progression of preparedness actions and facilitating linkages between people with disability, their support services and emergency managers.

The P-CEP is being used to advance individual and shared responsibilities for DIDRR in Australian communities through the incremental development of awareness about and responsiveness to the support needs that people with disability have in emergencies. This promotes collaboration.

A **P-CEP Certificate Course**, offered by the Centre for Continuing Education at The University of Sydney, **provides a nationally consistent training approach** for government and emergency personnel to learn and work together with people with disability and the services that support them to identify unmet needs of people with disability in emergencies and respond through cross-sector collaborative action toward DIDRR development and change in practice and policy.

The P-CEP Framework or "Capability Wheel"

Co-designed for use in Australia, P-CEP aligns with Australia's strategic shared responsibility frameworks for disaster risk reduction and the emergency management arrangements that require coordination at all levels of government. Grounded in a human rights and capability-focused approach to person-centred planning, P-CEP also aligns with Australia's National Disability Strategy and person-centred approaches to planning and care in the community, health care and disability services sectors.

Person-centredness refers to a way of interacting with people in a way that meets their needs, gives them choice and control, and engages them as active agents so they have ownership over decisions and actions. Person-centredness ensures meaningful inclusion in emergency preparedness by acknowledging people with disability as the expert in their lives.

When we act in a person-centred way, we gain access to the experiences of others (their roles, capabilities, and support needs) in context, including their disaster risk context. Governments and emergency services can use that knowledge to respond in ways that increase opportunities for people with disability to achieve safety and well-being in emergencies. This could include, for example, offering inclusive opportunities to learn about local hazard risk, preparedness steps or local community resources that can be used to improve contingency planning. It may also include using new understandings about the function-based support needs of people with disability to inform better risk communication practices by government and emergency services such that information is made accessible to people who understand, learn, and use information differently. It can also involve mobilising local community resources to overcome gaps in preparedness (e.g., transportation needed to evacuate), remove systemic barriers to accessing disaster response and recovery support, or developing enabling roles for people with disability to contribute to DRR.

P-CEP provides function-based framework (Figure 1) and operational procedures that support Australia's reporting on progress under the UN Convention on the Rights of Persons with Disabilities and the Sendai Framework for Disaster Risk Reduction (Box 1).

Box 1. International policy context for DIDRR development (taken from[22])

Disability became prominent in the disaster policy agenda after the **United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)** (United Nations, 2006) entered into force in 2008. The UNCRPD is a treaty to promote, protect, and ensure the human rights of the one billion people with disability globally. The UNCRPD reinforces the right of people with disability to have equal access to programs and services that all citizens enjoy. This should include local community activities designed to increase awareness of local hazard risks and steps to increase personal emergency preparedness to respond effectively in times of disaster. Article 11 of the UNCRPD specifically requires nations to take all necessary measures to protect the safety of persons with disability in situations of risk, including disasters triggered by natural hazard events. This may require the provision of extra supports when needed to achieve equitable access on par with everyone else in society. A significant challenge to fulfilling rights and protections for a heterogeneous group of people with disability is understanding what those extra supports are and how they should be resourced, organized, and delivered before, during, and after a disaster event.

Built on the foundations of the UNCRPD, the **Sendai Framework for DRR (SFDRR) (2015 – 2030)** (UNISDR, 2015) established people with disability and their representative organizations as legitimate stakeholders in the design and implementation of emergency management practices and policies (Stough & Kang, 2015), calling for "a more people-centred preventative approach to disaster risk" (p. 5). People-centred approaches place people and their needs at the centre of responsive emergency management and position them as agents of development and change.

P-CEP takes into consideration actions that individuals can take in partnership with their support networks to increase their self-sufficiency in emergencies. P-CEP makes explicit the coordinative, cooperative, and collaborative roles that other community stakeholders must play to enable resilience to disaster and support during the long-term period of recovery. P-CEP supports government and emergency services to develop more effective DIDRR strategies that enable people with disability to take control of their own preparedness planning while also ensuring that their rights to protection and safety are met[23].

[22] Villeneuve, M. (2022). Disability inclusive emergency planning: Person-centred emergency preparedness. Oxford Research Encyclopedia of Global Public Health. Doi: https://doi.org/10.1093/acrefore/9780190632366.013.343

[23] Villeneuve, M. (2022). Disability inclusive emergency planning: Person-centred emergency preparedness. Oxford Research Encyclopedia of Global Public Health. Doi: https://doi.org/10.1093/acrefore/9780190632366.013.343

Figure 1. Person-Centred Emergency Preparedness (P-CEP) Capability Framework (printed with permission of author).

It's called the **"Capability Wheel"** because capabilities include what you do for yourself, what you need support for, and how you get the support you need. Together these make up one's capabilities. For more information visit: https://collaborating4inclusion.org/home/pcep/

Overview: Study Questions, Methods, and Findings

Table 2. Study components, research questions, and directory of results

Study Component	Research Questions	Results
PART 1. Scoping study of the international peer reviewed research on the role, capacity, tools, and training needs of emergency management in DIDRR.	1. What is the nature and extent of research on emergency management in DIDRR?	Companion Document A*
	2. What does the research say about the role, capacity, tools, and training needs of EM to contribute to DIDRR?	Appendix A Appendix B
	3. What are the enablers and barriers to EM engagement in DIDRR?	
PART 2. An examination of disability representation in Australia's Emergency Management Arrangements.	1. To what extent do emergency management plans and guidance documents *recognise disproportionate risks* of people with disability in emergency management and disaster recovery plans? 2. What provisions are made in emergency management planning and guidance documents *for the extra support needs* of people with disability in emergencies?	Appendix C Appendix D Appendix E
PART 3. A search of grey literature and grey information to retrieve *"good practice"* resources relevant to emergency management DIDRR development in Australia.	1. What is the resource/tool/activity about? 2. What sector is leading the work? 3. What is the primary purpose of the resource/tool/activity? 4. What format is used to deliver the resource/tool/activity?	Companion Document B†

* See Companion Document A. An Evidence-Gap Map of the Peer Reviewed Research on Emergency Management Capabilities in DIDRR.

† See Companion Document B. A Resource-Gap Map of good practice resources relevant to emergency management DIDRR.

PART 1 Overview of Findings

Aim:

A scoping study of the international peer reviewed research was conducted to understand the role, capacity, tools, and training needs of emergency management in DIDRR.

Method:

Data from 31 studies that met the inclusion criteria were extracted using a charting framework designed for this study. A thematic synthesis was conducted to identify the key barriers and facilitators of emergency management. Limitations were identified and reported to support interpretation of findings in terms of their applicability in the Australian emergency management context.

Findings:

This review included a small number of disparate papers (n = 31) published between 2002 and 2022. With one exception, all studies were undertaken outside of Australia. Most studies were conducted in the United States where the emergency management frameworks and disability legislation differ from Australia.

An evidence-gap map (Figure 1, Companion Document A) shows the nature and extent of emergency management (EM) in DIDRR from the international research literature. The table in Companion Document A summarises details for each of the 31 articles.

Findings showed that current research on EM roles in DIDRR emphasises needs assessment and guidance documents focused on the preparedness and response stages of disaster management. This literature is informed by a wider range of study types and methods which strengthens the value and contribution of these recommendations to the EM sector (i.e., not just expert opinion). This matches the relative maturity and development of the knowledge base on DIDRR (e.g., issue identification, advocacy, principles for its development).

Research on disability inclusion in the prevention and recovery stages is lacking. Research on resources, practices, and education are fewer in number. They are informed by case study and qualitative research designs. There is limited focus on monitoring and evaluation in the published research. Despite the critical role of emergency management communications to public awareness (i.e., information designed to keep everyone safe), there has been limited focus on accessible and inclusive emergency information and warnings in the research literature.

There are no studies at the higher levels of research quality[24] (i.e., cross-sectional and cohort studies, controlled trials, and meta-syntheses). This reflects the current state of DIDRR knowledge and advancement of the field.

Training initiatives on the topics of disability awareness and inclusion were most commonly implemented to support EM capability development in DIDRR. Learning initiatives focused on increasing understanding about disability inclusion as a human right.

The research recommend the development of inclusive disaster management plans and integration of those plans with the supporting arrangements (e.g., workforce capacity, workforce standards). Supporting arrangements focus on the requirements for emergency management personnel to work in collaboration with people with disability and the diverse range of services that provide routine care and support as a key strategy for building inclusive disaster resilience. These findings align with research that articulates the roles, capabilities, tools, and training needs of community and disability service providers to contribute to DIDRR.

[24] https://www.nhmrc.gov.au/sites/default/files/images/NHMRC%20Levels%20and%20Grades%20(2009).pdf

The literature advocates for what needs to happen next including the need for the EM sector to:

- Develop **data and information systems**, **including geolocation capabilities** to promote the:
  - identification of people and their support needs for improved emergency management planning, and
  - response actions that addresses the disproportionate risks that people with disability face in emergencies.
- Adopt a **function-based approach** to understanding the support needs of people with disability in emergencies to shift focus from, *"What impairments/disability does this person have?"* to *"What supports does this person need in emergency situations"*?

The reader is referred to Part 3 of this report for more specific information resources developed in and relevant to DIDRR development and implementation in Australia.

Key barriers and enablers were identified through thematic analysis of the 31 included studies. They are grouped and summarised in this report under seven thematic areas: (a) communication; (b) evacuation; (c) transportation; (d) management of health; (e) emergency shelter; (f) learning and capacity development; and (g) partnering for inclusion and collaboration.

The barriers point to the issues faced by different stakeholders (e.g., people with disability, service providers that support them, government, and emergency personnel). This reinforces the need for cross-sector solutions to overcome the challenges. The enablers provide strategic direction on how the emergency management sector can get started to overcome those obstacles. The enablers illustrate the importance of meaningful inclusion and participation of people with disability in emergency management and cross-sector working in partnership with representative organisations, advocates, and service providers from the community, disability, health, and social welfare sectors who provide routine community-based care and support.

PART 2 Overview of Findings

Aim:

This component of the scoping study aimed to explore disability representation in Australia's Emergency Management Arrangements. Specifically, we sought to understand the extent to which emergency management plans and guidance documents *recognise disproportionate risks and make provisions for extra support needs* of people with disability in emergencies.

Method:

A rapid identification and screening of 354 emergency management documents was conducted, including national, state, and local-level doctrine. It was not feasible, nor beneficial to conduct a thorough content analysis because:

- there was high variability in the nature and purpose of these documents, and
- disability was insufficiently considered.

Rapid screening and review with the Advisory Panel supported identification of the following documents which were included in an in-depth analysis of content to answer the study questions:

- all Australian all **state/territory-level emergency plans** authorised under each state/territory legislation,
- state/territory-level **frameworks providing guidance directly related to disability inclusion** in disaster risk management,
- a representative sample of **local emergency management plans** from across Australia.

Findings:

People with disability and their support needs are not profiled in State and local emergency management documents. Where mentioned, people with disability are included as one of several "*vulnerable*" groups. Recognition is made of factors that increase vulnerability of people with disability in emergencies and there is some consideration of the impact (primarily negative) of those factors on the safety and well-being of people at greater risk. The factors identified are not comprehensive nor addressed equally across emergency management planning documents. The dominant perspective in the state and local emergency management plan documents is that people with disability have "deficits" that make them vulnerable.

No specific direction is given in the state or local emergency management plans on how to address factors that present barriers to the safety and well-being of people with disability. Strategic direction can be found in the guidance documents. These are mostly in the form of: (a) principles to guide collaborative efforts in partnership with the community services sector, and (b) calls for preparedness support to assist people to tailor emergency preparedness to their support needs and situation. There is limited detail on how these measures are to be implemented (and to what standard) or evaluated for their impact on reducing risk and increasing resilience of people with disability to disaster.

It is not clear whether local governments are required to act on guidance provided these guidance documents with the exception of Victoria's vulnerable people in emergencies policy guidance. Background information is provided in Part 2 of this report on the Victorian Policy. Only one guidance document is specific to people with disability. This QLD DIDRR Framework and Toolkit provides the greatest degree of specificity on how to translate principles into actionable change toward DIDRR.

This was the first known attempt to appraise Australian Emergency Management Plans and guidance documents to understand whether and how provisions are made for people with disability in emergencies. Part 2 methods and findings may support Commonwealth reporting requirements on Australia's Disability Strategy (2021-2031) Outcomes Framework and Data Improvement Plan.

Part 2 findings show that there is a critical need to develop self-assessment measures that can be undertaken by state and local governments to assess the nature and quality disability inclusion in emergency management plans. To further support the development of effective measures to assess disability inclusion in emergency management planning, it is recommended that NEMA provide leadership on the development a maturity assessment framework and reporting tool that local and state governments can use to demonstrate improvements in disability inclusive emergency planning over time and across jurisdictions. This measure should be co-designed in partnership with government stakeholders (e.g., emergency planners) and disability representatives and tested to ensure its feasibility and effectiveness in improving disability inclusive emergency planning. A consistent approach to the development of this measure is needed to ensure that emergency management planning leaves no Australian with disability behind.

PART 3 Overview of Findings

Aim:

This component of the scoping study aimed to identify and map "good practice" resources relevant to emergency management DIDRR

Method:

A search of grey literature and grey information was conducted to retrieve tools, resources, and good practices/activities relevant to DIDRR. The purpose, format and stakeholder groups leading the work were charted and presented findings in a resource-gap map.

Findings:

Findings revealed a suite of resources (n = 160 resources) that can support DIDRR actions. This includes numerous resource hubs that host resources from multiple sectors.

The resource-gap map (Companion Document B) shows where there is a concentration of resources and where there are gaps. It also shows which sectors are leading the DIDRR resource/effort. By visually presenting the purpose and type of DIDRR resources developed or used by different sectors, it can be observed that:

- There are numerous videos available that cover a wide range of purposes (inform, educate, facilitate, showcase, advocate).
- There are evidence-based preparedness tools that target disability inclusion, and they are being used to educate others and facilitate emergency preparedness.
- Preparedness support services are undertaken by emergency, community, and disability services sectors. Research is being conducted on preparedness support.
- There are existing webinars, training modules and programs designed to educate and showcase DIDRR.
- The research sector is represented across the spectrum of resource formats that fulfil a range of functions (e.g., inform, educate, facilitate, showcase, advocate, evaluate).
- There are several guidance documents and research briefs that fulfil multiple purposes.
- The government sector makes DIDRR resources available in “resource hubs” but the disability sector also collects and shares resources, and so to do community and emergency services, albeit to a lesser extent.

The resource gap map has greatest utility as an interactive and conversational tool and should be used to promote cross-sector learning and shared planning for DIDRR. Assessment of the utility of these resources is also encouraged. In combination with the table in Companion Document B, the resource-gap map can be used to support understanding and decision making such as:

- Knowing what resources are available so that effort isn’t unnecessarily duplicated.
- Having ready access to available resources that can be applied, combined, implemented, and evaluated.
- Increasing resource use by multiple stakeholders.
- Identifying where to focus effort on the development of new resources.
- Making decisions about modifying existing resources to be suitable for additional purposes or by different stakeholder groups.

As a first “benchmark” of the available resources relevant to DIDRR in Australia, this resource-gap map should be used to support cross-sector planning and development of DIDRR programs and services. Part 3 makes specific recommendations that will support the development and use of these resources through the development of governance, funding, and engagement mechanisms to enable uptake and use.

Priorities for Action

Scoping study findings from research (Part 1), policy (Part 2), and practice (Part 3) on emergency management capabilities in DIDRR were synthesised to **identify current opportunities and give direction that will enable Australia to lead the advancement of DIDRR into the future.** In doing so, we have identified three priority areas for action (Figure 2). DIDRR mechanisms should guide decisions and actions to support the development of cross-sector collaboration processes and outcomes.

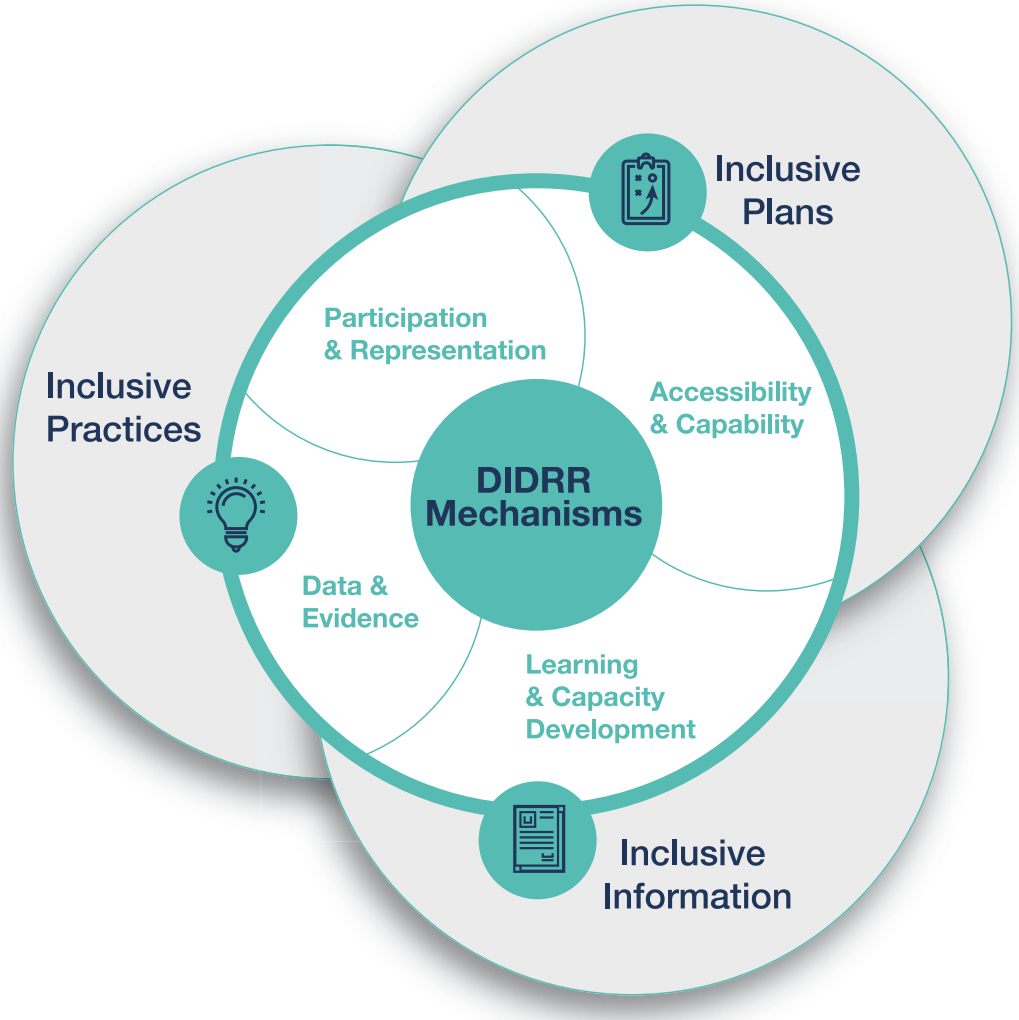

Figure 2. Priority Areas for Action

Inclusive Plans

- States/territories and local governments should profile people with disability and their function-based support needs in State and Local Emergency Management Plans.

  These plans should:
  - Include information about aware, capable, and prepared community/disability services and accessible assets that can be mobilised in emergencies.
  - Make explicit reference to other documents where strategic and practical guidance on disability-inclusion can be found so that those responsible for enacting emergency management plans and its component parts (e.g., health and well-being committees; recovery committees) are directed to those supporting and guidance documents.
- The National Emergency Management Agency should work with the Australian Government Department of Social Services (DSS) to develop and improve the outcomes framework so that there is consistency of definitions and operationalisation of outcome areas upon which to measure progress on DIDRR.
  - Engage in research to develop effective measurement tools that are tested for their validity and reliability in gathering and reporting on disability inclusion in emergency management plans and guidance documents. Part 2 of this report provides:
    - methodological direction on ways to get started, and
    - shares findings about disability inclusion in emergency management plans that should be shared with DSS to assist with future development of the Data Improvement Plan intended to track progress made by the emergency management sector on disability inclusion in emergency management planning under Australia's Disability Strategy.
- Commonwealth and states/territories should strengthen the practical utility of **state/territory-level emergency management guidance documents** (e.g., at risk frameworks) by including targeted actions of specific stakeholders and measurable outcomes on DIDRR.
  - Specific areas of focus should be on enhancing measurable action on the two key areas already evident in state-level guidance documents that are also recommended in the research evidence (see Part 1). They are:
    - **tailored preparedness support** for people with disability and the services that support them, and
    - **cross-sector collaboration** between the emergency, community, and disability sectors.
  - Embed into policy requirements that DIDRR strategies to be implemented in partnership with disability representatives. This is needed to ensure that such strategies identify and plan for the extra support needs of people with disability in emergencies and ensure that strategic actions are acceptable, realistic, and feasible.
    - Support and resource disability representative organisations to co-produce and test these guidance documents for their practical utility.
    - Require monitoring and evaluation to support ongoing feedback, improvement, and measurement of progress toward DIDRR.
  - Regularly share information about these guidance documents with local emergency/disaster management groups and committees. Provide regular updates to emergency management Groups/Committees on how strategies are being implemented and the impact on people with disability and the services that support them.

Inclusive Information

- Commonwealth, states/territories, and local governments should make accessibility of emergency management risk information and communications a priority action. Take steps to ensure awareness, preparedness, response and recovery messages and services are universally accessible for everyone.
  - Use research-informed methods to review current communication processes and tools in partnership with people with disability to identify and target areas for improvement.
  - Evaluate the impact of inclusive emergency management information on the preparedness actions, safety, and resilience of people with disability. Specific consideration should be given to increasing *access, readability, understandability and actionability* of risk information and communications.
  - Obtain feedback through monitoring and evaluation to assess how improvements to risk information and communications support people with disability to access, learn and use information to tailor emergency preparedness and response plans to their support needs and situation.
  - Include disability representatives in critical review and improvement of national-level emergency management frameworks (e.g., NDRRF), strategies (National Strategy for Disaster Resilience), and systems (e.g., New National Emergency Warning System) to ensure they are also universally accessible.
- Commonwealth, states/territories and local governments should include disability representatives to support the review and improvement emergency management information. Such as:
  - **emergency risk information** (e.g., hazard risk information), **communications** (e.g., disaster dashboards), and **preparedness resources** so that these resources are accessible, readable, understandable, and actionable by a wider range of people who need information in alternate formats.
  - the accessibility, understandability, and actionability of **early warning systems and communications** by people with disability.
  - **current evacuation policy guidance, procedures, practices, and communications about evacuation** so that people with disability:
    ~ have evacuation options that are better matched to their support needs and situation.
    ~ understand evacuation options and plan for them together with their support networks.
    ~ are included in pre-planning for the access and support needs of people with disability at evacuation centres, shelters, relief and recovery hubs which must move beyond physical accessibility to include universal access principles.
- States/territories should build capacity of government and emergency services by integrating disability awareness and DIDRR actions into training for the emergency management sector, particularly those with responsibilities for risk assessment, risk communications, emergency management planning, community engagement, and recovery planning and support.
  - The Person-Centred Emergency Preparedness (P-CEP) certificate course available through The University of Sydney Centre for Continuing Education is the only interdisciplinary program that offers a nationally consistent approach for emergency managers to learn and work together with people with disability and the services that support them to advance person-centred capability-focused approaches to DIDRR development. The certificate course is undergoing extensive evaluation and reporting.

Inclusive Practices

- Commonwealth, states/territories and local governments should promote the use of available tools and resources to support strategic actions on DIDRR. Specific focus should be on enhancing opportunities for **tailoring preparedness support** to individuals and the services that support them and **collaborating across sectors** to identify and address the barriers that increase risk for people with disability in emergencies.
  - Make sure that the individuals and organisations who are resourced (e.g., Disaster Resilience Fund; State Resilience/Recovery Funds) to undertake these responsibilities:
    ~ are aware, capable, and prepared themselves.
    ~ trained in preparedness support.
    ~ understand Australia's emergency management arrangements.
  - Support and enable cross-sector collaborative actions by clarifying the roles and responsibilities of different stakeholder groups in DIDRR.
  - In Part 3 of this report, we identify several high quality and readily available resources that can be used to facilitate preparedness support and enable cross-sector collaborative action for community and disability stakeholders to share responsibility with government and emergency services on DIDRR.
- Commonwealth and states/territories should use the resource evidence-gap map included in Part 3 to support decisions about where to focus future strategic development of resources, their implementation, and evaluation.
- The National Emergency Management Agency should work in partnership with the Australian Institute for Disaster Resilience to Implement Part 3 Recommendations to ensure ongoing development of high quality DIDRR resources that are accessible to multiple stakeholders, including people with disability.

What's missing and what needs to happen next?

National Leadership on DIDRR for Local Impact

The National Emergency Management Agency (NEMA) can provide national leadership on DIDRR through the identification and removal of barriers to the inclusion of people with disability in disaster risk reduction planning, information, and practice. Progress should be routinely assessed, and new priorities developed and evaluated to improve DIDRR.

DIDRR Development should support action taking, not just awareness raising. NEMA should prioritise research and evaluation of the effectiveness of those actions from multiple stakeholder perspectives and examination of the impact of DIDRR initiatives on the safety and well-being of people with disability before, during, and after disasters.

NEMA should provide strategic direction on DIDRR in the three priority areas outlined above, work in partnership with other Federal government agencies (e.g., Department of Social Services, Health, Aged Care, etc.), and seek support from states/territories (who hold legislated responsibility for emergency management) on ways to better enable local-community DIDRR to flourish. Local council links to community groups are a fundamental vehicle for the delivery of measures to increase inclusion for people with disability and the services that support them and build whole-of-community resilience before, during and after disaster. Local governments are best positioned to work in partnership with emergency services and their local interagency groups from the emergency, community, disability, and health sectors.

Local governments are in an optimal position to lead, support and coordinate cross-sector action on DIDRR, but they require the resources and mechanisms to realise these opportunities. In addition to their emergency management function, local councils are linked to Organisations of People with Disability (OPDs) and community-based service providers through their community development, disability inclusion and community engagement roles. In practice, there is wide variability and ineffective integration of these critical responsibilities of local government. This impacts local emergency management and disaster recovery planning and perpetuates inequity for people with disability, their family and carers because their support needs in emergency situations are not understood. The role of these organisations in community-led preparedness and disaster risk reduction should be clearly articulated in national and state-level planning documents, strategic frameworks, and principles that value and guide DIDRR implementation at all levels of Australia's emergency management arrangements.

NEMA should provide proactive leadership and strategic direction to state and local governments through:

- mainstreaming disability inclusion into the emergency management arrangements at all levels,
- ensuring that disability representatives have a seat at the table in emergency management planning and policy formulation,
- working collaboratively with other government departments and agencies to ensure that specific provisions are in place to identify and plan for the support needs of people with disability at all stages of the disaster management (PPRR) cycle,
- working in partnership with state/territories and local governments to determine how that support will be organised, resourced, and delivered,

- streamlining methods, tools, and governance mechanisms for national consistency while at the same time fostering local leadership, local flexibility, and responsiveness in the development/ mobilisation of local assets to ensure the rights of people with disability to protection and safety are met.

Data and Evidence

Strategic use of data and evidence is the least developed DIDRR mechanism. The development of data and evidence is needed to fully realise the priorities for action and ensure DIDRR is embedded into emergency management information and decision systems.

Credible, accessible, and up to date data and evidence are required to:

- profile people with disability and their function-based support need,
- identify community assets that can be mobilised in emergencies,
- track progress against the emergency management Targeted Action Plan (TAP)[25],
- measure impact of DIDRR interventions, and
- inform strategic and operational decision making.

There are, however, challenges and limitations in harnessing high-quality data in the emergency management sector, including "*a reluctance to share data, restrictive licensing arrangements, cost of collection, cost of providing accessibility and transparency, lack of coordination and harmonisation or standardisation of data"* (p. 114)[26]. Moreover, difficulties with interoperability and integration between systems are perceived to be major barriers to achieving data consolidation and data sharing between jurisdictions[26].

Underpinned by the findings of our research on Emergency Management Capabilities in DIDRR and inspired by the Australian Disability Strategy 2021–2031 Data Improvement Plan, we put forward the following recommendations for future actions on improving DIDRR data and evidence.

Recommendations:

- **Development of a national DIDRR data framework.** NEMA should take up the leadership role in developing a national DIDRR data framework in consultation with multiple agencies across all levels of governments, the private, non-for-profit and research sectors, and people with lived experience. This framework will provide agreed definitions, methodologies and standards on production, linkage, access, analysis, and exchange of DIDRR data, information, and knowledge.
- **Inter-government collaboration.** Under the NEMA's leadership, Australian, State and Territory Governments should work together to develop consistent data standards and improve the quality and usability of data about DIDRR. Although there are clear benefits in nationally coordinated data and information, vulnerability and capacity risk assessments are most effective when undertaken at a local level, recognising context and specific details around hazards, vulnerability and exposure26. Multi-jurisdictional arrangements are needed to collect and deliver data on 1) function-based support needs of people with disability in emergency situations and 2) geospatial mapping to better identify and map people, support needs, local assets, and capabilities.
- **Determination of critical data**. A working group should be established to determine what critical data and information should be captured in order to track the progress of DIDRR in Australia. People with disability are central to this exercise. The working group must work closely with people with disability, disability sector stakeholders and diverse groups within the sector to include and consider a broad range of views about DIDRR. Data should be collected and analysed to facilitate a better understanding of intersectionality, that is how individuals could be disproportionally impacted by disasters due to the intersection of their gender, age, race, culture, sexual orientation, impairment, disability status, socioeconomic status, religion and other dimensions.

[25] https://www.disabilitygateway.gov.au/ads/strategy

[26] Commonwealth of Australia (2020). *The Royal Commission into Natural Disaster Arrangements Report* 28 October, 2020.

- **Data mapping and linkage.** It is likely that critical DIDRR data and information already exist across governments and private sector. For example, Australian Bureau of Statistics (ABS) data provides information that can be used to profile the needs of people in their communities. ABS data are commonly used as part of developing community risk assessments and should be included in the community profile/context sections of all emergency management plans. Use of this data is a helpful starting point. The most comprehensive disability data can be found from ABS Surveys of Disability, Ageing and Carers (SDAC). Other useful data sources include but are not limited to:
  - ABS, the Short Disability module included in the General Social Survey, the Personal Safety Survey, the National Health Survey and the Survey of Income and Housing
  - ABS, the 'Need for assistance with core activities module used in the Census
  - AIDR, Knowledge Hub and Handbook Collection: information on disaster resilience
  - CSIRO, information on natural disasters including Australian Vulnerability Profile
  - data.gov.au, public data from Australian government agencies at all levels
  - DSS, Australia's Disability Strategy Survey
  - DSS, Disability Employment Services
  - Geoscience Australia, Australian Exposure Information Platform (AEIP): information on building, businesses, and people; public facilities and infrastructure assets; agricultural commodities; and environmental holdings within Australia
  - NDIS, information on NDIS participants and service providers
  - University of New England, Australian National Disaster Resilience Index.

These data should be made accessible and usable for all. It would be highly desirable to map the data sources and develop a DIDRR data dictionary to help users locate and access the available data and information. Data linkage might be required to link existing data sets to gain a more comprehensive view of the characteristics or experience of the target group.

- **Collection of new data.** While care should be taken not duplicate or undermine the existing data and information, overtime, new data might be needed to support community profiling at the local government emergency planning level. Community profiling should include more detailed information about the preparedness, capabilities, and function-based support needs of people with disability and the services that support them before, during and after disasters. In addition, local assets that can be mobilised to tailor preparedness support and increase collaboration with community and disability services (e.g., transportation in evacuation, communication of early warnings) should also be identified and mapped. This can be achieved by collaborating with aware, capable, and prepared service providers in the community.
- **Data governance.** All parties that are involved in data collection and storage must ensure high quality of data and comply with legislative privacy obligations and data storage and security policies. NEMA can play a key role in data governance and data audit to promote "timeliness, accuracy, coherence, interpretability and accessibility"[27] of the DIDRR data. NEMA might consider working with disability access and user experience specialists to ensure data accessibility and interactivity, and engaging researchers to develop valid and reliable measurement tools for accessing and reporting on the data quality.
- **Capacity building.** As pointed out in the 2020 Royal Commission into National Natural Disaster Arrangements, priority should be given to creating common information platforms and shared technologies to ensure the sharing of timely, accurate, consistent, interpretable and comprehensive data both intra-jurisdictionally and inter-jurisdictionally. It is equally important to build greater capacity of non-government organisations such as DPOs and service providers to collect, share and use data to inform decision making about DIDRR.

[27] www.disabilitygateway.gov.au/document/8176

PART 1

Scoping study of the international peer reviewed research on the role, capacity, tools, and training needs of emergency management in DIDRR.

Research Questions

Part 1 of this scoping study asked:

1. **What is the nature and extent of research on emergency management in DIDRR?**
2. **What does the research say about the role, capacity, tools, and training needs of EM to contribute to DIDRR?**
3. **What are the enablers and barriers to EM engagement in DIDRR?**

Method

Scoping studies aim to quickly map the key concepts underpinning a research area and the main sources and types of available and current evidence. This study employed a six-stage scoping methodology: (1) identify the research questions, (2) identify the relevant studies, (3) select the studies, (4) chart the data, (5) collate, summarise, and report the results; and (6) consult with stakeholders. This well-regarded scoping methodology was first outlined by Arskey & O'Malley (2005) and improved with recommendations by Levac, Colquhoun, & O'Brien (2010).

Search strategy

Eight electronic bibliographic databases were searched: MEDLINE, Embase, PsycINFO, Scopus, Web of Science, Informit, ProQuest and CINAHL. Only peer-reviewed articles that were accessible online were included in the search. The following search string was used [("emergency responders/ or firefighters/ or police" OR "volunteer" OR "government" OR "response personnel") AND ("disabled persons" OR "hearing disorders" OR "intellectual disabilities" OR "vision disorders" OR "language development disorders" OR "brain injuries" OR "congenital disorder" OR "autism spectrum disorder" OR "brain damage" OR "spinal dysraphism" OR "mental disorders") AND ("disability inclusive disaster risk reduction" OR "disaster planning/ OR "disaster plan" OR "community participation" OR "community support" OR "community engagement" OR "disaster risk education" OR "inclusive preparedness" OR "inclusive emergency management")]. Appropriate subject headings (MeSH terms) were applied to retrieve studies on the relevant topics whether the aforementioned terms were used in the original articles. Moreover, "exp" (explode) was applied to retrieve all articles that matched more specific terms that were nested beneath the headings. These search strategies ensured that all relevant articles were captured. The search was limited to English articles published between 1 January 2000 to 31 December 2022. This study was reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) recommendations[28]. Figure 3 illustrates the detailed search process.

Screening and study selection

A total of 2646 records were retrieved from the database searches. These records were imported to the Covidence software for the screening phase. After removing the duplicates, 1493 studies proceeded to title abstract screening. Two reviewers (PS and FN) independently completed the title and abstract screening against the inclusion/exclusion criteria outlined in Table 3. Reviewers were not blinded to authors' name, institution, or journal of publication. Disagreement was resolved by consensus of a third reviewer (JC). Further screening of the full-text articles was conducted by PS and FN. All reviewers (PS, FN, JC and MV) agreed on the final thirty-one included studies.

[28] https://www.bmj.com/content/372/bmj.n71

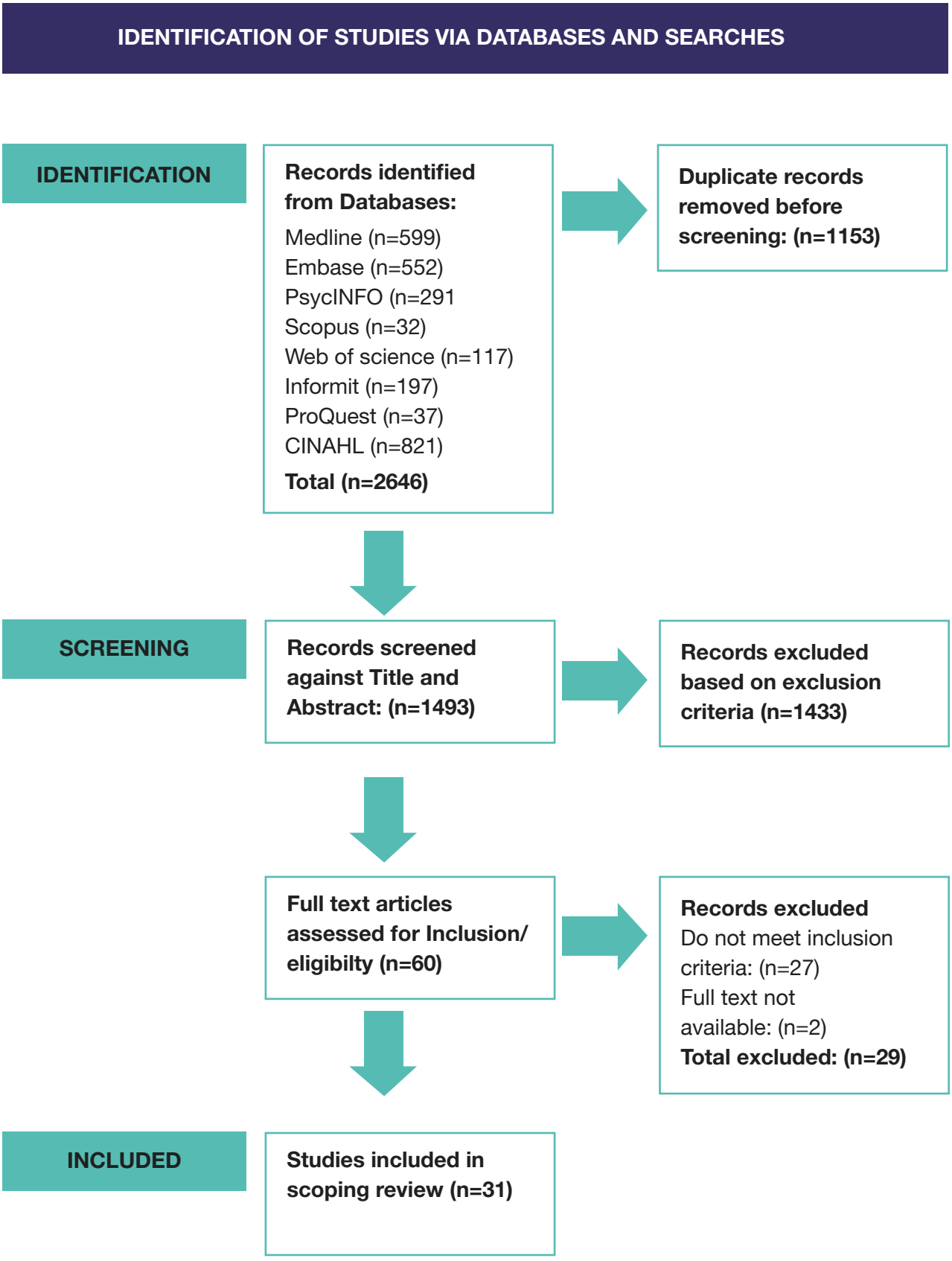

Figure 3. Process of Identification and Screening Studies for Inclusion

Table 3. The inclusion and exclusion criteria used during the literature selection process.

Factor	Inclusion	Exclusion
Study Population	People with disability and/or emergency management personnel	Health and medical professionals
Interventions	Disability-inclusive disaster preparedness, recovery, and resilience strategies	
Study designs	Randomized controlled studies (parallel-group or cross-over), cohort studies, longitudinal studies, case-control studies, cross-sectional studies, qualitative studies, case studies, feasibility study, opinions of experts, clinical audits, reviews (meta-analyses, systematic reviews, scoping review, narrative reviews etc.)	
Type of publications	Original studies published in a peer-reviewed journal, including commentary papers	Grey literature, book chapters
Topic of interest	Disability-inclusive disaster preparedness, response, recovery, and resilience strategies The actual or potential role/practices of emergency management sector in DIDRR (at any stage of DRM cycle) Modified roles and practices to facilitate DIDRR Tools and training used to engage in DIDRR DIDRR predicting factors (barriers and enablers)	

Data extraction and coding

Three researchers (MV, JC and PS) attended a workshop to develop a detailed charting framework that included elements such as location, study type, method, study aim, participants, stages of emergency management, unmet needs/gaps/issues, tools/training/resources needed, inputs, activities, outputs, outcomes, P-CEP "Capability Wheel" elements addressed, evidence of employment of DIDRR mechanisms, key findings, recommendations, implications, and lessons learned. Any conflicts or differences in opinions were resolved by discussion between the four researchers (PS, FN, JC and MV).

Using the NVivo software, a thematic synthesis was conducted by FN and JC to identify the key barriers and facilitators of emergency management. The thematic analysis was done following Braun and Clarke's[29] six-phase process involving: 1) familiarisation of data; 2) initial codes; 3) searching for themes; 4) reviewing themes; 5) defining and naming themes, and 6) writing the paper. Initial codes were generated based on the findings from the charting framework, followed by a thorough search of full-text papers conducted to establish themes. Identified themes were then reviewed by the lead investigator (MV).

[29] Clarke, V., & Braun, V. (2017). Thematic analysis. The Journal of Positive Psychology, 12(3), 297–298. https://doi.org/10.1080/17439760.2016.1262613

Limitations

When contemplating the overall strength of the research evidence and its applicability to the Australian emergency management context, the following limitations should be considered.

First, this component of the scoping study was limited to review of peer-reviewed papers that met our inclusion criteria (see method). This review included a small number of disparate papers (n = 31) published between 2002 and 2022.

- During this 20-year period there have been substantial changes in international legislation on the rights of people with disability.
- Guidance on the role and contributions of people with disability to in the field of disaster risk reduction emerged in the latter half of this period. Hence, understanding the international policy (see Box 1) context is an important consideration when assessing the potential contribution of any one piece of research evidence and its contribution toward DIDRR development and change.
- Findings therefore provide only a snapshot of research conducted over the past 20 years, with an explicit focus on the emergency management (EM) sector in DIDRR.
- A key consideration to understanding and using these findings is recognising the relative maturity the emerging interdisciplinary field of DIDRR policy and practice, which has lacked a coherent underpinning theory.
- Conceptual maturity will shape how future studies are designed and the methodological approaches employed, which will support coherence in the knowledge base and the programs of research informing it (Box 2).
- Findings from the individual studies contributing to this scoping review of the research must be considered within the context of dynamic changes that have occurred over the past two decades that have informed better understanding about disability inclusion in emergency management decision-making, policy formulation, and practice change.

Box 2. Australian-led research advancing DIDRR theory, practice, and research

Australian-led research has advocated a shift toward human rights and capability-focused approaches for the development of DIDRR in policy, practice, and research. This research has advanced DIDRR through a program of multi-stakeholder and partnership research and the co-production of tools and strategies that support DIDRR development and change.

New conceptual and methodological tools for implementing person-centred and disability inclusive emergency planning bring people, who have not traditionally worked together, to learn and work together (share responsibility) with shared goal of achieving safety and well-being outcomes for people with disability and other groups at greater disaster risk.

This contemporary understanding:

- connects international legislation and policy frameworks from the disability and disaster fields,
- applies integrated knowledge translation strategies that support action-oriented development and change across the government, emergency, disability, and community services sectors, and
- builds tools through co-production methodologies that advance cross-sector knowledge, skills, and actions on DIDRR.

Second, the recommendations and findings about the role, capacity, tools, and training needs of emergency personnel are based on a small number of disparate studies using methodologies that are represented at the lower levels of evidence quality which have potential for higher risk of bias.

Other limitations included:

- The small sample sizes and strategies (e.g., convenience sampling) which limits the generalisability of study findings.
- We did not undertake an assessment of the individual study quality of included papers which were dominated by literature reviews and case studies/reports.
- Further, the studies covered a wide range of different types of emergencies and disasters (e.g., earthquake, pandemic, all hazards).
- Any recommendations arising from these individual studies are limited in their transferability outside of the original study context (e.g., unique purpose, questions, methods, participants, and settings).

Third, with one exception, all studies included in this scoping study of the peer reviewed research were undertaken outside of Australia. Most studies were conducted in the United States where the emergency management frameworks and disability legislation differ from Australia.

- Australia's emergency management sector operates in a complex, dynamic and uncertain environment that has influenced workforce capability in both operational and community engagement roles across the emergency management sector[30].
- These key contextual factors require attention in combination with new provisions under Australia's Disability Strategy 2021 – 2031 and the National Disability Insurance Scheme (NDIS) legislation amendment (and accompanying practice standards) that require new roles and capabilities of the disability services sector. This consideration is related to the fourth limitation.

Fourth, DIDRR, by definition, requires joint effort of multiple stakeholders working together, in partnership with people with disability to identify and remove barriers that increase disaster risk.

- Our search strategy focused on studies that included the emergency management sector/ participants in the research to understand their role, capacity, tools, and training needs.
- This will have missed studies that illustrate the role and contributions of other sectors to DIDRR development if they did not also include the emergency management perspective.

Findings

Recognising the limitations, findings from this component of the scoping study on the peer reviewed research provides an overview of the nature and type of research that has been conducted on the contributions of the emergency management (EM) sector to DIDRR development and offers some helpful insights in answer to the three key study questions.

What is the nature and extent of research on EM in DIDRR?

The bubble chart in Companion Document A maps the main sources and types of evidence available (an evidence-gap map) from the peer reviewed research literature. The size and colour of the "bubbles" indicates number of different types of research designs that have contributed to the evidence base. The details on each study are presented in the table in Companion Document A.

[30] https://espace.curtin.edu.au/bitstream/handle/20.500.11937/89161/88985.pdf?sequence=2&isAllowed=y

The evidence-gap map shows the current **focus of research** on emergency management in DIDRR organised by **stage of the disaster management cycle** (prevention, preparedness, response, recovery). Each research focus area was defined as follows:

Research Focus	Definition
Guidance Document	seeks to show the way or direct policy and practice development for disability inclusion
Resource	offers information, packages knowledge, or offers a way of actioning disability inclusion
Practice	a program, service, or intervention that seeks to develop, improve, or change the situation toward disability inclusion
Education/Training	that seeks to build capacity/capabilities (knowledge, skills, behaviours) in disability inclusion
Monitoring/Evaluation	that seeks to demonstrate outcomes/impact or to improve quality in the delivery of disability inclusive practices
Emergency Information and Warning	a critical part of emergency management responsibilities that focuses on disability inclusive communicating information and warnings
Needs Assessment/Gap Analysis	that identifies areas of need or gaps to direct attention toward future development of disability inclusion

The reader is encouraged to use the evidence-gap map and hyperlinks to each reference in the succeeding table to explore the specific details of each study including:

> Title, author, year, country where the research was conducted
> Participants/materials
> Key study findings
> P-CEP Framework of Capability Wheel (elements) considered in the research
> DIDRR mechanisms evident in the research

By visually presenting the nature and extent of research on emergency management (EM) in DIDRR in an evidence-gap map, it can be observed that:

- Research targeting EM roles in DIDRR includes mostly **needs assessments and guidance documents** predominantly focused on the **preparedness and response** stages of disaster management.
- Needs assessment and guidance documents are informed by a **wider range of study types and methods** which strengthens the value and contribution of these recommendations to the EM sector (i.e., not just expert opinion). This matches the relative maturity and development of the knowledge base on DIDRR (e.g., issue identification, advocacy, principles for its development).
- Research on **resources, practices, and education** are fewer in number. They are informed by **case study and qualitative research designs.**
    - These types of study designs support depth of insight and understanding about how the emergency management sector has developed inclusive materials or engaged people with disability and the services that support them to reduce disaster risks.
    - However, more research is needed. Studies should include examinations of the impact of resources, practices, and training on DIDRR processes and outcomes. This is further considered in Part 3 findings of this scoping study which mapped a diverse range of extant resources developed and/or applied in Australia.

- There has been limited focus on **monitoring and evaluation research**. However, the two preparedness-focused evaluation studies that are included provide important insights into the role of capacity development programs on DIDRR.
  - One of these studies was conducted on an Australian community capacity development program focused on cross-sector collaborative action on DIDRR undertaken over a five-year period (ref 21).
  - The other was an educational evaluation of an online training program for emergency personnel to better respond to the needs of people with developmental disability (ref 11).
- Despite the critical role of emergency management communications to public awareness (i.e., information designed to keep everyone safe), there has been limited focus on accessible and inclusive emergency information and warnings in the research literature.
  - Calls for action found in the guidance documents and needs assessment literature reinforce the importance of future development that is needed in this area. A systematic approach to research and practice development is warranted.
  - This is further considered in Part 1 findings (barriers and enablers) where communication was identified as a cross-cutting theme.
- There are **no studies at the higher levels of research quality**[31] (i.e., cross-sectional and cohort studies, controlled trials, and meta-syntheses). This reflects the current state of DIDRR knowledge and advancement of the field.
  - Tracking of the scope of research on EM in DIDRR and levels of research evidence (quality) over time is warranted as one way to assess development and change in policy guidance, practice development, and research into the effectiveness of those changes.
- A few studies provide information across **more than one stage of the disaster cycle** and points to the cyclical nature PPRR processes. For example,
  - Reference 4 crosses prevention, preparedness, and response
  - Reference 6 crosses preparedness and response
- Some studies provide information across **multiple focus areas** consistent with the multi-faceted and cross-sector nature of DIDRR. For example,
  - Reference 21 crosses resource, practice, training, and evaluation
  - Reference 8 crosses guidance and education
  - Research on disability inclusion in the **prevention and recovery** stages is lacking.

What does the research say about the role, capacity, tools, and training needs of EM to contribute to DIDRR?

APPENDIX A presents a summary of findings on the contribution of the peer-reviewed research evidence and recommendations to understanding the (potential) role, capacity, tools and training needs of EM to contribute to DIDRR that have most relevance to the Australian Government actions/indicators outlined in Australia's Disability Strategy 2021-2031 Emergency Management Targeted Action Plan (Box 3).

Training initiatives on the topics of disability awareness and inclusion were most commonly implemented to support EM capability development in DIDRR. Learning initiatives focused on raising awareness of disability inclusion as a human right.

These studies recommend the development of inclusive disaster management plans and integration of those plans with the supporting arrangements (e.g., workforce capacity, workforce standards). They focus on the requirements for emergency management personnel to work in collaboration with people with disability and the diverse range of services that provide routine care and support as a key strategy for building inclusive disaster resilience. These findings align with research that articulates the roles, capabilities, tools, and training needs of community and disability service providers to contribute to DIDRR[32].

[31] https://www.nhmrc.gov.au/sites/default/files/images/NHMRC%20Levels%20and%20Grades%20(2009).pdf

[32] Subramaniam, P., Villeneuve, M. (2020). Advancing emergency preparedness for people with disability and chronic health conditions: A scoping review. Disability & Rehabilitation. DOI:10.1080/09638288.2019.1583781

These studies advocated for the development of data and information systems, including geolocation capabilities to promote the identification of people and their support needs for improved emergency management planning and response actions that addresses the disproportionate risks that people with disability face in emergencies. Most of these studies, advised on what needs to happen, rather than providing specific tools or strategies that have been developed, tested, and monitored for their effectiveness.

The reader is referred to Part 3 of this report for more specific information resources developed in and relevant to DIDRR development and implementation in Australia.

Box 3. Australia's Emergency Management Targeted Action Plan

Australia's new Disability Strategy (2021 – 2031) includes, for the first time, targeted action on DIDRR. The Emergency Management Targeted Action (TAP) plan is a first attempt to identify key actions, timelines, and indicators for national and state governments with associated implications on the (potential) role of the emergency management and disability sectors to DIDRR development and change. The emergency management TAP will require review and improvement as evidence-informed development of DIDRR also advances.

The Emergency Management TAP is designed to drive progress under the Health and Wellbeing Outcome Area of Australia's Disability Strategy 2021 – 31. This Outcome Area aims to ensure people with disability attain the highest possible health and wellbeing outcomes throughout their lives. The Emergency Management TAP has the following objectives:

1. Ensure disaster/emergency planning processes for conducting disaster risk assessments, and subsequent development and maintenance of disaster/emergency management plans, are inclusive of people with disability.
2. Ensure inclusive disaster/emergency management, preparedness and recovery planning processes support the health and wellbeing of people with disability before, during and after emergencies.

When reviewing the summary recommendations in APPENDIX A, the reader is reminded of specific limitations influencing the direct applicability of these recommendations in the Australian context. The following additional factors should be considered::

- Research recommendations summarised in APPENDIX A assume that service providers (e.g., community, health, disability) are aware, capable, prepared, and resourced to engage with the emergency management sector. However, prior research has recognised that Australian community, health, and disability service providers are underprepared for emergencies and not integrated into emergency management planning[33].
- Australia's service landscape is characterised by a diverse range of services and supports, funding models, and roles of service providers in the community, health, and disability sectors. In this landscape, some people receive disability supports from multiple service providers and agencies, while other people are not connected to specialist disability services but may receive support through mainstream community groups and activities. The situation is increasingly complex for people who have limited or no support networks, fewer people they rely on and trust, and fragile connections to community programs and neighbourhood centres.
  - This situation points to shortcomings of the current emergency management TAP which emphasises collaboration through the NDIS. Eligible NDIS participants represent a small proportion of people with disability.
  - Innovative strategies will be needed to reach the people with disability who are not eligible/ participants of the NDIS. This should be reflected in future reviews of the TAP.

[33] https://www.daru.org.au/wp/wp-content/uploads/2021/09/IssuesPaper_Clearing-a-path_FINAL.pdf

- Both the research literature and the Australia's emergency management TAP emphasise the potential role and contributions of service providers to DIDRR. In contrast, limited consideration is given to the strengths, capabilities, and potential contributions of people with disability (and their representatives) to emergency management DIDRR. Exclusion of people with disability from policy and practice development on DIDRR will perpetuate risks to the safety and well-being of people with disability who are the most critical source of information about what they can do for themselves and what they need support for in emergencies.
- The extant research has insufficiently considered:
  - intersectionality including culturally and linguistically diverse people with disability and First Nations populations
  - gender and disability
  - the issues and support needs of carers who provide unpaid informal support
  - children and youth with disability
  - mental health and well-being needs of people with disability

What tools, resources and training are available in the peer-reviewed research literature?

In APPENDIX B, a diverse range of practice tools, resources, and training that were identified in the peer reviewed research are summarised under the following headings:

> Practice tool, resource, or training (hyperlinked to the source)
> Country where it was developed/used
> Project aims
> Nature of cross-sector collaboration
> Capability (functional support needs) elements considered
> DIDRR mechanisms evident

These tools may offer a helpful starting point toward DIDRR development. Noteworthy is the nature of collaboration involved in studies that used these tools and the function-based support needs that they address (capability elements). APPENDIX B also identifies the specific DIDRR mechanisms that each tool supports.

Part 3 of this report mapped existing resources that are contributing to DIDRR development in Australia. Hence, further consideration is given in that section to resources, tools, and training that can support emergency management contributions to DIDRR.

What does the peer-reviewed research say about the enablers and barriers to EM engagement in DIDRR?

Key barriers and enablers were identified through thematic analysis of the 31 included studies. They are grouped there under the following thematic areas: (a) communication; (b) evacuation; (c) transportation; (d) management of health; (e) emergency shelter; (f) learning and capacity development; and (g) partnering for inclusion and collaboration.

The reader is directed to the table in Companion Document A for more information on each study and reminded that these enablers and barriers were identified from the international body of published research that was conducted predominantly outside of Australia. Please consider the scoping study limitations outlined above when considering the applicability of these findings to the Australian emergency management context where more research is needed.

Barriers and Enablers to EM engagement in DIDRR

Communication

Barriers	Enablers
• Emergency information is frequently inadequate, inaccurate, out-of-date, and inaccessible to people with disability[7, 9, 15, 16, 18, 23, 27, 28]. For instance, during an emergency, disruptions to electricity supply[27] or limited access to assistive technologies such as hearing aids[16] prevents people with disability from obtaining information about the emergency in a timely manner. Information concerning changes to public transport routes and schedules, local services, and public meetings also tends to be poorly communicated[27]. • The low readability and understandability of some emergency information presents a key communication barrier for people with cognitive limitations or low literacy [18]. • Emergency management personnel largely do not sufficiently understand the unique and diverse communication needs of people with disability. As a result, they employ inappropriate communication strategies when disseminating emergency information[1, 3, 6, 7, 18]. For example, certain words and idioms that often feature in announcements or statements are unfamiliar to particular groups of people with disability[7], and interpreter services are not employed to the extent they should be[7]. Moreover, emergency management personnel are not adequately trained on how to properly communicate with people with disability6, and the tools available to supposedly facilitate these lines of communication, such as text alert, are ineffective[7]. • The absence of reliable technological infrastructure, including internet access and mobile phone services, prevents service providers from communicating with clients with disability during and after an emergency event[6].	• Designing emergency information with various specific needs in mind[1, 3, 9, 10, 17, 18, 19, 26, 28, 29]. • Adopting technology effectively, including Geographic Information System, video clips, social media, and real-time captioning[1,3,10, 17, 29]. • Using Information cues (e.g. visual cues, auditory cues, vibration) to enhance receptive communication[19, 26]. • Using multiple venues to ensure information is disseminated in a timely and accessible manner. This can involve posting the content of oral announcements in a specified public area, and designating a specific time of the day and a place or channel where foreign language and sign language interpreters will be available to translate the information[1, 18, 28]. • Providing clear and accurate content that uses understandable and incisive language based on best practices[1, 3].

Evacuation

Barriers	Enablers
• Planners and policymakers often do not identify the evacuation needs of people with disability, or they are negligent in meeting these needs on occasions when they are identified[24, 27, 31]. • Architectural barriers (e.g., descend the stairs, get out of the windows, open the emergency exit doors) impede the ability of people with disability to evacuate during an emergency[24, 27]. • Inadequate staff training on evacuation techniques can lead to delays in evacuating people with disability and other at-risk groups, or unsafe evacuation procedures which may injure people with disability[31]. • During a building evacuation, people with disability are often disregarded as they are seen to slow down the evacuation process for others[14].	• Assisting people with disability in the development of personal disaster evacuation plans, as well as helping them become active in the community so that they can consult on evacuation plans for workplace and public buildings[31]. • Establishing emergency managers among of people with disability who can identify and communicate the various evacuation needs within their community[24, 31]. • Consider implementing necessary evacuation measures, such as special elevators, appropriate emergency exit routes, ramps, and trained personnel or volunteers, to ensure that people with disability are rescued and relocated during a disaster[24]. • Ensuring that the physical characteristics of the built environment adequately accommodate natural behaviours among people with disability in each evacuation form (protective, preventive, rescue, and reconstructive)[14]. • Evaluating and improving existing evacuation policies and planning to recognize the various factors at play in various form of emergency evacuations, and to facilitate the equal participation and equal safety of individuals with disability in an evacuation[14, 24]. • Undertaking further scholarly research to better understand how previous experience, perception of the hazard and social attachments can influence individual evacuation behaviour[14].

Transportation

Barriers	Enablers
• For people with disability, travelling to reach a safe area, or to access necessary services, can be challenging during and after an emergency event or disaster. Functional impairment, roads, and traffic signals, and altered routes and schedules of public transport are simply a few of many possible limitations[10, 3, 14, 24]. • Travel can also be very costly, particularly since the poor accessibility of public transport means that people with disability frequently rely on more expensive modes of transport, such as taxis[27].	• Improving the accessibility of public transport (e.g., ensuring all buses are wheelchair equipped) [24, 31]. • Strengthening transport infrastructure and facilities so that transport can continue operating following a disaster[27]. • Providing accessible information to the community about road conditions and public transport alternatives[23, 27]. • Planning thoroughly for the increased transport needs of at-risk populations during and after an emergency event or disaster[14, 28].

Management of Health

Barriers	Enablers
• During an emergency or disaster, people with disability may be dropped-off at shelters without care instructions or medical records outlining their needs[28]. • Being unable to access social support networks during an emergency or disaster can heighten feelings of isolation and anxiety for people with disability[28]. • Requiring assistance with daily activities but being unable to do it themselves and having limited support or no support from family or friends, can significantly worsen people of disability's mental and physical health[23].	• Encouraging people with disability to plan ahead about how to manage their health during and after an emergency event/ disaster[4, 13]. • Providing social support to mitigate the effects of stress and promote emotional well-being and recovery for people with disability during and after an emergency[23]. • Incorporating a more specific, function-oriented determination of medical needs into training on disaster management[18]. • Identifying at-risk individuals and addressing their functional independence needs within the first 48 hours to avoid costly deterioration of their health and wellbeing. Maintaining functional independence can include replacing essential medications, replacing lost or adaptive equipment (e.g., wheelchairs, walkers) and essential consumable supplies (e.g., catheters), and helping those with vision impairment navigate their surroundings[18].

Emergency Shelter

Barriers	Enablers
• People with disability are often discriminated against by other survivors at evacuation centres[22]. • There is a potential loss of independence that can occur at these centres due to the absence of special facilities for people with disability (e.g., particular bathroom and toilet) or the loss of assistive devices[5, 23, 24]. • Appropriate and/or accessible accommodation is frequently lacking, in which case people with disability are forced to extend their stay in hospitals or emergency departments[28]. • The support services that people with disability normally receive at home are almost always disrupted or stopped during an emergency event or disaster[16]. • Some individuals with disability may be slower to receive recovery assistance as they experience greater difficulty comprehending the large amounts of information and navigating the complicated application processes for assistance[28].	• Making the interior features of emergency shelters easily accessible for people with disability, for instance re-designing bathrooms and toilets[15, 24]. • Temporarily transferring the support services routinely provided in the home to the shelter[28]. • Ensuring service providers and agencies that maintain regular contact with people with disability and at-risk groups can distribute information about where to seek accessible and appropriate shelter and/or assistance during an emergency[28]. • Encouraging people with disability to plan ahead about what they should bring to emergency shelters[4]. • Using technology (e.g., mapping techniques) to identify shelter and transportation resources for people with disability[5]. • Orienting shelter emergency personnel to the essential functional needs of people with disability and to available resources designed to assist personnel in supporting of people with disability in an emergency[18]. • Training shelter personnel to distinguish between people who need only assistance in maintaining their health, medical stability, and mobility and those who have medical and supervision needs cannot be met by typical mass shelter services. Personnel must also be able to perform “quick access fixes”, such as installing temporary ramps and designating a specific time of the day and place where interpreters will be available to communicate information[18].

Learning and Capacity Development

Barriers	Enablers
• Barriers to capacity building faced by people with disability include: – being left out from community emergency preparedness and planning[15] – being unsure of how to prepare for an emergency or disaster event[15] – lacking the confidence to advocate and lead DIDRR initiatives[25]. • Barriers facing service providers which prevent them from developing service continuity plans and enabling personal emergency preparedness with the people they support include: – a lack of guidance on how they can enact these two roles[6, 21, 25, 29] – inadequate human and financial resources funding[6, 9, 20, 25, 29] – a lack of legislative requirements or regulations not being widely enforced[6, 21, 29]. • Factors that hinder building capacity and capabilities among emergency personnel and governments include: – decision makers being unfamiliar with and insensitive to the values and goals of independent living, human and civil rights laws, and protections, and cultural and linguistic issues[12, 15, 18] – not receiving adequate training on how to facilitate emergency preparedness, response, and recovery for people with disability[6, 12, 31] – a lack of knowledge regarding available services which outline the complexities of functional independence for people with disability and how to support this independence[18] – the absence of specific guidelines, policies and practices addressing the needs of people with disability, or policy alternatives not being recognised and implemented by emergency personnel[12, 31] – a lack of human resources, financial resources and "know how" to improve existing policies and practices so that people with disability are assisted more effectively during emergencies[12, 31].	• Providing tailored training, tools, resources, and drills which can be adapted to different contexts to improve self-efficacy levels and emergency preparedness among people with disability, carers, service providers, emergency personnel and the general population[2, 4, 5, 6, 8, 9, 11, 12, 13, 15, 19, 21, 22, 23, 27, 28, 29, 30]. • Raising awareness about disability issues and the rights of people with disability to be protected in situations of risk and emergency. This can be done via advocacy, communications, training, and education[21, 22, 25]. • Service providers collaborating with emergency managers and governments to identify and address their own hazard vulnerabilities, develop procedures to enhance disaster resilience, and prepare them to receive technical and other assistance to facilitate service continuity during and after a disaster[21, 28]. • Improving compliance with exiting legislation or revising regulations to allow for better disaster management for people with disability[6, 21]. • Collecting data or evidence to support a rigorous evaluation of current emergency preparation, response and recovery processes, procedures, and systems. The evaluation should be designed to ensure that these procedures and systems are continuously improved to be more appropriate, effective, and feasible for people with disability, as well as for the population as a whole[6, 17, 18]. • Establishing an integrated disaster management model that addresses the essential, sometimes overlapping, functional needs of at-risk populations, including communication, health management, living situation, transportation, assistive technology, assistance animals, personal support and social connectedness[18, 20].

Partnering for Inclusion and Collaboration

Barriers	Enablers
• The roles of each stakeholder in DIDRR are not clearly defined[21]. • Societal limitations and stigmatization often prevent people with disability from participating in emergency management planning and procedures[29]. • Stakeholders largely lack local disability profiles. As a result, they may be unsure how to involve people with disability in the DIDRR process[12]. • Service providers frequently do not consider emergency preparedness to be a priority, especially when they are understaffed and busy addressing the issues affecting their clients every day[21, 30]. • Information sharing by national and local governments, as well as those engaging in frontline activities, is inconsistent, poorly coordinated and generally reactive rather than proactive[9, 16, 20].	• Implementing national policies which outline the role and responsibilities of different stakeholders in DIDRR and establish key achievement indicators of DIDRR[21]. • Providing opportunities for people with disability to learn about their disaster risk from emergency managers and service providers and encouraging them to embrace their individual choices and responsibility as key actors in DIDRR[4, 15, 21]. • Organising regular, structured, and inclusive community engagement where stakeholders at all levels can: – Develop a shared focus on human rights and strengths-based approaches to including people with disability in DRR; – Deepen their collective understanding about the root causes of vulnerability for people with disability in emergencies or disasters; – Create new ways of working individually and collaboratively to remove barriers to DRR for people with disability and their support networks; and – Undertake incremental changes in practice to increase the inclusion and participation of people with disability and their support networks in all phases of disaster risk management[21, 25]. • Combining local knowledge, networks, and resources to increase collective impact among people with disability, DPOs, service providers and emergency managers[4, 6, 15, 18, 19, 21, 25, 27, 29, 30].

Recommended Actions for the Emergency Management Sector from Review of the Peer-Reviewed Research

Scoping study findings point to multiple overlapping avenues for EM action on DIDRR. However, key priorities can be drawn from the peer reviewed research to achieve targeted action on DIDRR. These actions should happen in partnership with people with disability and the services that support them. These interrelated actions will support the development of inclusive planning, inclusive information, and inclusive practices.

Five specific areas for action are:

1. **Commonwealth and States/territories should develop data systems to understand and plan for the extra support needs of people with disability should place emphasis on gathering information on the function-based support needs of people with disability in emergency situations.**
   - Leverage existing services/systems that already have or that can readily collect information on the function-based support needs of people with disability.
   - Identify and collaborate with aware, capable, and prepared service providers as a critical starting point for developing robust information gathering and decision-making systems.
   - Consult widely with the disability community to ensure representative input into the co-design of these systems.
2. **Data systems should include geospatial mapping to better identify and map people, support needs, local assets, and capabilities that can be leveraged in emergencies. Such data can be:**
   - integrated with geographic hazard risk data and contemporary vulnerability and capacity risk assessments undertaken by the emergency sector.
   - used to inform local government disability inclusive emergency management plans.
   - used to build understanding about the development of emergency management capabilities of individuals and organisations in the community, health, and disability sectors.
3. **States/territories should support and resource local government to develop the capacity of service providers (community, health, disability) to increase the emergency preparedness of their organisations, staff, and the people they support.**
   - Preparedness support and preparedness tools should enable emergency preparedness planning that is tailored to the support needs of people with disability and the services (organisational/service context) that support them.
   - Preparedness support should enable tailored preparedness to progress from the individual to the organisational to the community level and support translation of preparedness resources into preparedness actions.
   - Capacity development support should enable two-way communication and feedback for increased inclusion and more effective emergency planning at the individual, organisation, and community levels that responds to unmet needs that perpetuates disaster risks for people with disability.

4. **Commonwealth, States/territories and local governments should engage with disability representatives to support the review and improvement of emergency management information. Such as:**
    - **emergency risk information, communications, and preparedness resources** so that these resources are accessible, readable, understandable, and actionable by a wider range of people who need information in alternate formats.
    - the accessibility, understandability, and actionability of **early warning systems and communications** by people with disability.
    - **current evacuation policy guidance, procedures, practices, and communications about evacuation** so that people with disability:
        - have evacuation options that are better matched to their support needs and situation.
        - understand evacuation options and plan for them together with their support networks.
        - are included in pre-planning for the access and support needs of people with disability at evacuation centres, shelters, relief, and recovery hubs which must move beyond physical accessibility to include universal access principles.
5. **States/territories should ensure emergency managers undertake training and routine updates to increase/maintain knowledge, skills, and behaviours in disability and human rights, person-centred emergency preparedness, and disability inclusive emergency planning.**
    - Emergency managers should learn and work together with people with disability and the services that support them to enhance shared learning about the lived experiences of people with disability in disasters and collaborative action on DIDRR that proactively identifies and responds to those risks.

PART 2

An examination of disability representation in Australia's Emergency Management Arrangements.

Research Questions

Part 2 of this scoping study asked:

1. To what extent do emergency management plans and guidance documents *recognise disproportionate risks* of people with disability in emergency management and disaster recovery plans?
2. What provisions are made in emergency management planning and guidance documents *for the extra support needs* of people with disability in emergencies?

Method

This component of the scoping study aimed to explore disability representation in Australia's Emergency Management Arrangements. Specifically, we sought to understand the extent to which emergency management plans and guidance documents *recognise disproportionate risks and make provisions for extra support needs* of people with disability in emergencies.

To ascertain this, we first conducted a rapid desktop review that began with the identification and screening of 354 documents (Box 4). A complete list of documents included in this screening can be requested from the authors.

Box 4. Number of documents included in rapid screening at different levels of the emergency management arrangements in each jurisdiction.

State	State Level	Zone / District / Region	Local Council	Community
Queensland	22	6	46	4
New South Wales	53	2	45	0
Victoria	36	3	45	1
Western Australia	34	0	9	0
South Australia	20	2	6	0
Tasmania	11	0	3	0
Northern Territory	2	0	2	0
Australian Capital Territory	2	0	0	0
Total (354)	**180**	**13**	**156**	**5**

Screening

In-text word searches were conducted for references to *disability and related terms* and then read for surrounding context. Words searched for included:

- Disability / disabled / mobility impairment / special needs
- Chronic illness, ill-health / medical condition
- Mental Health – also emotional well-being, psycho-social needs
- Homeless(ness) – people who do not live in a permanent dwelling and can include people who "sleep rough" or stay in their cars, or caravan parks etc.
- Vulnerable – where this reflects vulnerability of groups or people, but not related to vulnerable buildings or locations.

Rapid screening involved documenting the following for each policy or plan:

- Overall purpose, aims, objectives, principles
- Summary of the core content of the document
- A paraphrased summary or direct quotations of sections that mention disability and other at-risk groups (see word search terms above) across any phase of emergency management in each document was noted. Repeating the word "disability" in the title of a government department, was not recorded
- A frequency of the use of keywords from our search terms was documented. This system provided an indication of the number of times that each search term appeared and offered a rapid indicator to what extent the at-risk group has been addressed or not.

It was not feasible, nor beneficial to conduct a thorough content analysis on the entire set of 354 documents for the following reasons:

- There was variability of the nature and purpose of documents screened which would make such an analysis incoherent.
- Disability is insufficiently considered across the breadth of emergency management planning documentation including across national-level emergency management strategic frameworks and guidance documents.

Instead, findings from our initial screening supported the identification of documents to include in an in-depth analysis of content to answer the study questions:

1. To what extent do emergency management plans and guidance documents r*ecognise disproportionate risks* of people with disability in emergency management and disaster recovery plans?
2. What provisions are made in emergency management planning and guidance documents *for the extra support needs* of people with disability in emergencies?

Document Selection

From the initial rapid screening we identified the following documents to include in a content analysis (Box 5):

- all Australian all **state/territory-level emergency plans** authorised under each state/territory legislation.
- state/territory-level **frameworks providing guidance directly related to disability inclusion** in disaster risk management.
- a representative sample of **local emergency management plans** from across Australia.

Box 5. Documents included in a content analysis

State/Territory Emergency Management Plan Documents

State and territory emergency management planning documents state/territory emergency management plans describe the approach taken in each jurisdiction to *prevent, prepare, respond, and recover* from the impact of disasters. State emergency management plans (and their supporting documents) include the governance, coordination mechanisms, roles, and responsibilities of agencies; typically referred to as the state's emergency management arrangements.

State/Territory People At-Risk Frameworks

Some jurisdictions include additional policy guidance (strategy, frameworks, principles, practices) that address the support needs of people at greater disaster risk, including people with disability.

All Australian States, except for NSW, have policy/guidelines that focus on the needs of persons who are most at-risk in emergencies. We did not find any guidance document for at-risk groups in the territories (NT and ACT).

Local Government Emergency Management Plan Documents

Supported by the Advisory Panel, we developed the following strategy for selecting a representative sample of Local Government Emergency Management plans.

We applied a ranking method to take both **disability prevalence** (the percentage of people with health conditions that had lasted, or were likely to last, for 6 months or more. Source: Australian Bureau of Statistics (2018) Survey of Disability Ageing and Carers [Census TableBuilder], accessed 02 December 2022) and **disaster incidence** (number of disasters during 2012 – 2022 is greater than the median of the dataset of the state) into consideration. The number of LGAs selected in each jurisdiction was based on the number of LGAs and population size. If the LGAs were geographically close to each other, the one with lower prevalence of disability was excluded.

The resulting 25 Local Emergency Management Plans were included in this review:

State	LGA	No. Disasters	% Of PWD
NSW	Upper Hunter Shire (A)	16	66.67%
NSW	Kyogle (A)	17	48.25%
NSW	Dungog (A)	14	48.30%
NSW	Bega Valley (A)	15	39.82%
NSW	Greater Hume Shire (A)	8	66.06%
NSW	Shoalhaven (C)	16	34.97%
NSW	Port Macquarie-Hastings (A)	25	29.91%
VIC	South Gippsland (S)	27	39%
VIC	Murrindindi (S)	11	67%
VIC	Latrobe (C)	20	26.94%
VIC	Strathbogie (S)	9	86%
VIC	Pyrenees (S)	12	27.42%
QLD	Fraser Coast (R)	12	64.52%
QLD	Hinchinbrook (S)	12	50.00%

State	LGA	No. Disasters	% Of PWD
QLD	Livingstone (S)	12	41.07%
QLD	Napranum (S)	12	33.66%
SA	Murray Bridge (RC)	4	45.45%
SA	Flinders Ranges (DC)	3	36.84%
WA	Murray (S)	4	45.24%
WA	Denmark (S)	7	36.21%
WA	Woodanilling (S)	1	42.11%
WA	Port Hedland (T)	11	22.92%
WA	Merredin (S)	2	29.27%
TAS	Kentish (M)	5	76.00%
NT	Victoria Daly (R)	10	25.00%

Procedure

The procedure for content analysis, applied to all three sets of documents, was informed by the following questions:

1. What is the purpose of the document?
2. Does the document *identify and profile* the disproportionate risk of disasters for people with disability? Y/N
   If Yes:
   a. How are people with disability and their support needs represented in the in the document?
   b. How are support needs described?
3. Does the document reference any other document that identifies or responds to risks for people with disability in emergencies? Y/N
4. Does the document *describe intent (goals) or recognise the potential of a strategy/activity/action to positively impact the safety and well-being of people with disability before, during, or after disasters?* Y/N
   Focus was on goals and potential of actions because of the early stage of DIDRR development in Australia.
   If Yes:
   a. *What stage is targeted (PPRR)?*
   b. *Are the characteristic features (mechanisms) of DIDRR evident in the strategy/activity/action?*
   c. *What methods, tools, or approaches are used to develop, monitor, and/or evaluate the impact of the strategy/activity/action?*
5. Following the content analysis and description of findings, team discussions were guided by the following question:
   - *How might this strategy/activity/action be further improved or developed?*

Limitations

The following limitations of this content analysis of the included documents should be considered when contemplating the findings.

First, the review of emergency management plans at the state and local levels was limited to the "head" document – The Emergency Management Plan. We did not consider sub plans, supporting plans, or recovery plans in our analysis of state and local-level emergency management documents. Time constraints limited our capacity to include these additional documents which may have:

- identified risks and support needs of people with disability in emergencies, and
- included strategies to manage those risks.

However, we did chart whether the Emergency Management Plan (head document) indicated whether the extra support needs of people with disability were considered elsewhere (e.g., in a supporting plan, sub plan or other document). We found only two instances (at State-level) where other documents were referenced. In both instances, these were risk frameworks already included in this content analysis (see APPENDIX C).

Second, the processes used to select Local Government Plans supported a representative sample and served to mitigate the potential for researcher bias. This was because the University of Sydney research team, leading this review, has worked with several local governments over the past decade as partners and supporters of participatory research to develop local community capability in DIDRR. Bias was further managed by having a project support (RH) who was not involved in any prior DIDRR research collaborations charting the data.

Interestingly, none of the local government emergency management plans from councils that have previously partnered with our research team were selected for this content analysis. It should be recognised, however, that several local councils across Queensland, New South Wales and Victoria are actively working to increase disability inclusion in emergency management. Current Disability Inclusive Emergency Planning (DIEP) forums are being undertaken in NSW as part of the Leave Nobody Behind project which aims to develop of an operational framework for DIDRR in NSW.

DIEP reports share findings from forums undertaken in LGAs across these three states. These reports and the experiences of participants (including those with responsibilities for local government emergency management planning) could provide helpful direction to understand how local government emergency management planning and practice has developed through this partnership research and capacity development program. That body of work is currently in progress and will be made available in 2023 at this link: https://collaborating4inclusion.org/diep/. The results of past inclusive local Disability Inclusive Emergency Planning (DIEP) forums, conducted in Queensland in 2019, contributed to the co-design of the Queensland DIDRR Framework and Toolkit which was included in this content analysis (see APPENDIX D).

Third, documentation of plans may not account for what happens in practice and therefore future research should consider implementation of these plans and how practices impact on safety and well-being of people with disability in emergencies.

With those limitations in mind, it is informative to consider the way in which people with disabilitywere included (or excluded) in emergency management documents. It offers a useful baseline for DIDRR development in emergency management policy, upon which future progress can be gauged.

Findings

The reader is directed to APPENDIX C, D and E which present the results of the content analysis.

Document Purpose

Box 6 provides an overview of the main purpose of each set of documents and notes some key differences across jurisdictions and across the types of documents.

- The State (APPENDIX C) and Local Emergency Management plans (APPENDIX E) align with legislated requirements in each jurisdiction.
- The state-level guidance documents (APPENDIX D) align with Australia's shared responsibility framework and strategies.
- There is limited evidence that these documents are effectively interconnected in ways that are necessary to support governments to shift from intent to targeted and measurable action-oriented change on DIDRR. This is the focus of the discussion and recommendations that follow in this section.

Box 6. Document Purpose or Statement of Aim

State EM Plans	Local Government EM Plans	State Level Risk Frameworks
Common aims (QLD, VIC, WA) are to document how emergency management will be coordinated (e.g., an emergency response plan)	Common aims are to detail the emergency management procedures, operations, and roles of the emergency sector	Common aims are to improve preparedness, increase safety, and reduce the impact of disasters on people at greater risk
In contrast, SA and TAS plans specify the aim of the plan is to positively impact people, their well-being, and resilience	Some include the aim to minimise the impact of disaster on local communities	No Frameworks were found for *NSW, NT, and ACT QLD has two documents. One focuses on vulnerable people and the other is specific to DIDRR.

*Development of an operational framework for cross-sector collaboration on DIDRR at the local community level is in progress in NSW. This is part of an Australian Research Council Linkage grant that is supported by the NSW Government. It was not available at the time of this review.

The two study questions are considered together in this discussion of findings. They are:

1. To what extent do emergency management plans and guidance documents *recognise disproportionate risks* of people with disability in emergency management and disaster recovery plans?
2. What provisions are made in emergency management planning and guidance documents *for the extra support needs* of people with disability in emergencies?

Profile of People with Disability in Emergency Management Plans and Guidance Documents

People with disability and their support needs are not profiled in State and local emergency management documents. Where mentioned, people with disability are included as one of several "*vulnerable*" groups.

Recognition is made of factors that increase vulnerability of people with disability in emergencies and there is some consideration of the impact (primarily negative) of those factors on the safety and well-being of people at greater risk. The factors identified are not comprehensive nor addressed equally across emergency management planning documents.

- Factors that increase vulnerability reference mostly personal factors or impairments (e.g., culture, language, age, medical condition, low understanding of warnings; reduced health and well-being, "special needs", etc).
- Fewer environmental factors are identified (e.g., geographic proximity to hazard risks).
- Structural barriers that increase disaster risk are limited to the identification of need for improvements to communication and information systems for people with different communication disabilities (e.g., deaf, low vision).

The dominant perspective in the state and local emergency management plan documents is that people with disability have "deficits" that make them vulnerable. The problem is that knowing someone has impairments, conditions, or "deficits", does not help government and emergency personnel to plan for that support. As recommended in the research literature (see Part 1), a more helpful framework for planning for the extra support needs of people with disability (and other at-risk groups) is to identify and gather information about function-based support needs.

- Planning that is based on functional support needs, invites meaningful participation of people with disability (and their support networks) to identify what they can do for themselves (strengths & capabilities to manage in emergencies with their existing supports) and what their extra support needs are in emergency situations.
    - This approach aligns with Australia's shared responsibility framework and strategy.
    - Australia's National Strategy for Disaster Resilience and the National Disaster Risk Reduction Framework advocate for the development of shared and defined responsibilities so that individuals and community organisations can contribute to disaster risk reduction within their capabilities. However, they also lack methods, tools, and programmatic guidance on how to include people with disability and their support networks.
    - The Person-Centred Emergency Preparedness (P-CEP) framework and toolkit was co-produced in Australia to respond to this gap. The P-CEP supports a functional needs-based approach to (self)assessment, data gathering and preparedness planning at the individual, organisational, and community level.

Strategic Direction on DIDRR in Emergency Management Plans and Guidance Documents

No specific direction is given in the state or local emergency management plans on how to address factors that present barriers to the safety and well-being of people with disability. Strategic direction can be found in the guidance documents (APPENDIX D). These are mostly in the form of **principles to guide collaborative efforts** in partnership with the community services sector and c**alls for preparedness support** to assist people to tailor emergency preparedness to their support needs and situation. This is further discussed below.

A diverse range of **protective measures** are noted **as goals or intent** in emergency management plans (e.g., *public information and emergency warnings in accessible formats; social connectedness to community; lists of vulnerable facilities; lists of vulnerable people; etc*).

- Protective measures and goals are inconsistently considered across the emergency management plans at both state and local levels.

There is limited detail on how these measures are to be implemented (and to what standard) or how they are to be evaluated for their impact on reducing risk and increasing resilience of people with disability to disaster.

General statements are made in some state-level emergency management plans that indicate that these details ***should be included*** in local emergency management plans or, more commonly, ***should be considered*** in the development of public communication (e.g., for conveying emergency information and warnings to people who access, use, and understand information differently).

- These statements suggest an **intent to tailor support** to the needs of people with communication disabilities but there are **no objective or measurable actions** to act on or gauge progress on that intent.

A few state level emergency management plans point to state-level at risk (or vulnerability) frameworks as a source of guidance for translating emergency management intentions/goals into actions, particularly in the areas of **"preparedness support" and "collaboration"** with others.

- Most emergency management plans do not mention their own state-level guidance documents.
- Some jurisdictions do not have equivalent "at-risk"/vulnerability framework or guidance documents.

It is not clear whether local governments are required to act on guidance provided in the "at-risk"/ "vulnerable people" frameworks (see APPENDIX D). **The exception is in Victoria** where local emergency management plans reference the vulnerable people in emergencies policy/framework (see APPENDIX E, **Victorian Local EM Plans**) with requirements as follows:

- The VIC framework includes **strategies and associated policy for developing local lists** of (a) facilities where vulnerable people may be located and (b) people who may need **tailored advice in the event of an evacuation.**
- Those lists are **intended to be made available to those with responsibility for helping vulnerable residents to evacuate.**

The Victorian Government Vulnerable People in Emergencies (VPE) Policy[34] was developed in response to the 2009 Victorian Bushfires Royal Commission recommendation for tailoring evacuation recommendations to people at greatest risk. Recognising the disproportionate risks for people with disability, and other groups (e.g., people with chronic health conditions, the elderly), the VPE policy was put in place to address the risks to safety and the need for protection in emergencies. The VPE, administered by the Department of Families, Fairness and Housing (DFFH) (formerly DHHS), includes a Vulnerable Persons Register (VPR). The current VPR[35] includes a cohort of people over 70 years of age that have been identified as requiring extra support during an emergency and who live in areas at greatest bushfire risk. The VPR is managed by local governments to be used by police and anyone else with pre-arranged responsibility for helping vulnerable residents to evacuate.

Garlick (2015) pointed to numerous failings of the VPE policy to provide tailored emergency planning and evacuation support, including the challenge of identifying who qualifies as "vulnerable". The VPR has many reported issues, including a strict criterion for inclusion, a focus on evacuation during response phase, a reliance on service providers to add their clients to the list[36], and lack of transparency about what practical supports will be provided to those on the list, and how they will access or use those supports in an emergency.

[34] https://providers.dffh.vic.gov.au/vulnerable-people-emergencies-policy

[35] People on the VPR are added to the register because they meet three criteria:
1. frail, and/or physically or cognitively impaired.
2. unable to comprehend warnings and directions and/or respond in an emergency.
3. cannot identify personal or community support networks to help them in an emergency.

[36] This requirement was updated in 2018 to account for changes in the delivery of disability services which are now organised and administered through the National Disability Insurance Scheme.

It is important to recognise that the VPR was designed as an instrument to identify people who need assistance (e.g., from emergency services) to evacuate, not as a tool to support their inclusion in proactive and planning for how they will plan and act with their support network in an emergency.

With one exception (APPENDIX D**, Queensland DIDRR Framework**), the stated outcomes of all at-risk framework documents are broad-based, process-oriented, and lack specific actions (e.g., *work together to improve safety and security, health and well-being, knowledge, and or social connection; support preparedness; etc*). Emphasis is placed on **guiding principles** which is consistent with recent developments in DIDRR advocacy and policy guidance (see Part 1 findings). Targeted actions of specific stakeholders and measurable outcomes are needed to enhance the practical utility of these guidance documents. For example,

- SA and TAS guidance (at-risk frameworks) (APPENDIX D) provide examples of guidance grounded in a "strengths-based" approach. Currently, these frameworks implicate individuals and community service providers to work together to identify/profile risk. Again, their roles and contributions are insufficiently connected to legislated EM arrangements. Processes emphasise interactive dialogue and engagement, for learning and working together and offer principles for how that engagement can be initiated and developed.

All guidance documents (APPENDIX D) emphasise the **importance of collaborating with service providers** (e.g., community, health, disability, social welfare), who are recognised as an important resource for facilitating **tailored preparedness** support to people with disability (and other groups) (see Part 1 of this report for more information and recommendations from the research literature).

The QLD, WA, SA and TAS frameworks (APPENDIX D), all describe th**e intent to undertake collaborative work** with various community groups to: (a) understand their role and contributions to building disaster resilience and (b) identify and engage with people who may be vulnerable and work together to plan for their support and safety in emergencies.

- The WA document speaks to a full time "At Risk Communities Program Officer" to develop and deliver training in cooperation with stakeholders. The nature of that training and who should receive it is unclear.
- There is limited consideration of how these service providers will be supported and resourced in these collaborative efforts.
- There is no consideration of their capability (i.e., knowledge, skills, competence) to facilitate preparedness support.

Only one at-risk framework/guidance document is specific to people with disability. This QLD DIDRR Framework and Toolkit (APPENDIX D) provides the greatest degree of specificity on how to translate principles into actionable change toward DIDRR. It includes:

- an action framework with measurable outcomes grounded in the function-based support and tailored planning needs of people with disability and the services that support them.
- tools for emergency managers to work with people with disability and the services that support them to progress tailored planning for the extra support needs of people with disability from the individual to the organisational and community levels.
- practice tips, examples, and a companion resource library/hub to help people get started.

A common need for tailored **preparedness support** is identified in the at-risk frameworks. Only the QLD DIDRR Framework (APPENDIX D) clarifies specific action-oriented preparedness outcomes for tailoring emergency preparedness to support needs at the individual, organisation, and community level.

In addition to the absence of function-based information about the support needs of people with disability, all plans and guidance documents (with one exception) **lack provisions for meaningful participation and representation of people with disability in emergency management planning**. This can be achieved by increasing the involvement of Disabled People's Organisations (DPOs) and Disability Advocacy Organisations (Box 7) to support identification and planning for the extra support needs of people with disability in emergencies.

- Like service providers, it is important that disability representatives and advocates who participate in emergency management planning (policy and practice formulation):
  - have sufficient knowledge about disaster risks,
  - engage in tailored personal and organisational preparedness planning,
  - understand the relationship between personal, organisational, and community-level emergency planning responsibilities, and
  - are well-acquainted with Australia's emergency management arrangements.

Box 7. Disability Representatives and Advocates

Disabled People's Organisations (DPOs) can play a significant role in disaster policy, planning and interventions. Through their lived experience and leadership roles as disability advocates, DPOs represent the voice and perspective of their members with disability. DPOs have in-depth understanding of the factors that increase risk for people with disability in emergencies. They also have access to informal networks of support and communication. This information is not readily available within mainstream emergency management. Listening to people with disability and learning about their experiences is essential to understanding and removing the barriers that increase vulnerability in disasters.

DPOs typically align with one of three categories:

- Cross-disability – represent the interests of all people with diverse disability
- Disability-specific – represent the interests of a particular group of people (e.g., people with spinal injury)
- Population-specific – represent the interests of a certain population group (e.g., women with disability)

The fundamental difference between DPOs and other disability sector organisations is that DPOs are driven by people with disability (at least 51% people with disability at both board and membership levels), with the purpose of serving and representing their members with disability.

Disability Advocacy Organisations work to promote, protect, and defend the human rights of people with disability. They may advocate for themselves, another person, or a group of people with disability. They work through issues that have an adverse effect on rights for individuals, groups, or on a society-wide level.

This was the first known attempt to appraise Australian Emergency Management Plans and guidance documents to understand whether and how provisions are made for people with disability in emergencies. This supports the reporting requirements by the Australian Government on Australia's Disability Strategy (2021-2031) Outcomes Framework and Data Improvement Plan.

There is a critical need to develop self-assessment measures that can be undertaken by state and local governments to assess the nature and quality disability inclusion in emergency management plans.

To further support the development of effective measures to assess disability inclusion in emergency management planning, it is highly recommended that the Commonwealth government provide leadership on the development a maturity assessment framework and reporting tool. This measure should be co-designed in partnership with government stakeholders (e.g., emergency planners) and tested to ensure its feasibility and effectiveness in improving disability inclusive emergency planning.

Recommended Strategies to Develop DIDRR in Emergency Management Plans and Guidance Documents

To support Australia to fulfil its obligations under the UNCRPD and Sendai Framework (see Box 1), the following strategic actions can be undertaken:

1. **Profile people with disability and their function-based support needs in State and Local Emergency Management Plans. Include in the community profile information about aware, capable, and prepared community/disability services and accessible assets that can be mobilised in emergencies.**

   Australian Bureau of Statistics (ABS) data provides information that can be used to profile the needs of people in their communities. ABS data are commonly used as part of developing community risk assessments and should be included in the community profile/context sections of all emergency management plans. Use of this data is a helpful starting point.

   Planners should be aware that these statistics give emergency planners only a superficial impression of the factors that increase risk for people with disability in emergencies. Therefore, the following actions can be taking over time to improve understanding and documentation about the extra support needs of people with disability and improve pre-planning that protects their safety and well-being when disasters strike. They include:

   - Use the Person-Centred Emergency Preparedness (P-CEP) Framework to gather information on both the capabilities and support needs of people with disability in emergencies. Aggregated information about support needs can be used to target actions to address barriers to safety (e.g., transportation in evacuation, communication of early warnings) (see also Part 1 Barriers and Enablers and recommendations). Co-produced in Australia, this is a world-first tool that combines person-centred emergency preparedness with community-level emergency planning to ensure that people with disability and their support needs are at the centre of emergency management planning and disaster risk reduction. P-CEP is being used to advance individual and shared responsibilities for DIDRR in Australian communities. Details on the P-CEP co-design process, key features of the tool and its utility are described in full in the Oxford Research Encyclopaedia of Global Public Health[37].
   - Over time, community profiling at the local government emergency planning level should include more detailed information about the preparedness, capabilities, and function-based support needs of **people with disability and the services that support them**, including local assets that can be mobilised to tailor preparedness support and increase collaboration with community and disability services before, during, and after disasters (see Part 1 findings and recommendations; see Part 3 Resources that are enabling capacity development). This can be achieved through wide-spread adoption of P-CEP and future effort to design data-information decision systems that assist with gathering and using this information for improved emergency management planning and DIDRR actions.

[37] Villeneuve, M. (2022). Disability-inclusive emergency planning: Person-Centred Emergency Preparedness. *Oxford Research Encyclopedia of Global Public Health*, https://doi.org/10.1093/acrefore/9780190632366.013.343

2. **In State and Local Emergency Management planning documents, make explicit reference to other documents where strategic and practical guidance on disability-inclusion can be found so that those responsible for enacting emergency management plans and its component parts (e.g., health and well-being committees; recovery committees) are directed to those supporting and guidance documents.**

   Reference these supporting and guidance documents in emergency management training, orientation, and induction programs to increase familiarity and understanding of how they:
   - support strategic responses during and after disasters and
   - improve practical actions of those responsible for implementing them

   Include guidance documents in any reviews of lessons learned to give further shape to these supporting and guidance documents.

3. **Strengthen the practical utility of state-level guidance documents (e.g., at risk frameworks) by including targeted actions of specific stakeholders and measurable outcomes on DIDRR.**

   Specific areas of focus should be on enhancing measurable action on the two key areas already evident in state-level guidance documents that are also recommended in the research evidence (see Part 1). They are:
   - **tailored preparedness support** for people with disability and the services that support them, and
   - **cross-sector collaboration** between the emergency, community, and disability sectors

   Embed into policy requirements that DIDRR strategies to be implemented in partnership with disability representatives to support and improve actionability and implementation. This is needed to ensure that such strategies identify and plan for the extra support needs of people with disability in emergencies and ensure that strategic actions are acceptable, realistic, and feasible.
   - Support and resource disability representative organisations to co-produce and test these guidance documents for their practical utility.
   - Require monitoring and evaluation to support ongoing feedback, improvement, and measurement of progress toward DIDRR.

   Share information about these guidance documents with local emergency/disaster management groups and committees. Provide regular updates to the EM Groups/ Committees on how strategies are being implemented and the impact on people with disability and the services that support them.

4. **Build capacity of government and emergency services by integrating disability awareness and DIDRR actions into training for the emergency management sector, particularly those with responsibilities for risk assessment, risk communications, emergency management planning, community engagement, and recovery planning and support.**

   Disability awareness programs exist. For example, the Disability Advocacy Resource Unit (DARU) hosts a free online Disability Awareness Training module. This program provides a general overview of the legislative framework. The content focuses broadly on the inclusion of people with disability in Australia. An underlying aim is to challenge ingrained cultural and attitudinal barriers that perpetuate discrimination against people with disability. This program is not specific to the emergency management

sector. The Person-Centred Emergency Preparedness (P-CEP) certificate course available through The University of Sydney Centre for Continuing Education offers a nationally consistent approach for emergency managers to learn and work together with people with disability and the services that support them to advance person-centred capability-focused approaches to DIDRR development. This program is the only training program specific to DIDRR development and change. It was co-produced in partnership with government and emergency services, people with disability and the services that support them. A unique feature of this program is that the required drivers of implementation were built into the education design to increase applicability and transferability of learning into practice by diverse actors across the emergency management sector (e.g., government emergency managers, community engagement officers, resilience and recovery officers, etc) . Evaluation results show the impact of this program in supporting specific actions of government and emergency services personnel in DIDRR planning, information, and practice development and change.

P-CEP is a framework and process tool that supports and directs person-centred and capability-focused approaches to DIDRR development and change. It consists of a framework of 8 function-based support elements, four process steps, and three principles that guide its application. P-CEP gives shape to developing best practice for inclusive emergency management planning. P-CEP does not replace existing emergency management tools and resources. Rather the P-CEP process guides effective implementation and ongoing improvement so that people with disability are not left behind due to inaccessible information, tools, and resources. Here are two examples:

a) Country Fire Authority Victoria's Emergency Planning Advice Service (EPAS) program[38] was built as a vehicle for implementing P-CEP to provide tailored preparedness support for people with disability, elderly, and chronic health conditions at greatest bushfire and housefire risk and work in partnership with local government to address barriers that increase risk through improved planning, referral mechanisms and improved collaboration with local community, health and disability support services. The EPAS program is built on the Four P-CEP Steps. Training integrates DARU's Disability Awareness training module as part of the educational design.

b) Queenslanders with Disability Network (QDN) developed the Get Ready, Plan Ahead Program[39] as a vehicle for delivering P-CEP in small group workshops to enable personal emergency preparedness actions of people with cognitive, sensory, and multiple disabilities. The program uses transformational leadership theory to combine QDN's peer support model with the principles and process steps of P-CEP. The program is delivered by peer leaders, including people with intellectual disability to increase emergency awareness and preparedness. The peer Leaders work in partnership with local emergency managers from council and emergency services agencies to tailor risk information and education to the needs of learners.

[38] https://engage.cfa.vic.gov.au/preparing-vulnerable-people
[39] https://qdn.org.au/our-work/disability-inclusive-disaster-risk-reduction/get-ready-plan-ahead/

5. **Use available tools and resources to support strategic actions on DIDRR. Specific focus should be on enhancing opportunities for tailoring preparedness support to individuals and the services that support them and collaborating across sectors to identify and address the barriers that increase risk for people with disability in emergencies.**

   In Part 3 of this report, we identify several high quality and readily available resources that can be used to facilitate preparedness support and enable cross-sector collaborative action for community and disability stakeholders to share responsibility with government and emergency services on DIDRR. Use the resource evidence-gap map included in Part 3 to support decisions about where to focus future development of resources, their implementation, and evaluation. (See Part 3 Recommendations).

   - Make sure that the individuals and organisations who are resourced (e.g., Disaster Resilience Fund; State Resilience/Recovery Funds) to undertake these responsibilities are aware, capable, and prepared themselves.
   - To maximise their potential and contributions to DIDRR, give them training in preparedness support and make sure they understand Australia's emergency management arrangements.

6. **Make accessibility of emergency management risk information and communications a priority action. Take steps to ensure awareness, preparedness, response and recovery messages and services are universally accessible for everyone.**
   - Use research-informed methods to review current communication processes and tools in partnership with people with disability to identify and target areas for improvement.
   - Evaluate the impact of improvements for people with disability. Specific consideration should be given to increasing access, readability, understandability and actionability of risk information and communications.
   - Obtain feedback through monitoring and evaluation to assess how improvements to risk information and communications support people with disability to access, learn and use information to tailor emergency preparedness and response plans to their support needs and situation.

PART 3

A search of grey literature and grey information to retrieve “good practice” resources relevant to emergency management DIDRR development in Australia.

Research Questions

Part 3 of this scoping study asked:

1. What is the resource/tool/activity about?
2. What sector is leading the work?
3. What is the primary purpose of the resource/tool/activity?
4. What format is used to deliver the resource/tool/activity?

Method

We conducted a search of grey literature and grey information to retrieve tools, resources, and good practices/activities relevant to DIDRR.

Grey literature is a term used to describe resources that are scattered and hosted within several organisations that produced the knowledge. As with many topics, knowledge, and evidence on DIDRR is accumulating through innovation in practice. It may not be of sufficient formality to meet the definition of grey literature. This is referred to as *grey information*.

Search Strategy

Grey literature and grey information are difficult to search systematically. We developed a search strategy and sought feedback from the Expert Advisory Panel. As a team we engaged in iterative review of the success of our search which was tested and improved alongside charting the findings.

To support the identification of grey information and grey literature concentrated nationally, we:

- drew on a search strategy employed for a prior review of international resources relevant to DIDRR conducted in 2019 (see DIDRR Resource Library).
- took direction from learners who had completed the Person-Centred Emergency Preparedness (P-CEP) Certificate Course at The University of Sydney. Two threaded discussion posts invite learners to identify **government and emergency services and community, health, and disability services** "doing good work" on DIDRR. This enabled access to numerous people, organisations, and resources from the experiences of 214 learners across 8 cohorts who had undertaken the training in 2022.
- conducted web-based searches focused on Australian websites including government (e.g., Australian Government Department of Health, Emergency Management Victoria), government agencies (e.g., Infrastructure NSW), non-government organisations (e.g., Australian Red Cross), emergency services (e.g., Queensland Fire and Emergency Services, CFA Victoria) peak community services organisations (e.g., VCOSS), disability (e.g., spinal injury) and carer organisations (e.g., Carers NSW).

A variety of search terms were used in varied combinations depending on which sector we were searching (e.g., disability terms were used in emergency sites, emergency and disaster terms were used on disability sites, both were used on government sites).

Selection Criteria

The selection process involved reviewing the introductory page and purpose of each resource. To determine if the resource met our inclusion criteria.

Include	Exclude
Toolkit, preparedness tools, practical guideline, tips, case study, video, webinar, training, research briefs, resource hubs – relevant to DIDRR	Report, best practice recommendations, policy documents, news article, updates, advertisement
Natural hazard emergencies, house fire or pandemic	Other emergencies (e.g., Humanitarian crisis, conflict)
Disability, functioning, chronic conditions	
One or more DIDRR mechanisms evident	

Charting Framework

Four members of the research team workshopped the charting framework which was created in Excel. One project support (CB) undertook initial charting of the resources. The team (CB, JC, PS, MV) met together regularly to review progress and evaluate both the search and charting approach. Iterative improvements were made to strengthen charting decisions. These improvements also supported and strengthened our search (e.g., depth and scope). This process resulted in three main improvements to the charting framework (Figure 2). Improvements were supported by thematic analysis of emerging findings which allowed us to group qualitative information and create categories for greater consistency in the final charting. This was aided with the creation of drop-down menus in Excel.

After the initial phase, the team workshopped options for presenting the findings and deliberated with the Advisory panel. We decided on presenting the resources in a “gap map” with hyperlinks to the resources. We tested the layout of the gap map iteratively as we progressed to the final charting stage. Our decisions for layout were tested by re-configuring how the three elements of the gap map (e.g., purpose, format, sector) were displayed. We landed on the bubble chart in Companion Document B, in part because it was the most efficient way to present the information visually. Advisory panel input showed that having the sector represented in the coloured bubbles would be of most interest and use to different stakeholders.

After the “revised” phase (Figure 4), the whole data set was reviewed by MV and PS which supported the final revisions to the charting framework and presentation in a gap map. PS and MV worked together to ensure accuracy of the drop-down options (i.e., for consistency in charting the purpose, sector, and format). JC reviewed the final charting for accuracy. Differences of opinion (e.g., determining the primary purpose of a resource) were resolved through discussion between JC, MV, and PS. The Advisory panel reviewed a penultimate draft of the gap map and resources. No major changes were made to the content. Missing information (e.g., durable weblinks) was sought with support of the Advisory panel. JC created the final bubble chart and its succeeding table in Companion Document B.

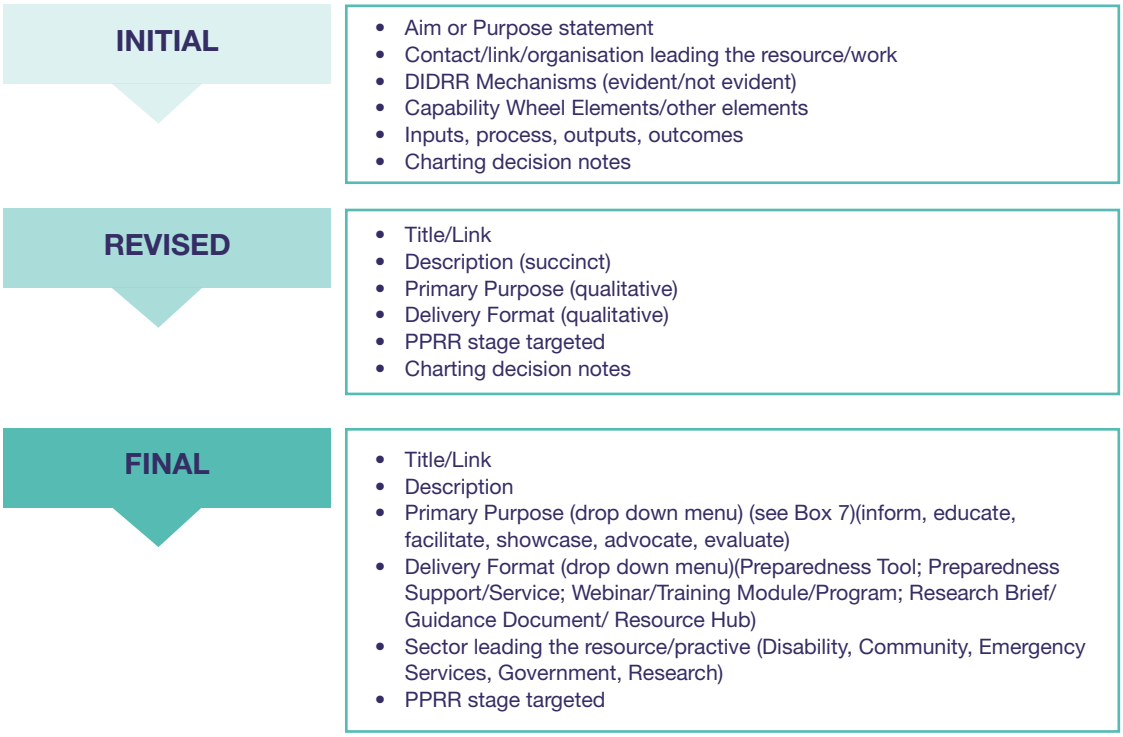

Figure 4. Stages of development and improvement of the charting framework

Box 8. Primary purpose of the resource

Purpose	Definition
Inform	give information, raise awareness about (e.g., risk, preparedness, evacuation, warnings, emergency shelter, response, recovery supports)
Educate	teach a knowledge, skill, or behaviour based on learning objectives or plan
Facilitate	support or enable someone to do something
Showcase	model, show, illustrate – particularly to demonstrate complex ideas or multi-stakeholder actions
Advocate	standing up for rights, enabling activation of rights, giving voice to others to achieve rights/justice
Evaluate	to monitor the process of implementation and assess the effectiveness on outcome achievement

Limitations

Grey literature and grey information searches are time consuming and have potential limitations (e.g., difficult to replicate the search strategy; potential to miss materials/activities, challenge to access materials/activities locked behind organisation firewalls, the inconsistency of language used to name these resources, etc.). These limitations are expected when searching for information that is internal to organisations and developed through emerging innovations in practice.

We encountered each of the following well-documented issues when conducting our search:

- There were no clearly defined methods that we could follow for conducting this novel search, so we documented our process as accurately as possible and drew on a previous search strategy.
- Although we tracked our search decisions, it may be difficult for someone else to replicate the search or the search my not result in retrieval of the same information.
- It was challenging to manage and extract relevant information from diverse sources that were designed for different purposes and where resources had vastly different formats for sharing information and different intended audiences.
- We were challenged by the diverse lexicon used to name resources, especially since DIDRR is a relatively new concept. Inconsistent language reduced search efficiency because different terms were used to describe similar things. The DIDRR mechanisms were used to manage this challenge. We were generous in our inclusion of resources that met one or more of the characteristic features. We excluded all resources if no mechanisms were evident. This process required team deliberation.
- Practically, time constraints limited the breadth of our search. However, we were reassured that our search was comprehensive when our expanded searches (including recommendations by Advisory members) revealed the same or similar tools from our original searches.
- The research team has longer experience working in Queensland, New South Wales, and Victoria. Hence, we may have missed important resources housed in other Australian states. However, we were aided by participants of the P-CEP Certificate Course which also included learners from other jurisdictions (e.g., WA, SA, ACT, TAS).

Additionally,

- Descriptions did not always offer insight into the utility of the resource for people with disability.
- Some resources contained useful contextual information on how, why and in what context the resource was developed or used, while others provided no contextual details.
- It was sometimes difficult to assess the quality of information, particularly for resources that lacked an explicit conceptual foundation or apparent research evidence. Future effort could undertake a quality review of resources included in Companion Document B. This would require the development of a tool for assessing quality because DIDRR is an emerging practice.

We addressed these challenges by applying a systematic approach to charting that was documented above.

Despite the limitations, this search for good practice resources is an important part of this scoping exercise because DIDRR is an emerging practice. **This component of the scoping study enabled us to provide the first mapping of Australian DIDRR resources**. Benefits included:

- Search for grey literature/information revealed a range of practices that are occurring in Australian communities.
- Broad scope allowed for consideration of the practices of a diverse range of emergency management practitioners (e.g., Local and State Government, Emergency Services, Recovery Support, etc) to capture potential resources across PPRR.

- The search revealed practices (tools, activities, resources) that are valued by emergency management and other sectors, and that are considered useful, feasible, and appropriate for engagement by this sector in DIDRR.
- Identified resources revealed information about the roles of other sectors who also undertake DIDRR (e.g., community, disability).

Findings

Part 3 of this scoping study revealed a suite of resources (n = 160 resources) that can support DIDRR actions. This includes numerous resource hubs that host resources from multiple sectors.

The bubble chart in Companion Document B maps the purpose and format of resources available (a resource-gap map). It shows where there is a concentration of resources and where there are gaps. It also shows which sectors are leading the DIDRR resource/effort. The size and colour of the "bubbles" indicates number of different types of sectors that have contributed to the resource base. The details on each resource are presented in the succeeding table in Companion Document B.

The reader is encouraged to use the Resource Gap Map and hyperlinks to each reference in the succeeding table to explore the specific details of each resource including:

> Title of the resource
> Primary purpose
> Description
> Delivery Format
> Sector Leading the Work
> PPRR Stage

By visually presenting the purpose and type of DIDRR resources developed or used by different sectors, it can be observed that:

- There are numerous videos available that cover a wide range of purposes (inform, educate, facilitate, showcase, advocate).
- Case studies appear to be used by researchers to showcase DIDRR and by the disability sector to advocate for DIDRR.
- There are evidence-based preparedness tools that target disability inclusion, and they are being used to educate and facilitate.
- Preparedness support services are undertaken by emergency, community, and disability services sectors. Research is being conducted on preparedness support.
- There are existing webinars, training modules and programs designed to educate and showcase DIDRR.
- The research sector is represented across the spectrum of resource formats that fulfil a range of functions (e.g., inform, educate, facilitate, showcase, advocate, evaluate).
- There are several guidance documents and research briefs that fulfil multiple purposes.
- The government sector makes DIDRR resources available in "resource hubs" but the disability sector also collects and shares resources, and so to do community and emergency services, albeit to a lesser extent.
- Gaps might give new directions for DIDRR development. Other gaps may be appropriate given the current trajectory of DIDRR development. For example, it is possible that preparedness support/services are not sufficiently developed (stable) to warrant informing or showcasing. Yet, research is being conducted.
- Overall, there are numerous DIDRR resources that can support multiple stakeholders to get started.

Using the Resource Gap Map

The resource gap map has greatest utility as an interactive and conversational tool and should be used to promote cross-sector learning and shared planning for DIDRR. The reader is encouraged to interact with the bubble chart and its succeeding table in Companion Document B by exploring the information in different ways such as:

- View the resources by row to explore:
  - the purpose of the various resource types
  - which sector is leading work to develop those DIDRR resources/practices
  - the potential use of a resource for different purposes or by different sectors
- View the resources by column to explore:
  - different types of resources/formats available that fulfil a similar purpose
  - where different sectors are focusing their efforts on resource development/practices
- View the resources by sector to explore:
  - how different sectors are working toward DIDRR
  - whether and how different sectors are working together
  - how resources might promote cross sector effort
- Explore gaps (white space) and consider:
  - where resources/DIDRR efforts are most needed
  - what types of resources are missing (e.g., recovery)

Assessment of the utility of these resources is also encouraged. In combination with its succeeding table, the bubble chart in Companion Document B can be used to support understanding and decision making such as:

- Knowing what resources are available so that effort isn't unnecessarily duplicated.
- Having ready access to available resources that can be applied, combined, implemented, and evaluated.
- Increasing resource use by multiple stakeholders.
- Identifying where to focus effort on the development of new resources.
- Making decisions about modifying existing resources to be suitable for additional purposes or by different stakeholder groups.

As a first "benchmark" of the available resources relevant to DIDRR in Australia, this Resources Gap Map should be used to support interactive dialogue within and across sectors to support planning and development of DIDRR programs and services and expand programs and services across the Disaster Risk Management Cycle (PPRR).

It is important to recognise that because we charted only one primary purpose for each resource, a secondary (or tertiary) key use of that resource may not be immediately apparent. Exploration of the original resource is needed to consider multiple potential functions and uses. For example, the P-CEP Certificate program appears on the resource map as a *training program*. However, another key focus for that program is to train multiple stakeholders in the use of P-CEP tools and methods to facilitate *preparedness support*.

It is hoped that, through dialogue, stakeholders will discover how well-suited the resources are for multiple purposes. It is through pre-planning and use that these tools will be implemented, translated, or adapted to different contexts so that they are fit for purpose. For example, Part 2 of this scoping study revealed that the majority of "at risk" frameworks call for preparedness support. However, those same guidance documents lack specificity on how to deliver it. Meanwhile Part 3 of this scoping study revealed that (a) preparedness tools are available, (b) preparedness supports/services are being delivered by the disability, community, and emergency services sectors, and (c) preparedness support is being researched. Collectively, findings from this three-part scoping study illustrate the importance of connecting the research evidence with policy direction and practice resources to build a strong foundation for DIDRR development in Australia.

Recommendations for Development of High-quality DIDRR Resources and Increase Access by Multiple Stakeholders

The following recommendations focus on the current use and future development of this DIDRR Resources Gap Map by the EM sector and the Australian Institute for Disaster Resilience (AIDR) to maximise access and use by multiple stakeholders and develop multi-stakeholder capabilities in DIDRR.

These recommendations were raised in the multi-stakeholder Advisory panel discussion of the Resource Gap Map. These specific recommendations were informed by those consultations with the expert panel, including AIDR. These activities will support national leadership, cross-sector engagement, good practice information sharing, and build capability DIDRR implementation.

1. With support from AIDR, Commonwealth and States/Territories should raise awareness of the extent and availability of DIDRR resources to facilitate uptake and use and avoid developing new resources with similar objectives. For example,
    - Advertise the resources in the Australian Journal of Emergency Management and share information via websites, newsletters, and forums led by emergency, community, disability, and health sectors.
    - Link to the resources and encourage their use in calls for projects/funding applications.
    - Share case studies and stories of resource uptake, use, implementation, and evaluation of outcomes and impact.
2. Commonwealth and State governments should facilitate more effective allocation of funding that encourages implementation and evaluation of existing DIDRR resources and measurement of outcomes and impact to progress DIDRR development and outcomes assessment. Also facilitate funding allocation to develop resources in the areas of greatest need. For example,
    - Link to the resources when calling for applications to disaster ready and resilience funding opportunities.
    - Encourage funding applicants or Resilient Australia Award applicants/nominees to show how they drew on existing resources, developed programs to implement, evaluate, and improve resources, and create new resources that fill gaps.
3. The Commonwealth government should support AIDR to establish a central place in their knowledge hub for the collection, organisation, and assessment of DIDRR resources that support a wide range of activities and are useful to various stakeholders (governance, products & services).
    - Build requirements into any future funded disaster ready and resilience programs for funded projects to contribute their outputs to the repository for review, assessment, and potential inclusion.
    - Establish a quality-assurance process to ensure all DIDRR resources are designed with the needs of people with disability in mind, up-to-date, and are backed by evidence. This quality-assurance process may involve assessing materials against DIDRR principles and mechanisms.

- All DIDRR materials registered at this central place, including locally produced information and resources, should be accessible to all.
- Set up a system to enable easy identification and allocation of the DIDRR resources. For example, filtering the items to only show the resources relevant to a particular emergency management stage, a geographic location, or a population type.
- Conduct ongoing maintenance of the Resource gap map to present a clear pattern on where DIDRR resources already exist, and how reliable, relevant, and useful the resources are to a particular stakeholder.

APPENDICES

APPENDIX A. Summary of findings on EM role, capacity, tools and training needs from the peer reviewed research that are most relevant to the Australian Government actions/indicators outlined on p. 4 – 9 of Australia's Disability Strategy 2021-2031 Emergency Management Targeted Action Plan

(References can be found in Companion Document A)

Ref	Study Design	Country	Evidence/Recommendation	Roles and Capacity of EM	Tools/Training/Resources needed	TAP
30	Case study	USA	**Use the existing resources:** Agencies that provide services to elderly adults, people with physical or cognitive disabilities, and other vulnerable populations already have extensive information about their clients in secure and private systems that are routinely updated	• Develop new strategies for locating, engaging, and communicating with vulnerable populations about both organizational and personal emergency preparedness	• **Centralized data system** • **Two-way communication** for better inclusion. • **Tabletop and emergency scenario exercises** to evaluate relationships between the partners and vulnerable populations	**TAP-1.2**
28	Literature review	USA	**Consider the available resources:** For instance, Meals on Wheels, church-based service groups, community-based organizations, utility companies (for lists of clients who use Life Support Equipment (LSE)), certain property management companies, retirement homes, and other organisations have lists of people with special needs.	• Collaborate with existing organisations to create a robust data collection system.	• **Data registry** that would enable elderly people or their carers to input their name, address, contact information for the carer, and other needs into a database that could then be used to connect persons in need with potential service providers	
31	Survey study and Qualitative analysis	USA	**Improve the local surveillance systems:** • Agencies to alert designated people with disabilities in the event of an emergency using advanced technology; • Community-based organizations can encourage people with disabilities to self-identify and update their most current location and required assistance in the registry.	• Develop local registries that identify persons with disability and their assistance needs during an emergency.	• Local data registry updated by CBOs and PWD	
18	Expert opinion	USA	**Functional support coordinators (FSC)** FSC should be skilled in implementing the principles of independent living and self-determination, human and civil rights policies and procedures, and meeting people's complex function-based needs.	• Appoint **Functional support coordinators (FSCs)** to provide leadership, guidance, coordination and resource management for emergency preparedness, disaster relief, and recovery operations.	• **Specific training for FSCs** in disability inclusion so that they can participate in and provide guidance and feedback	**TAP-1.3**

Ref	Study Design	Country	Evidence/Recommendation	Roles and Capacity of EM	Tools/Training/Resources needed	TAP
28	Literature review	USA	**Assist agencies in developing disaster continuity capabilities:** • Assist elderly service organizations to identify and address their risks and vulnerabilities; • Ensure their capability to service and business continuity; Assist to receive technical and other support from public agencies.	• Maximize the services available in current organisations, educate them about disaster-related challenges, and motivate them to integrate disaster-planning principles into their operations.	• **Emergency preparedness training for local CBOs and Disability organisations.**	**TAP-1.5**
6	Literature review and Qualitative analysis	USA	**Identify the systemic challenges** • Need to address systemic difficulties, such as a lack of training on cultural concerns, lack of resources including technological initiative, and tailored messages for the deaf population.	• Improve collaboration and partnerships with local and state-level organisations, as well as more compliance with existing mass communication legislations	• **Audience specific Emergency preparedness training f**or Local emergency responders; State-level emergency management and public health organisations; CBOs; and Members of the Deaf community	
9	Survey study	USA	**Collaborate** with CBOs, older people with disabilities and local or federal government agencies.	**Provide support** • States can act as a facilitator and provide resources to local organisations; • Make emergency educational materials available in different formats; • Provide comprehensive mental health support for both staff and clients.	• **More comprehensive and frequent Emergency preparedness training**	
11	Case report	USA	**Develop Online education program** that uses photos and video clips of realistic scenarios, can improve the knowledge and efficacy of disaster responders and critical care transporters related to caring for individuals with developmental disabilities	• **Enhance knowledge about disabled people and their care needs during recovery**	• **Educational program for disaster responders and critical care transporters**	
5	Case report	USA	**Address the disability-related knowledge gap** among emergency responders to ensure appropriate, effective, and equitable emergency preparation, response, and communication.	• In addition to the online education programs, incorporate **disability course curriculum** into the current undergraduate, graduate, and ongoing training courses for first responders	• **Education program for first responders**	
3	Qualitative Study	USA	**Use Internet (e.g., YouTube) as an alternative source of information:** • Use population-specific search terms in the title (e.g., Evacuation Preparedness for Persons with chronic illness) • Provide a contact for additional information • Include healthcare professionals in video clips that discuss measures to manage specific conditions during emergency	• Disseminate accessible, accurate, and sufficient information to meet the diverse needs of people with disability, people with chronic illnesses, health practitioners, community leaders and DPOs	• **Tailored information tools disseminated via internet/social media.**	**TAP-2.1**

Ref	Study Design	Country	Evidence/Recommendation	Roles and Capacity of EM	Tools/Training/Resources needed	TAP
16	Expert opinion	USA	**Use Alternative resources:** Alternative, accessible approaches need to be developed for people with cognitive disabilities, limited literacy, non-digital users	• Develop partnership with Faith-based and community-based organizations to communicate with people with disability	• **Need of Inclusion:** Emergency planning needs to include people with disabilities to minimize preventable exposure, communicate risks effectively, and ensure the continuity of essential services.	
1	Case study	Italy	**Ensure fast access and information:** International standards must be followed while using sign language in online communication.	• Ensure emergency coordinators, rescuers, and disaster managers are aware and trained in giving fast emergency information and tailoring their communication to the needs of deaf people	• **Future research:** Further studies need to investigate new online tools tailored to disabled populations, living in various settings and countries.	
19	Literature review and qualitative analysis	USA	**Use alternative communication tools and technology:** Alternative tools and technology such as more accessible alert and early warning systems (Text-to-911), relay calls, Teletypewriters (TTYs), visual cues (signs at shelters, flashing lights), communication access real-time translation (CART) services.	• Implement alternative tools and technology, one-on-one communication between emergency responders and at-risk people via home visits or video relay services	• **Special training for response personnel** Response personnel need to be trained in audience-specific communication methods and tools, and these mass training tools need to be in the appropriate language and at the appropriate literacy and education level of the trainees.	
13	Qualitative study	USA	**Ensure access and awareness:** • Lack of participants awareness of social media resources could be a barrier to disseminating preparedness education. • Social media communication will be ineffective if households do not have Internet or computers.	• Determine more effective ways of using social media to disseminate preparedness education.	• **Further research** Further investigation is needed to determine more effective ways of using social media and technology in emergency preparedness.	
6	Literature review and qualitative analysis	USA	**Improve emergency communication**	• Review communication strategies and upgrade them according to the unique needs of diverse communities, including linguistic minorities.	• **A new (State) Alert and Warning System** in which people would register their information into the system and choose how they would like to be contacted in the event of an emergency	**TAP-2.2**
19	Literature review and qualitative analysis	USA	**Involve community representatives in disaster management** • In addition to serving as a preparedness mentor within their communities, community representatives can facilitate the data registry (collecting phone numbers and preferred ways of communication).	• Enhance response to disasters by involving community representatives, whose responsibilities can include data registry, and relaying feedback from the community to emergency organisations	• **A secure emergency communication database updated by community representative**	

Ref	Study Design	Country	Evidence/Recommendation	Roles and Capacity of EM	Tools/Training/Resources needed	TAP
28	Literature review	USA	**Adopt audience-specific response strategies** • Create audience-specific disaster checklists and other educational materials, • Public service announcements that are specifically designed to remind people to check on their elderly neighbours, • A special hotline number for the elderly to obtain emergency information	• Involve community representatives and family members of elderly people during emergency preparedness planning, and preparedness education for effective emergency communication	• **Tailored public service announcements and Specific hotline numbers for the elderly population**	
16	Expert opinion	USA	**Improve public health surveillance systems** to evaluate the impact of emergency events on people with disabilities and to assess the effectiveness of planning and response measures	• Develop population-based data on the experiences of individuals with disabilities during emergencies • Develop tools to identify people with disabilities during an emergency and public health activities	• **Public health Surveillance system with disability indicator**	**TAP-2.3**
10	Case study	USA	**Use Geographic information systems (GIS)** in decision-making, and resource coordination during an emergency event.	• Include disability-relevant data in each state's framework for geospatial data.	• State-level disability policy advocates must **integrate disability-relevant geospatial data into the key systems** utilised for emergency planning and response.	
12	Qualitative study	USA	**Collaborate with agency stakeholders** Emergency personnel training departments should collaborate with rehabilitation team consultants to obtain guidance about the proper use of equipment that could be implemented during an emergency.	• Improve knowledge/ awareness about people with mobility impairments and their functional needs	• **Development of specific training modules that** - Can be added to the existing training program. - Have specific components to assist people with different types of disabilities. - Involves People with disabilities, key stakeholders	**TAP-2.4**
15	Survey study	Mexico	**Use collaborative approach** • Emergency preparedness planning initiatives should include all stakeholders: PWD, disaster risk reduction & relief agencies, NGOs, disabled people organizations (DPOs), public health, rehabilitation health • Stakeholders should be aware of disability literature, "people first" language and semantics	• Ensure authorities understand the theme of disability (inclusion, sensitisation, and awareness) • Organize inclusive training for PWD and the community • Create alliances and involve all stakeholder groups	• **Holistic inclusion model for emergency management** • **Trained staff to support PWD empowerment**	
20	Expert opinion	Japan	**Develop integrated disaster management model** • Comprehend the present emergency response and management situation • Integrated disaster management model **Use multi-level systems approach** • Multi-level systems approach that includes law change, the establishment of a hospital- or healthcare facility-level strategy, and researcher insights	• Develop facility-specific emergency evacuation plan • Adopt specific strategy to maintain medical personnel and provide/maintain equipment and energy supplies onsite shelter-in-place • Ensure regular disaster-specific evacuation drills.	• **Policy amendment** that mandates the facilities to establish an emergency evacuation plan, to support and protect medical personnel responsible for determining emergency actions and regularly conduct disaster-specific evacuation drills.	

Ref	Study Design	Country	Evidence/Recommendation	Roles and Capacity of EM	Tools/Training/Resources needed	TAP
17	Literature review	India	**Use the PRE-RE-SyST model** • Address disability inequities • Outlines key measures and potential solutions. • Can be implemented into practice by local policymakers, or other regulatory agencies, including disability advocates, in a context-sensitive manner.	• Develop intersectoral, disability-inclusive pandemic preparedness • Use evidence on disability disparities and their reduction to inform planning	• **Disability-disaggregated data and research** would better guide the development of preparedness policies and programmes.	
19	Literature review and qualitative analysis	USA	**Ensure Effective disaster planning** by coordinated efforts across agencies	• Share knowledge, experiences, and specific capabilities • Distribute resources more efficiently	• **An integrated model for disaster management**	
25	Case study	Indonesia	**Ensure collaboration with mainstream stakeholders:** collaboration with people with influence, power, and resources is a proven strategy to overcome embedded stigma.	• Make sure mainstream disaster risk reduction stakeholders reach out to DPOs; and • The DPOs familiarise themselves with disaster risk reduction governance and stakeholders	• **Capacity development program, funding, and external support** from disaster risk reduction experts within the organisational networks and mainstream disaster risk reduction organisations	
21	Qualitative study	Australia	**Develop operational guidance** for effective cross-sector governance mechanisms that support collaboration between diverse stakeholders working across various sectors and service delivery systems.	**Participate in DIDRR** • To protect human rights and use inclusion strategies for people with disabilities in disaster risk reduction. • To innovate new ways of working across-sectors • Changes in practice and policies to increase inclusion	• **DIDRR within disaster management plans** to ensure that it is supported at all levels (i.e., national, state, local) • **Supporting arrangements,** including workforce capacity and service standards in the disability, community, and health sectors	
19	Literature review and qualitative analysis	USA	**Provide home health and long-term care staff training** to create individualised plans that address particular needs, such as accessibility to medications, mobility, and whether to evacuate or shelter in place. **Ensure Resource availability:** Databases for medical records, medications, bed availability, and real-time updates for older adults with access and functional needs are required.	• **Train staff** who can create individualised plans that address the functional needs of at-risk individuals	• **Specific training** on managing medical and functional needs of people at-risk during an emergency event • **Database** with medical records and updated functional needs of at-risk individuals • **Adequate financial resources for training**	**TAP-2.5**
25	Case study	Indonesia	**Implement new way to push for change:** DPO's capacity to collect data at the community level and to generate evidence can act as a powerful tool to influence community perceptions about disability and to ensure that people with disabilities are heard in disaster risk reduction forums.	• Ensure that disaster risk reduction interventions are tailored to the specific needs of people with disabilities	• **Data-driven advocacy;** • **Leveraging power and influence to break down stigma;** • **Resource sharing and sustainability; and** • **Engagement with mainstream multi-stakeholder mechanisms**	

Ref	Study Design	Country	Evidence/Recommendation	Roles and Capacity of EM	Tools/Training/Resources needed	TAP
27	Qualitative study	New Zealand	**Develop evidence-based policy** • Review emergency management disaster preparedness and response policies, plans, infrastructure, and services with a particular focus on the needs of disabled people. • Address underlying risk factors such as unemployment among disabled people, financial hardship, and inaccessible built environment	**Take cross-government initiatives in the Disability Action Plan** • Review the design of government service delivery, consider changed individual, community and business circumstances following an emergency event. • Use lessons learnt to improve emergency preparedness	• **Further research** is required to determine how disability and socioeconomic status increase risk exposure and affect recovery needs.	**TAP-2.5**
29	Literature review	Korea, USA, Indonesia	**Address policy issues** using effective tools like regional or national emergency operation plans (EOPs) that cover the participation and needs of people with disabilities, education and training, regulation, health care, and others. **Set up extensive international networks** to share information, new policy agenda, new programs, or innovative solutions for addressing the needs and participation of people with disabilities.	• **Revise the fundamental laws** that address active participation and the needs of people with disabilities in disaster management • **Develop partnerships with international NGOs, disability organisations and agencies**	• **Regional or national emergency operation plans** • **Diverse and extensive international networks** to share relevant materials, information, and practices, in particular, for the ultimate goal of international disaster management.	
24	Qualitative study	Iran	**Include perspectives of people with disabilities** • Emergency managers and policymakers should identify needs from the perspectives of people with disabilities in disasters management.	• **Consider necessary facilities for emergency evacuation,** including removal of architectural barriers, and considering special elevators prioritized for transporting people with disabilities.	• **Education and deployment of rescue teams equipped with assistive devices** • **Further studies on the unmet needs of people with disability**	

APPENDIX B. Emergency management practice tools, resources and training identified from the peer reviewed research

(References can be found in Companion Document A)

Practice Tools, Resources and Training (Ref)	Country	Project Aims	Collaboration	P-CEP "Capability Wheel" function elements	DIDRR Mechanism
Facebook page for deaf person and their family (1)	Italy	Provide information about the available services, communication among deaf people, their family members, and first responders and to share information on safety measures	• Two deaf researchers created the Facebook page	• Assistive technology • Communication	• Participation and representation • Data and evidence • Accessibility and capability
Emergency preparedness resources for children with autism (2)	UK	Identify ways to develop/design resources specific for children and teenagers with autism and provide detailed process of adaptation and evaluation of the resources.	• CBOs • DPOs • Government • Emergency service • Others (Service provider, telecom service, utility service)	• Communication	• Data and evidence • Accessibility and capability
YouTube as a source of information (3)	USA	Examine the quality of information shared in YouTube and effectiveness of social media as an alternative source of emergency information and alerts.	• Researchers conducted content analysis of you tube clips	• Communication	• Data and evidence
Preparedness program for PWD (4)	USA	Enhance preparedness of people with disabilities through accessible series of preparedness training modules, partnering with preparedness instructors and program evaluation.	• CBOs • Health services • Government • Emergency service	• Others (Training modules were introduction to preparedness, CPR course, Fire safety, first aid training, and mass care)	• Participation and representation • Data and evidence • Learning and capacity development • Accessibility and capability
Online training and education program for first responders (Rescue-D) (5)	USA	Explore effectiveness of a scenario-based online program designed educate emergency responders about emergency planning and response for individuals with disabilities.	• Government • Emergency service • People with disability and their families • Others (Geographic information system (GIS) mapping specialists, instructional designers)	• Others (online role-play simulation course and training materials)	• Data and evidence • Learning and capacity development
Emergency preparedness education program for deaf community and representative (EPPS model) (7)	USA	Increase first responders' awareness regarding the deaf community or signed language and encourage representatives from deaf community to take active roles in local, county, state, and national committees.	• Government • Emergency service • CBOs • Deaf community members	• Communication	• Participation and representation • Learning and capacity development • Accessibility

Practice Tools, Resources and Training (Ref)	Country	Project Aims	Collaboration	P-CEP "Capability Wheel" function elements	DIDRR Mechanism
Geographic information system for Emergency management (10)	USA	Map and share the disability relevant resources during emergency event.	• Government	• Transportation • Assistive technology • Management of health • Personal support • Living situation	N/A
Online education program for emergency responders (DO NO HARM—Developmental Disabilities Awareness Training) (11)	USA	Evaluate an online educational program for disaster responders and critical care transporters'	• Government • Emergency service	• Management of health • Personal support • Communication	• Data and evidence • Learning and capacity development
Preparedness education materials for people with disability and their families (13)	USA	Explore the experience of the emergency-preparedness education materials which was shared by medical outreach (MO) clinic.	• CBOs • Health service	• Transportation • Management of health • Communication • Living situation	• Participation and representation • Data and evidence • Learning and capacity development • Accessibility and capability
Building a roadmap for inclusive disaster risk reduction (DIDRR framework and P-CEP toolkit) (21)	Australia	Empower people with disability and the services that support them with the tools they need to engage in grassroots innovation for DIDRR in Australia	• CBOs • Disability organisations • Emergency service • Government • People with disability	• Transportation • Assistive technology • Management of health • Personal support • Communication • Assistance animals • Living situation • Social connectedness	• Participation and representation • Data and evidence • Learning and capacity development • Accessibility and capability
Vibration Signaling in Mobile Devices for Emergency Alerting (26)	USA	Investigate the pattern and/or length of vibration signal used in mobile devices of deaf individuals in terms of their perceived efficacy	• Government	• Assistive technology	• Participation and representation • Data and evidence • Accessibility and capability
Vulnerable populations (VP) outreach model (30)	USA	Develop accessible and tailored emergency preparedness and alert messages and to disseminate these messages to hard-to-reach populations	• Government • Emergency service • CBOs	• Communication • Others (Disability inclusion)	• Participation and representation • Data and evidence • Learning and capacity development • Accessibility and capability

APPENDIX C. State Emergency Management Plans – Content Analysis

State	State Emergency Management Plan	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
QLD	Queensland State Disaster Management Plan Authority: Disaster Management Act 2003, Section 49	2018	To enable Queensland to mitigate the effects of, prepare for, respond to, recover from, and build resilience to disaster events.	No	Section 7.2. Planning, notes "*the needs of vulnerable people (due to geographic location, medical or service needs, cultural background and language skills, age or disability) are specifically considered across all levels of planning".* Appendix F, Principles of Public Information Dissemination, notes, *"the use of multi-media for those .... people with a disability (e.g. hearing or vision impaired)."*	Section 7.2. Planning acknowledges the methodology of Queensland Government People with Vulnerabilities in Disasters Framework.	Section 11.3. Standards for Disaster Management and 11.4. Assurance Activities - *however, no mention of DIDRR. *The QLD Government DIDRR Framework and Toolkit was published in 2019 and presented at QLD Ministerial Showcase in 2021.	Accessibility & Capability
NSW	NSW State Emergency Management Plan (EMPLAN)	2018	Describes the NSW approach to emergency management, the governance and coordination arrangements and roles and responsibilities of agencies. States that the Plan is supported by hazard specific sub-plans and functional area supporting plans.	No	Disability and support needs for people with disability are not described in the Plan	Not evident Paras 139 and 140 refer to community and stakeholder engagement, but do not reference PWD.	Not evident	Not evident

State	State Emergency Management Plan	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
VIC	Victorian State Emergency Management Plan Issued by Emergency Management Victoria under the State Emergency Management Act 2013	2021	Described as an integrated, coordinated and comprehensive approach to emergency management at the State level. The EM Act 2013 requires the State EM Plan to contain provisions providing for the mitigation of, response to and recovery from emergencies, and to specify the roles and responsibilities of agencies in relation to emergency management.	No	Disability and support needs for people with disability are not described.	Not evident The Vulnerable People in Emergencies Policy is not referenced.	Not evident	Not evident
WA	WA State Emergency Management Plan Authority: Emergency Management Act 2005	2022	To document the agreed WA emergency management arrangements to prevent, prepare for, respond to, and recover from hazards as listed in the Emergency Management Act and prescribed in the Emergency Management Regulations 2006.	No	There is no description of vulnerable groups, including people with disability in the WA context section. Section 4.6.1. details: Specific Arrangements, notes that some individuals and groups, including people with disability and those who are medically reliant, will require consideration at State level, and any specific requirements be included in local emergency management arrangements.	The State EMPlan does not specifically refer to the 2013 At Risk People Strategy. However, it shows intent to deliver Specific Arrangements (4.6) for some individuals and groups.	The Plan describes tools for Exercises and Training (4.7); and for Continuous Improvement (4.8) but does not mention people with disability or other vulnerable group considerations. Exercises and Training: These include: a) issue-based discussion exercises to stimulate reflection on plans, arrangements, policies and procedures; include seminars, agency presentations, hypotheticals, syndicate progressive and red learning; b) functional exercises – a repetitive, methodical activity undertaken to reinforce specific skills, procedures or arrangements; inform about responsibilities of individuals and groups;	Learning & Capacity Development

State	State Emergency Management Plan	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
					Also mentions health requirements and notes that Hazard and Support Plans should also consider and identify at risk / vulnerable groups.		explore capabilities and interagency relationships. c) field exercises – a large scale, complex activity conducted in "real time" under simulated conditions involving the deployment of personnel and other resources. Section 4.7.2. State Emergency Management Exercise – This is conducted every three years to assess the EM sector's capability to manage multiple concurrent hazards. Continuous Improvement Continuous Improvement – notes that "tools such as post-incident analysis are of particular value". 4.8.1. Lessons Management – "broadly involves collecting and analysing information and data to develop, implement, validate and share changes intended to improve efficiency and / or effectiveness".	
SA	South Australia State Emergency Management Plan and Arrangements Authority: Issued by the State Emergency Management Committee pursuant to Section 9(1)(b) of the Emergency Management Act 2004 (SA)	2022	To ensure that the State has effective arrangements in place to support our communities and people. It provides a comprehensive, coordinated approach to emergency management across all sectors of the community, including	Yes	Part 3 - Frameworks and Guidelines, page 3, refers to "People at Risk During Emergencies Framework" (Annex K).	The SA EMPlan (part 3) refers to guidelines titled, "People at Risk During Emergency Framework", which recognises some action to positively impact the safety and well-being of people with disability in PPRR.	The Plan refers to a variety of guidelines and frameworks that can be used to support monitoring and evaluation. They include: (a) lessons management; (b) process for review of significant events; (c) debriefs; (d) National Data Coding Themes.	Accessibility & Capability

State	State Emergency Management Plan	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
			state and local government, business, the non-government sector and individuals."		Part 3C, Public Information and Warnings - Community Information and Warning Process, notes "use of multi-media for those who are illiterate or persons with a disability (hearing or vision-impaired)". Part 3, Annex G, Recovery Activities, page 6 notes, "a range of special needs groups may be present in a disaster-affected community, ... those with accessibility and mobility needs…Consideration must be given to these special needs groups in the development of public communication messages".	The Plan also shows intent to tailor community warnings and public information to "a range of special needs groups".	Tools to support debriefing and lessons management are included.	
TAS	Tasmanian Emergency Management Arrangements (TEMA) Issue 1 Authority: Emergency Management Act 2006 (Section 32)	2019	Purpose (not a specific section). "The TEMA support Tasmanians to become more disaster resilient. The arrangements define activities that mitigate risks and outline whole-of-state, regional and municipal preparedness measures and describe how to effectively respond to, and recover from, the impacts of emergencies."	Yes	People with disability not referenced in Context section of plan. Specific mention is made of children and youth (p. 75 Section 5.4.3), and animals, but not people with disability (Section 5.4.4) Section 5.4.2. Special Considerations - reference is made to "The People at Risk in an Emergency, A Guide for Tasmanian Government and non-government community service providers."	Section 5.4.2. Special Considerations indicates areas where actions could be taken to support people with disability and other at-risk groups. It states that "low level of understanding of warnings and risks and or the local context / risk factors must be accounted for." Section 5.4.2, p. 75 outlines the "susceptibility factors and protective factors, that, if compromised, increases a persons risk."	No specific approach for people with disability mentioned. Section 2.2.9. Other Stakeholder and Advisory Groups, notes that "advisory groups can be established to provide advice or evaluation. Members may be subject matter and or evaluation experts."	Not evident

State	State Emergency Management Plan	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
NT	Territory Emergency Plan (2021-22) Authority: Emergency Management Act 2013, Section 9	2019	To describe the Northern Territory's approach to emergency and recovery operations, the governance and coordination arrangements, and roles and responsibilities of agencies. The Plan is supported by regional, local and hazard specific sub-plans and functional group supporting plans.	No	There is no context section. People with disability and their support needs are not mentioned. There is reference to mental health services and psychosocial support needs, and arrangements for care of "medically vulnerable" people.	Not evident	Not evident	Not evident
ACT	ACT Emergency Management Plan Authority: Emergencies Act 2014	2014	To describe the responsibilities, authorities and the mechanisms to prevent, or if they occur, manage emergencies and their consequences within the ACT in accordance with the requirements of the ACT Emergency Act 2004.	No	There are no details on people with disability in the context section. The plan does not mention people with disability or their support needs. Section 3.4.3.2. Community Warnings and Public Information states, "In providing public information and warnings, specific consideration will be given to community groups with special needs that can impair their capacity to access and appreciate the warnings and public information being provided."	Shows intent to tailor community warnings and public information to "community groups with special needs	Section 3.4.3.4. Operational Analysis and Lessons Learned, (p. 14) states, "The ACT will seek to analyse the response to and impacts of emergencies for future learning and adjust strategies where this new information and knowledge will result in improved outcomes."	Accessibility & Capability (community warnings) Learning & Capacity Development

PWD = people with disability

APPENDIX D. State Level Guidance Documents (Risk Frameworks) - Content Analysis

State	State Level Guidance Document (Risk Frameworks)	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
QLD	People with vulnerabilities in disasters: A framework for an effective local response Issued by the QLD Government Department of Communities, Child Safety and Disability Services	2016	"To reduce the impact of disasters on people with vulnerabilities, or people who may become vulnerable, and contribute to building resilient communities." The Framework provides a common definition that outlines the target groups along with factors to consider when undertaking collaborative work to identify and engage with people who are or may be vulnerable.	No	Support needs mentioned include: continuous supply of utilities and electricity, help from friends, family and in-home services that provide meals, help with activities of daily living, living or travelling in areas of close proximity to an event; people in high risk geographical locations who experience language or communication barriers to accessing information about identified local hazards	The emphasis is on the vulnerability of various groups and what can be done by others to support them. It doesn't reflect a strength-based approach or consider individual capability and contribution to risk reduction. The Framework presents broad-based strategies to address concerns of at-risk groups in disasters. It is not clear if Local Governments are mandated to implement it, nor	Not evident	Not evident
QLD	Disability-Inclusive Disaster Risk Reduction (DIDRR) Framework and Toolkit Prepared by the Centre for Disability Research and Policy in partnership with the Queenslanders with Disability Network and the Community Services Industry Alliance and supported by a multi-stakeholder advisory committee.	2019	"To provide a roadmap for peole with disability, community and disability support services, and local disaster management to work together to co-design DIDRR innovations, implement and evaluate their impact on decreasing risk and increasing the resilience of people with disability to disaster."	Yes	The Person-Centred Emergency Preparedness – capability framework is used to profile both functional capabilities and support needs in eight areas: - Social connectedness - Transportation - Assistive technology - Management of health - Personal support - Communication - Assistance animals Living situation	The framework and toolkit supports the actions of multiple stakeholders at each stage of disaster management (prevention, preparedness, response, recovery). Process mechanisms outline how to achieve cross-sector collaborative actions at the personal and community level for the dual action of enabling preparedness planning from the individual to organisational to community level.	Process and outcome evaluation is embedded into the design of the action-oriented outcomes framework. Process evaluation is supported by Practice Tips 2 – 8. Outcomes evaluation is supported by the DIDRR outcomes framework.	Participation & Representation Accessibility & Capability Data & Evidence Learning & Capacity Development

State	State Level Guidance Document (Risk Frameworks)	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
NSW	nil							
VIC	Vulnerable People in Emergencies Policy Issued by the Department of Health and Human Services	2018	Stated purpose (p. 5) "To improve the safety of vulnerable people in emergencies, through supporting: emergency planning with and for vulnerable people; developing local lists of facilities where vulnerable people may be located; developing local lists of vulnerable people (VPR) who may need consideration (tailored advice of a recommendation to evacuate) in an emergency, and make those lists available to those with responsibility for helping vulnerable residents to evacuate."		The Policy provides little description of support needs for people with disability. Part 3, Principles (page 6) refers to "supports in personal emergency planning", and "Important role of local people and communities in caring," and "evacuation."	The Policy requires councils to maintain a) A vulnerable facilities list (VFL) and b) A vulnerable people's register (VPR). The VFL includes facilities where vulnerable people may be, such as hospitals, aged care homes and child care centres. This is stored within a Council's document management system and a copy in a database called, "Crisisworks". Certain limited types of people are included on the VPR, which is maintained as part of the MEMP to assist incident controllers and Victoria Police to aid response and evacuation planning. Access to the VPR is restricted to the Victoria Police. The VPR contains details of agencies that work with vulnerable people. The list of agencies is accessible to local Council.	Not evident	Not evident
WA	At-Risk People Strategy Issued by the Department of Fire and Emergency Services	2013	The Strategy has been developed to "provide direction to DFES and information to their stakeholders. Once implemented, it will help service providers assist at-risk people to be better prepared for bush fires and other hazards across the WA state."	No	The Strategy defines At Risk People as "people who are unable to receive, understand, or act on information, prior to or during an emergency."	The Strategy objectives are (no page number): 1) ensure that at-risk people are better prepared for a bushfire;	Consultations were conducted with 37 organisations across 4 locations to identify common themes. A Monitoring System with indicators of success has been formulated.	Data & Evidence Learning & Capacity Development

State	State Level Guidance Document (Risk Frameworks)	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
					Research conducted by agencies identified that (Executive Summary) "a) service providers need criteria to determine the level of risk for their client, b) At Risk people in their own homes are more vulnerable in a bush fire emergency than those living in residential care."	The Strategy objectives are (no page number): 1) ensure that at-risk people are better prepared for a bushfire; 2) encourage a shared responsibility between the Department of Fire and Emergency Services (DFES), stakeholders, and the community, now and for the future, by: a) informing stakeholders, agencies and service providers on the benefits of collaborating in this strategy and the consequences of not being involved, b) encourage service providers to work with the wider community to put plans in place for at-risk people; 3) DFES will employ a full-time "At-Risk Communities Program Officer" to develop and deliver training in cooperation with stakeholders.		
SA	People at Risk in Emergencies Framework for South Australia Prepared by the Australian Red Cross in partnership with the Country Fire Service	2018	Purpose (section 1.2.) "This framework provides guidance for how State and local governments, businesses, non-government organisations, community	No	People at risk is used to refer to individuals who are less able to prepare for, respond to or recover from an emergency event because they are experiencing factors that undermine their wellbeing, knowledge, connectedness and/or security.	The strategy states that the best outcomes for people at risk will occur when organisations across the community understand how they can positively contribute to the disaster resilience of people at risk as part of their everyday business	Planning for implementation, monitoring and evaluation appears to be in a development phase. The main implementation approach includes developing:	Participation & Representation Data & Evidence Learning & Capacity Development

State	State Level Guidance Document (Risk Frameworks)	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
			Purpose (section 1.2.) "This framework provides guidance for how State and local governments, businesses, non-government organisations, community groups, and individuals can work together to strengthen the preparedness, safety and well-being of persons who are most at risk in emergencies." Aims are: "reduce the impacts of emergencies on people who are most at risk in our communities; identify the best ways for individuals and organisations to work together to increase the safety and well-being of people most at risk in emergencies; facilitate a greater sharing of responsibility for emergency preparedness, response and recovery as a wider range of organisations play a role in supporting people most at risk."		The term vulnerable persons is sometimes used to describe people at risk, but this term is avoided in this document because being at risk does not mean a person is inherently vulnerable. The definition is taken from the Australian Institute for Disaster Resilience (AIDR) glossary of terms. The strategy recognises shared responsibility. It notes that people at risk receive significant support from those closest to them. It also explains that some people receive assistance from a broader support network including formal services, community groups, businesses, government agencies and service providers. Further noting that, "some people at risk are not well connected with regular support services, which is why the whole community needs to be involved." (p. ii)	The strategy states that the best outcomes for people at risk will occur when organisations across the community understand how they can positively contribute to the disaster resilience of people at risk as part of their everyday business. To support this outcome, this framework seeks to clarify the roles that different sectors play as it relates to the safety and wellbeing of people at risk in an emergency. Table 3.1 provides an example of some of these roles. (p. 06) The Strategy presents a detailed rationale and process for strengths-based approach to address concerns of at-risk groups in disasters. "A strengths-based approach reinforces individual autonomy and supports people to understand how their individual capabilities can be drawn upon in preparing and responding to emergencies." (p. ii) Principles of this strategy include: a) Adopt a whole of community approach b) Build in strengths	a) an Action Group (that will lead, coordinate and deliver on priority actions in the framework), and b) a Community of Practice (that will share knowledge, experiences and understanding within and between organisations with an interest in people at risk in emergencies). The documented intent is for the implementation strategy to sit under the Disaster Resilience Strategy for SA. Section 6.4. (p. 17) notes that monitoring and evaluation will be conducted on the implementation plan in the future. Monitoring and Evaluation was not yet formulated at the time of publishing the framework document. Section 6.5. refers to annual implementation updates and 5-year evaluation review.	

State	State Level Guidance Document (Risk Frameworks)	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
						c) Tailor approaches to individual capabilities d) Lead action together Section 5.2. "Build on Strengths" reflects elements of a strength-based approach including: reinforce the autonomy and agency of individuals; support people to understand how their individual capabilities can be drawn upon in preparing for, responding to and recovering from emergencies; help people to identify areas where they may need assistance from others in emergencies. Specific strategies listed include: 5.2.1. Ensure emergency preparedness activities with people at risk build upon people's strengths, and develop their well-being, knowledge, connection, and security. 5.2.2. Support individual, community, business, organisations, to assess their own strengths and capacities, and make informed decisions about what they will do in an emergency.		

State	State Level Guidance Document (Risk Frameworks)	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
						5.2.3. Share individual, community and organisational experiences of preparing for emergencies. 5.2.4. Adopt a learning approach when with people at risk, and ensure that engagement about emergencies is ongoing, and not a point in time activity.		
TAS	People at Increased Risk in An Emergency – A Guide for Tasmanian Government and Non-government Community Services Providers Issued by the State Emergency Management Committee	2019	The Purpose (page 6) is "to provide strategies for individuals and community service providers to work together to improve the safety and security, health and well-being, knowledge and or social connection of people who are at increased risk; to foster a shared approach to emergency planning and preparedness across individuals, households and community service providers to improve the emergency resilience of people who are at increased risk"; to reduce the impact of emergencies on people who are at increased risk."	No	Page 7, notes - the term vulnerable people is not used in this Guide because 1) it is disempowering, evoking a sense of weakness and helplessness 2) being exposed to an increased level of risk does not mean that a person is inherently vulnerable 3) people living with challenging circumstances, such as a disability or chronic illness, can reduce their risk in an emergency by planning and being well-prepared.	The Strategy utilises key elements of a DIDRR and Emergency Risk Management approach. The strategy refers to capability, empowerment and strengths-based approach. The Purpose is "to provide strategies for individuals and community service providers to work together to improve the safety and security, health and well-being, knowledge, and or social connection of people who are at increased risk." This includes people with disability.	The strategy includes an evaluation stage. It also highlights a tool for "Emergency Risk Self Assessment - Tool for Individuals" (Appendix 2). The self-assessment items are predominantly support needs (i.e., rather than strengths or capabilities)	Data & Evidence Learning & Capacity Development Accessibility & Capability

State	State Level Guidance Document (Risk Frameworks)	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
					Further it notes, Strengths-based approach - encourages individuals, households and communities to be motivated to use their capability, which can come in different forms Page 10, Step 2: Determine Emergency Risk Profile This section considers a range of factors that can determine individual's emergency risk profile (health and wellbeing, safety / security, social / physical / geographic isolation, mobility, understanding of risks and warnings, language, prior experiences, financial stress).	The Strategy fosters a shared approach to emergency planning and preparedness and aims to reduce the impact of emergencies on people who are at increased risk. Key elements are: a) strengths-based approach b) shared approach. A step-wise process is underpinned by 4 principles – engage, enable, enhance, evaluate. The process determines the emergency risk profile, "resilience category," and support needs of clients through an examination of their susceptibility and protective factors. Underpinned by the 4 key principles, operational strategies can be adopted or adapted to support clients in an emergency. A key outcome of the process is to increase client protective factors.		
NT	Nil							
ACT	Nil							

APPENDIX E. Local Government Emergency Management Plans - Content Analysis

State	Local Government Emergency Management Plan	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
QLD	Fraser Coast Regional Council	2019	"To ensure consistent approach to disaster management by the establishment of procedures for the management of disasters in the Fraser Coast region."	No	Not evident The only mention of people with disability is in a context description of transport in the region, (p. 24), "taxi services operate throughout the region and cater well for persons with disability."	Not evident	Not evident	Not evident
QLD	Hinchinbrook Shire Council	2021	"To detail and support the arrangements for coordination of local capability for disaster operations during a disaster event; ensure safety and well-being of the Hinchinbrook community prior to, during and after a disaster; additionally, to provide guidance on operations for the LDMG, lead and support agencies, and the community according to the PPRR Disaster Management Guidelines."	Yes	Section 3.5.8. (p. 20) - Vulnerable Persons, notes that "such vulnerable persons include (but are not limited to) those in aged care facilities, seniors residing in homes, people with a disability, people with chronic medical conditions, and those culturally and linguistically diverse."	References to vulnerable groups, including disabled, and QLD Ambulance Service (QAS) maintenance of a list of medically vulnerable people. Section 7.2 (p. 39). Community Awareness and Education - encouragement to community groups, businesses, organisations to prepare continuity plans, especially for those that care for vulnerable sectors.	The Plan references training and exercises (Section 7.3), as one way to enhance capacity and contribute to continuous improvement. Section 3.5.8. notes that Queensland Ambulance Service responsible for maintaining a list and supporting medical vulnerable people in the community".	Not evident

State	Local Government Emergency Management Plan	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
QLD	Livingstone Shire Council	2021	To detail the arrangements within the Livingstone Shire area to plan and coordinate capability in disaster management and disaster operations, and to ensure and maintain safety in the Livingstone Shire community prior to, during and after a disaster by adopting a comprehensive and all agency shared responsibility approach.	No	Community Vulnerabilities: (Section 11.2, p. 100) "Individuals, families, and specific population groups susceptible to vulnerability factors and low levels of resilience, often require more targeted support to remain safe and to prepare, respond, and recover from disaster events." "The groups include the culturally and linguistically diverse (CALD), and those that have a need for assistance who make up 5% of the region's population" that need assistance in self-care, mobility, and communication.	Suggests a broad strategy to address vulnerable group considerations – (Section 11.2., p. 101) to: a) reduce hazard impact (through mitigation, prediction, warning, and preparedness), b) build capacity, and c) tackle the root cause of vulnerability (such as poverty, poor governance, discrimination, inequality and inadequate access to resources and livelihoods	Examples of tools that are used include: a) Section 11.2. Community Vulnerabilities mentions that potential 'risk" is being monitored by the Livingstone Shire Disaster Management Unit and Human and Social Services Task Force. b) 12.2.2. Exercise Programme Evaluation - hot/cold debriefs. c) Post Disaster Assessment - After Action Review, Hot/Post Event Evaluation. There is no indication that terms of reference include people with disability or their representatives.	Learning & Capacity Development
QLD	Napranum Aboriginal Shire Council	2020	To minimise the effects of and to coordinate the responses to, and the recovery from a disaster or major emergency affecting the community of Napranum.	No	There are no statistics on number of people with disability. The Plan includes several references to mental health and psychological support requirements during the post disaster recovery period.	Some reference to vulnerable groups are made. No reference to the QLD People with Vulnerabilities in Disasters Framework	Not evident	Not evident

State	Local Government Emergency Management Plan	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
NSW	Kyogle Shire Council	2020	Provide an understanding of the nature of any responses to an adverse event; provide a source of information on resources relating to the preparation for an adverse event by Council and/or the community; inform the community of the response protocols for various disasters and emergencies; learn from adverse events and consequently make improvements as appropriate in the preparation for future occurrences; identify key strategies and actions to be undertaken by Council and other relevant stakeholders, in order to prepare for and manage adverse events.	No	Not evident	Not evident	Not evident	Not evident
NSW	Dungog Shire Council	2019	Details arrangements for prevention of, preparation for, response to and recovery from emergencies within LGAs covered by this plan.	No	Not evident	Not evident	Not evident	Not evident

State	Local Government Emergency Management Plan	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
NSW	Bega Valley Shire Council	2021	Details arrangements for prevention of, preparation for, response to and recovery from emergencies within the Bega Valley LGA.	No	Section "Population and People," page 10 states the need for functional assistance, "needing help in their day to day lives due to a profound or severe disability". Assistance required in areas of "self-care, mobility and communication."	Not evident	Not evident	Not evident
NSW	Greater Hume Shire Council	2012	"To ensure controlled and coordinated response and initial recovery to emergencies by all agencies having responsibilities and functions in the Greater Hume LGA."	No	Not evident	Not evident	Not evident	Not evident
NSW	Shoalhaven City Council	2021	Details arrangements for prevention of, preparation for, response to and recovery from emergencies within the Shoalhaven LGA.	No	A table (p. 25) describes residents as being vulnerable due to their circumstances. The table includes children, over 65 groups, persons needing assistance, sole occupants, and without vehicle.	Not evident	Not evident	Not evident
NSW	Port Macquarie-Hastings Council Document not found							
NSW	Upper Hunter Shire Council Document not found							

State	Local Government Emergency Management Plan	Year	Aim	Indicates extra support needs of PWD considered elsewhere	Profile of PWD and their support needs	Description of intent (goals) or strategy to positively impact safety of PWD before, during or after disasters	Monitoring/Evaluation of the goals/strategy	DIDRR Mechanism
VIC	South Gippsland Shire Council	2022	"To reduce the likelihood of emergencies, their effects on and consequences for communities; ensure a comprehensive, integrated approach to emergency management in South Gippsland; promote community resilience in relation to emergencies; promote interoperability and integration of emergency management systems."	Yes	"People living in the community who have been assessed as vulnerable to an emergency because they are: frail and/or physically or cognitively impaired; unable to comprehend warnings and directions and/or respond in an emergency situation; unable to identify personal or community support networks to help them in an emergency". (p. 15)	The Plan refers to the Vulnerable People in Emergency Policy and register, focused on disaster response. The Plan references a Risk Treatment Plan, an Engagement and Resilience Plan, and a Preparedness Framework (PF).	The Preparedness Framework includes "annual MEMPC member capability and capacity discussion" and "completion of a Capacity and Capability Assessment Template	Learning & Capacity Development
VIC	Murrindindi Shire Council	2020	"To detail the agreed arrangements for the prevention of, response to, and the recovery from, emergencies that could occur in the Murrindindi Shire."	No	"Vulnerable people include: frail aged people living alone; people with CALD backgrounds; people with physical and mental impairments through age, illness or disability; visitors and tourists; residents living in areas prone to natural and / or other hazards." (p. 15) Community Emergency Risk Assessment (CERA) results indicate that in "extreme temperatures/ heatwaves, support needs include to communicate heat health messages." Figure 5 (p. 37) "Recovery agencies should consult communities ... to ensure adequate support for the most vulnerable." (p. 87)	References the Victorian People in Emergencies Policy, register, and Facilities list.	Section 1.7 describes a monitoring and review process through the use of a community emergency risk assessment process that consists of review of emergency office and other agency reports, and an annual risk assessment process. Sub-Plans have their own review processes. The monitoring and review process does not reference disability inclusion.	Not evident

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VIC	Strathbogie Shire Council	2019	“To detail the agreed arrangements for the mitigation of, the response to, and the recovery from, emergencies that could potentially occur in the municipal district of Strathbogie Shire.”	Yes	Section 2.3. (p. 15) describes a range of community groups and individuals considered to be vulnerable, which includes but is not limited to: frail, aged, living alone; persons with physical and or mental impairment, through age, illness or disability; visitors, tourists; residents living in areas prone to natural and / or other hazards. Table 1 lists various measures of vulnerability, which includes, “number of people who may need assistance to access relief centres.”	References the Victorian People in Emergencies Policy, register, and Facilities list.	Section 4.3 (p. 29-30) outlines a Risk Assessment Process that uses a Community Emergency Risk Assessment (CERA). “The process of implementing options is monitored by the MEMPC through reports provided by agencies and organisations at MEMPC meetings and through the annual risk assessment process.” Sub-Plans are subject to review every 3-5 years.	Not evident
VIC	Pyrenees Shire Council	2020	"To establish a coordinated approach to response, relief and recovery from emergencies within the Pyrenees Shire Council.”	Yes	Section 12.3.2. Catering for Persons with Special Needs. These include young children, people with English as a second language, people from various social backgrounds, the frail, aged, and people with disabilities, people on life support technology.	References the Victorian People in Emergencies Policy, register, and Facilities list.	Section 13.1. Evaluation. “At the conclusion of relief and recovery activities a de-brief should be held to evaluate how well the operation performed.” Section 13.2. Reporting. The Municipal Relief and Recovery Planning Committee is required to prepare reports. This includes on, “vulnerable people and clients.”	Not evident

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VIC	La Trobe City Council	2018	Not stated	No	In Part 2, section 3, a vulnerable person is defined as someone living in the community who is: frail, and/or physically or cognitively impaired; unable to comprehend warnings and directions and or respond in an emergency situation; cannot identify personal or community support networks to help them in an emergency. Vulnerable Person Facilities are also described.	Part 2.3 also notes that "it must be recognised that some vulnerable individuals will have their own emergency management planning structures in place and this is to be actively supported by this plan where possible". How to actively support individuals to develop their own emergency planning structures is not stated.	Section 1.7. describes a monitoring and review process through the use of a community emergency risk assessment process that consists of review of emergency office and other agency reports, and an annual risk assessment process. Sub-Plans have their own review processes. The monitoring and review process does not reference disability inclusion.	Not evident
WA	Shire of Murray and Waroona	2022	To set out Shire of Murray and Warooma policies for emergency management, roles and responsibilities, provisions about the coordination of emergency operations and activities relating to emergency management; describe local emergencies; strategies and priorities.	No	Disability Profile, page 31 notes, "persons with profound, severe, moderate, and mild core activity limitations, as well as those with schooling or employment restrictions and disabilities with no restrictions or limitations." (Murray 25%, Waroona 19.5%). Also, Evacuation and Welfare, (p. 70) describes at-risk and special needs groups as "particular attention is needed for sections of the community with special needs" - includes people with disabilities.	Strategy is limited to identifying people with disability in relation to evacuation and welfare in the context section.	Not evident	Not evident

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WA	Denmark Shire Council	2017	To set out policies for emergency management; roles and responsibilities; provisions about coordination of emergency operations and activities; description of emergencies; strategies and priorities; other matters prescribed by regulations or considered appropriate.	No	There are no statistics on the number of people with disabilities in the context section. Section - Evacuation and Welfare (p. 44) shows a list of special needs groups which includes "persons with disabilities." There is reference to Appendix 12 – a Vulnerable Persons List.	Not evident	Sections on exercising, reviewing, and reporting do not make reference to disability inclusion	Not evident
WA	Shire of Katanning, Woodanilling, and Kent	2016	To set out policies for emergency management; roles and responsibilities; provisions about coordination of emergency operations and activities; description of emergencies; strategies and priorities; other matters prescribed by regulations or considered appropriate.	No	People with disability and their support needs are not indicated. A section on Special Needs Groups (p. 30) considers seniors, retirement homes, hospital, primary schools, caravan park	Not evident	Sections on exercising, reviewing, and reporting do not make reference to disability inclusion	Not evident
WA	Port Headland Council	2015	To set out policies for emergency management; roles and responsibilities; provisions about coordination of emergency operations and activities; description of emergencies; strategies and priorities; other matters prescribed by regulations or considered appropriate.	No	Reference to Special Need Groups including people with disability are in Part 3, Support to Response. Section 3.12. Evacuation refers to "specific arrangements in place for special needs groups such as schools, nursing homes, hospitals, caravan and holiday parks, people with disability and CALD."	Not evident	Sections on exercising, reviewing, and reporting do not make reference to disability inclusion	Not evident

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					Section 3.14. Special Needs Groups notes, "these groups may require unique arrangements in regard to resources, mobility, timings, support or communications when responding to an emergency." Groups to consider include ... "persons with physical, medical, or mental conditions (including persons using assistance animals)." Further it states, "Special Needs groups should be included in the development of local risk plans for inclusion in LEMAs."			
WA	Merredin Shire Council	nd	To set out policies for emergency management; roles and responsibilities; provisions about coordination of emergency operations and activities; description of emergencies; strategies and priorities; other matters prescribed by regulations or considered appropriate.	No	The Plan provides no community context information. Under Special Needs Groups (no page numbers) it is noted that "a list of contacts to coordinate the contacting of vulnerable people within the Shire is available in the Contacts and Resources Section." Attachment A: A Local Recovery Coordination Group Checklist, references people with disabilities.	Identifies that response and recovery strategies are needed but does not explain what they are or how to enact them. For example: Mention is made of "appropriate communications strategies for special needs and vulnerable people and groups." However, these are not evident in the Communications Plan.	Not evident	Not evident

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						Evacuation of Animals notes, “assistance animals are welcomed at Welfare Centres.” Recovery Assistance Strategies note, “provide for special needs of aged, ethnic, children.” There is no mention of people with disability or their support needs. Local Recovery Coordination Group role and functions includes, “ensure inclusion and recovery issues of special needs people/groups are addressed.” There is no mention of people with disability or their support needs. Although, Attachment A - Local Recovery Co-ordination Group Checklist, includes, “identify special needs and vulnerable people such as ....”the disabled.” Recovery Communications / Community Engagement, notes that “effective recovery communications addresses ....’The who’: wide variety of groups, including special needs groups.”		

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SA	Flinders Ranges Council	2021	The Emergency Management Plan reflects Council's Emergency Management Policy (2021) by establishing strategic directions for emergency management and describing the actions that Council will take to reduce disaster risk, maintain incident operational capacity and prepare for recovery.	No	Section 3 (p. 24) notes that 6.3% of the population need assistance with day to day activities. Vulnerable people (to pandemic diseases) are described as, "young children, elderly, and those with underlying health conditions." Section 3.1. Risk Identification, p. 23, notes that: a) heatwaves impact vulnerable persons, and pandemics cause illness or death particularly to the young and vulnerable.	Not evident	Not evident	Not evident
SA	Murray Bridge Rural City	2021	Purpose (is not specifically indicated) appears to be, "to provide for disaster reduction, inform our incident operations and considerations for recovery." There are 6 goals that cover: planning and preparation; incident operations to assist nresponse; and recovery.	No	Not evident The term "vulnerable persons" is used but people with disability their support needs are not mentioned nor quantified in the Community Context. Section 8, "Consult and Engage" notes, "inform community profile data with multicultural, sporting, vulnerable persons, youth."	Not evident	Not evident	Not evident

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TAS	Mersey Leven Municipality, including Kentish Shire	2021	To describe the emergency management arrangements for the Mersey-Leven municipal combined area.	No	The Context section does not consider people with disabilities. Section 1.8.9. Persons at Risk, states, “the major group of people at risk is “the elderly.” Section 3.2.4.3. Public Information Readiness, states, “pre-prepared public information resources are tailored where possible to assist all members of the municipal area be informed about the emergency, e.g., the aged and disabled.” Section 3.4.2.2. Longer term, states, “the affected Area Recovery Committee usually develops a plan that considers needs of specific population groups within the community, including .... disabled.”	Not evident The Plan recognises disability inclusive arrangements and strategies are needed for public communication and recovery planning, but it fails to provide examples of strategies and actions to support their various needs in all phases.	Not evident	Not evident
NT	Victoria Daly (Daly River District)	2022	To describe the emergency management arrangements for Daly River District during 2021/2022.	Yes	Emergency Shelters (p. 20). Paragraph 97 states, “persons with special needs, the aged, the infirm and persons under the influence of drugs or alcohol are to be assessed by the Shelter Management team upon entry to the emergency shelter.	The Plan refers to actions for vulnerable people but only in terms of response and evacuation management.	Annex L - Debrief. This annex provides a framework for a debrief process, as a lessons learned opportunity, but does not specifically mention people with disability or other vulnerable groups.	Not evident

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					On p. 52 Reference is made to Evacuation Guidelines (Annex H), which notes, “vulnerable people in the community consist of - antenatal, dialysis clients, elderly who require walking frames, other older or frail aged people.” Community Demographics section includes: “people with health issues, including chronic disease, illnesses and injuries.” Also, “vulnerable clients such as elderly, frail and disabled.” (No actual data provided).			
ACT	N/A							

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