

SCOPING STUDY

Emergency Management Capabilities for DIDRR

**COMPANION DOCUMENT A.
EMERGENCY MANAGEMENT CAPABILITIES FOR DIDRR:
SCOPING STUDY PART 1 EVIDENCE-GAP MAP**



THE UNIVERSITY OF
SYDNEY

This is a companion document to the synthesis report. The Figure and Table included in this document present results of scoping study part one on emergency management capabilities for Disability Inclusive Disaster Risk Reduction (DIDRR) in research, policy, and practice. This should be read in conjunction with the main report.

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Figure and Table

Figure 1.
Evidence-Gap Map of the Peer Reviewed Research on
Emergency Management Capabilities in DIDRR

Table 1.
Studies Included in the Scoping Review of Emergency
Management Capabilities in DIDRR

Figure 1. Evidence-Gap Map of the Peer Reviewed Research on Emergency Management Capabilities in DIDRR. (Every number in the bubbles is hyperlinked to its associated study in Table 1.)

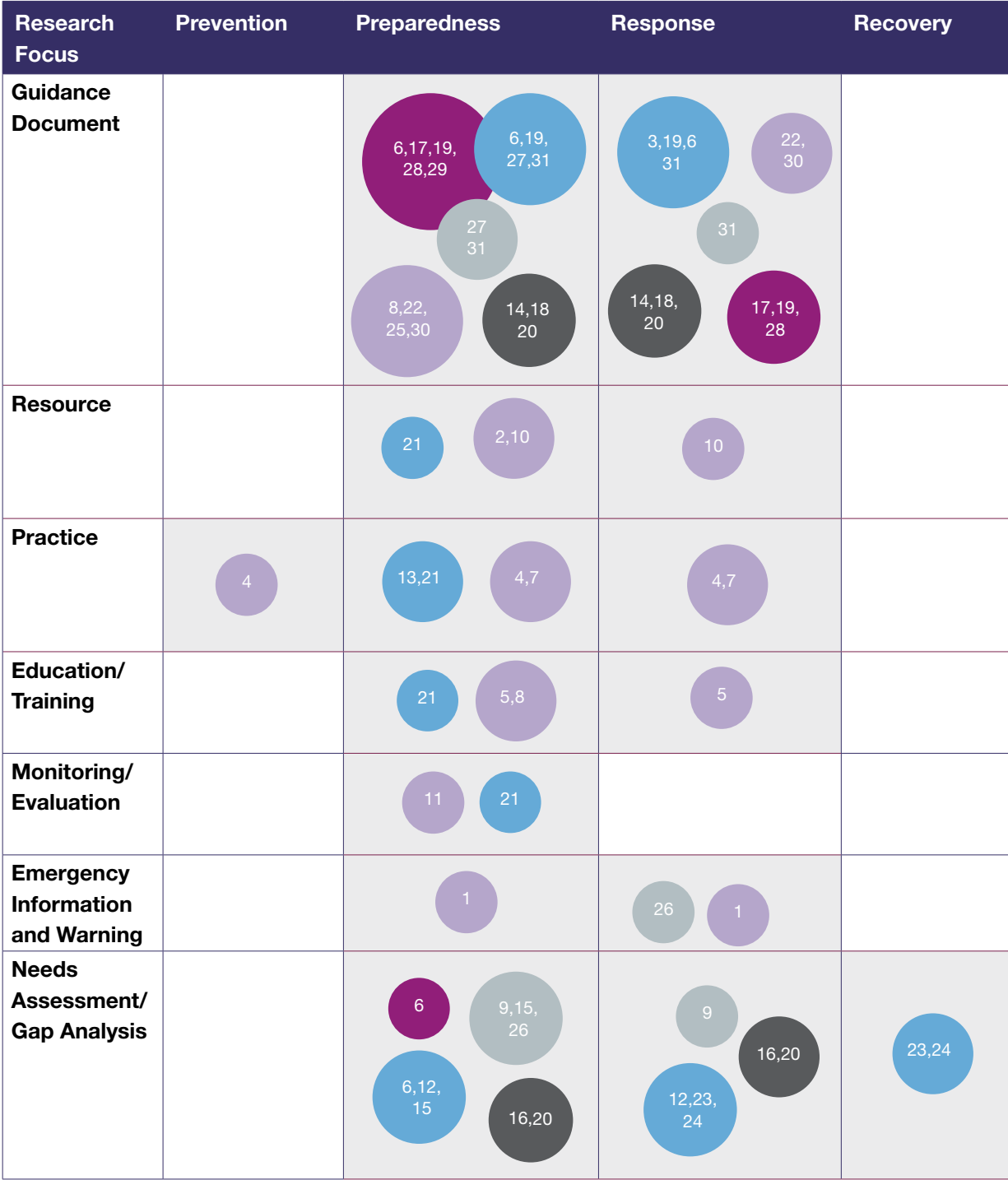


Table 1. Studies Included in the Scoping Review of Emergency Management Capabilities in DIDRR

Ref	Title	Author, Year	Country	Aim	Participants/ Materials	Key Findings	Capability Wheel Element/s	DIDRR Mechanism
1	A Facebook page created soon after the amatrice earthquake for deaf adults and children, families, and caregivers provides an easy communication tool and social satisfaction in maxi-emergencies	Rotondi et al. (2019)	Italy	<ul style="list-style-type: none"> To document the development, reach and response of a Facebook page that provided earthquake emergency information to Italian deaf community 	Deaf persons, their families, and caregivers	<ul style="list-style-type: none"> The Facebook page received high numerous accesses (58,000 persons) and satisfaction from deaf adults and families with deaf children, as well as hearing family relatives and caregivers; Social media, such as Facebook page, had the potential to offer fast, accessible safety information after earthquakes or other maxi-emergencies. 	<ul style="list-style-type: none"> Assistive Technology Communication 	<ul style="list-style-type: none"> Participation and representation Data and evidence Accessibility and capability
2	Designing emergency preparedness resources for children with autism	Edmonds (2017)	UK	<ul style="list-style-type: none"> To consider the needs of emergency preparedness intervention for children with autism To report the process of adaption and initial evaluation of a previously developed resource for use with primary aged children with autism 	Emergency services, counselling services, Transport for London, telecoms services, utility services, autism charities and schools.	<ul style="list-style-type: none"> Delegates who completed the evaluation survey reported high level of satisfaction (4-5 stars out of 5) of the resources (book and cards); Following adaption of the resources, the expert groups commented that (1) the resources were better suited to children with autism; (2) the adapted resources should retain the connection with the originals; (3) minor adjustments of the wording were needed. 	<ul style="list-style-type: none"> Communication 	<ul style="list-style-type: none"> Data and evidence Accessibility and capability
3	Disaster evacuation for persons with special needs: A content analysis of information on YouTube	Owens et al. (2013)	USA	<ul style="list-style-type: none"> To analyse the content of disaster evacuation procedures on YouTube targeting individuals with chronic illness To report on the research model incorporating one aspect of the Health Literacy Skills Framework 	YouTube clips that offered disaster information to persons with chronic illness	<ul style="list-style-type: none"> Findings suggested several concerns: <ul style="list-style-type: none"> - videos containing errors/incorrect advice or information; - videos were not accessible, e.g., one clip targeted at people with visual disabilities was offered in ASL but had no sound; - lack of information on how to manage illness during the disaster; - lack of specific information; - lack of diversity in most clips. 	<ul style="list-style-type: none"> Communication 	<ul style="list-style-type: none"> Data and evidence

Ref	Title	Author, Year	Country	Aim	Participants/ Materials	Key Findings	Capability Wheel Element/s	DIDRR Mechanism
4	Nothing about us, without us: An inclusive preparedness programme for the whole community from inception to sustainment	Black et al. (2019).	USA	<ul style="list-style-type: none"> To describe the evaluation of an inclusive preparedness programme for the whole community 	People with disability	<ul style="list-style-type: none"> Evaluation measures indicated improvement of preparedness knowledge after receiving the programme. 	<ul style="list-style-type: none"> Others: Need for inclusive preparedness program 	<ul style="list-style-type: none"> Participation & Representation Data & Evidence Learning & Capacity Development Accessibility & Capability
5	Educating first responders to provide emergency services to individuals with disabilities	Wolf-Fordham et al. (2014).	USA	<ul style="list-style-type: none"> To assess effectiveness of an online program to increase emergency responder knowledge about emergency planning and response for individuals with disabilities 	Emergency responders, including law enforcement, fire, EMS, public health, CERT/ MRC, emergency manager/ planner	<ul style="list-style-type: none"> Evaluation measures indicated significant pre- to post-test gains in learner knowledge and simulated applied skills; An online program using scenarios and simulations could be an effective way to make disability-related training available to a wide variety of emergency responders across geographically disparate areas. 	<ul style="list-style-type: none"> Others: Online educational and training materials for first responders 	<ul style="list-style-type: none"> Data & Evidence Learning & Capacity Development
6	Responding to the deaf in disasters: Establishing the need for systematic training for state-level emergency management agencies and community organizations	Engelman et al. (2013)	USA	<ul style="list-style-type: none"> To assess Deaf/hard-of-hearing (HH) related emergency preparedness training needs for state emergency management agencies and deaf-serving community-based organizations (CBOs) 	State and territorial-level emergency management, public health agencies and deaf-serving CBOs	<ul style="list-style-type: none"> Emergency preparedness trainings specific to responding to or promoting preparedness of the Deaf/ HH was rare, even for state agency personnel, and frequently lack standardization, evaluation, or institutionalization in emergency management infrastructure. This had significant policy and research implications. Similarly, CBOs were not adequately trained to serve the needs of their constituents. 	<ul style="list-style-type: none"> Management of Health Communication Others: Emergency preparedness training for clients/ caregivers 	N/A
7	Emergency preparedness with people who sign: Toward the whole community approach	Cripps et al. (2016).	USA	<ul style="list-style-type: none"> To describe The Emergency Preparedness with People Who Sign (EPPS) model that adopted the concept of the "whole community" approach for emergency preparedness 	Firefighters, members of the deaf community	<ul style="list-style-type: none"> Response to the concurrent training of first responders and deaf community members was positive, and it was hoped that this model could be replicated with deaf people and first responders in other locations, as well as with other often-overlooked groups. 	<ul style="list-style-type: none"> Communication 	<ul style="list-style-type: none"> Participation & Representation Learning & Capacity Development Accessibility & Capability

Ref	Title	Author, Year	Country	Aim	Participants/ Materials	Key Findings	Capability Wheel Element/s	DIDRR Mechanism
8	Disaster preparedness and families of children with special needs: A geographic comparison	Baker et al. (2013)	USA	<ul style="list-style-type: none"> To explore differences in two populations of families of children with special health care needs to determine if geographic differences exist in preparedness levels To determine whether a brief education intervention would prove successful in increasing baseline preparedness levels across both populations 	Families of children with special needs from the Alabama and the Florida regions	<ul style="list-style-type: none"> Although there was no difference in preparedness levels based on geographic location, both populations demonstrated a statistically significant increase in preparedness levels post-intervention. 	<ul style="list-style-type: none"> Management of health Personal support Communication 	<ul style="list-style-type: none"> Participation & Representation Learning & Capacity Development
9	Assessing the emergency response role of community-based organizations (CBOs) serving people with disabilities and older adults in Puerto Rico post-Hurricane María and during the COVID-19 pandemic	Engelman et al. (2022)	USA	<ul style="list-style-type: none"> To assesses the emergency preparedness and response capacity of CBOs for addressing the needs of people with disabilities and the elderly 	N/A	<ul style="list-style-type: none"> Puerto Rican CBOs played a critical role in EPR or disability-inclusive disaster risk reduction for communities living with heightened medical and functional needs such as individuals with disabilities or mental illness and the elderly. It was imperative that emergency management officials, CBOs, and communities in crisis received sufficient resources and mental health support. 	<ul style="list-style-type: none"> Transportation Management of health Personal support Communication 	N/A
10	Using geographic information system technology to improve emergency management and disaster response for people with disabilities	Enders et al. (2007)	USA	<ul style="list-style-type: none"> To provide a case study example of the use of geographic information systems (GIS) to create a map matching disability-relevant resources post hurricane Katrina 	GIS technology	<ul style="list-style-type: none"> GIS technology provided the ability to spatially coordinate resources from separate systems, which was vital for emergency management 	<ul style="list-style-type: none"> Transportation Assistive Technology Management of Health Personal Support Living Situation 	N/A
11	Evaluation of an online educational intervention to increase knowledge and self-efficacy in disaster responders and critical care transporters caring for individuals with developmental disabilities	Edinger et al. (2019)	USA	<ul style="list-style-type: none"> To evaluate the effect of an online educational intervention on disaster responders and critical care transporters' knowledge of and feelings of self-efficacy about caring for individuals with developmental disabilities 	Disaster responders and critical care transporters	<ul style="list-style-type: none"> Education was lacking and needed for caring for the developmentally disabled community after a disaster; Online education could improve the knowledge and self-efficacy levels of disaster responders and critical care transporters related to caring for individuals with developmental disabilities; This method of education had the potential to educate larger numbers of individuals in this population. 	<ul style="list-style-type: none"> Management of health Personal support Communication 	<ul style="list-style-type: none"> Data & Evidence Learning & Capacity Development

Ref	Title	Author, Year	Country	Aim	Participants/ Materials	Key Findings	Capability Wheel Element/s	DIDRR Mechanism
12	Emergency response training practices for people with disabilities	Rowland et al. (2007)	USA	<ul style="list-style-type: none"> To examine what types of policies and practices exist to ensure emergency personnel are trained to assist people with mobility impairments 	Emergency services administrators, firefighters from urban and rural locations in Northeast Kansas	<ul style="list-style-type: none"> Interviewees revealed that emergency agencies did not have emergency preparedness policies, guidelines, or practices specifically designed to assist people with mobility impairments during emergencies; Many responders reported using any means to get the person out of the emergency situation. All reported they applied existing policies and procedures to assist all people, including those with mobility impairments; Rural emergency services personnel reported relying on information from personal contacts such as long-time neighbours of people who had mobility impairments to determine how to assist those individuals. In contrast, none of the urban locations had a formal or informal method of determining how many people located in their coverage area have mobility impairments; The lack of personnel and financial resources as the primary limiting factors for future action to change existing policies and practices; Both rural and urban location representatives were receptive to including people with mobility impairments in future policy development; however, they were unclear how people with mobility impairments in their specific locations might get involved in this process. 	<ul style="list-style-type: none"> Assistive Technology Management of Health Personal Support 	N/A

Ref	Title	Author, Year	Country	Aim	Participants/ Materials	Key Findings	Capability Wheel Element/s	DIDRR Mechanism
13	Individual emergency-preparedness efforts: A social justice perspective	McNeill et al. (2020)	USA	<ul style="list-style-type: none"> To highlight participant experiences in becoming better prepared for emergencies and provide insight from a social justice perspective 	Low-income, uninsured, or under-insured attendees at a medical outreach clinic	<ul style="list-style-type: none"> All participants reflected positively on the education they received; Some suggestions for improving the program included addressing preparation for those with Alzheimer's or dementia; Participants indicated that the information shared during the session triggered their thinking about emergency planning for and with their families; Participants identified three areas that presented potential challenges when preparing for emergencies: medications, family concerns, and being able to afford items needed to prepare for an emergency; Facilitators of preparedness: prior consideration, were having a family member who was knowledgeable, long-term experience with emergency preparedness. 	<ul style="list-style-type: none"> Transportation Management of Health Communication Living situation 	<ul style="list-style-type: none"> Participation & Representation Data & Evidence Learning & Capacity Development Accessibility & Capability
14	The built environment, evacuations, and individuals with disabilities: A guiding framework for disaster policy and preparation	Christensen et al. (2007)	USA	<ul style="list-style-type: none"> To explain the complexity of evacuation difficulties by proposing a framework that emphasises the conditions associated with various types of emergency evacuations and the factors that can affect a person's response to these conditions 	N/A	<ul style="list-style-type: none"> This article proposed a framework perspective on 4 forms of emergency evacuation according to the timing and duration of the evacuation (protective, preventive, rescue, and reconstructive), as well as 3 overlying factors that affected all emergency evacuations: the behaviour of the individual, the planned systems active in the event, and the environment in which the event occurs. 	<ul style="list-style-type: none"> Others: Accessible built environment 	N/A
15	Semi structured interviews on disaster and emergency preparedness for people with disabilities in two states in Mexico	Simpson et al. (2021)	Mexico	<ul style="list-style-type: none"> To identify the barriers that rehabilitation professionals facing in facilitating emergency and disaster preparedness for people with disability (PWD) To identify and explain the needs of PWD through community feedback. 	Rehabilitation professionals, people who had lived experience of disaster with their disability, acquired their disability through a disaster or have not yet experienced a disaster with disability	<ul style="list-style-type: none"> Lack of inclusion and fundamental understanding of disability; PWD must be included holistically in emergency preparedness planning; The need for an intersectional approach toward preparedness planning initiatives; A need for urgent action in disaster risk reduction and promotion of preparedness behaviours. 	<ul style="list-style-type: none"> Communication Others: Holistic inclusion model 	N/A

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16	Preparing for and responding to pandemic influenza: Implications for people with disabilities	Campbell et al. (2009)	USA	<ul style="list-style-type: none"> To identify the potential needs of persons with disabilities during an influenza pandemic To analyse the status of pandemic influenza planning and present recommendations for each challenge 	N/A	<ul style="list-style-type: none"> Existing surveillance systems were unable to determine the impact of emergencies on people with disabilities; Present planning and response systems were lacking consistency in strategy, depth, and evidence of implementation that were both reliable and effective; Risks were greatest among persons with disabilities who resided in congregate care facilities as they often relied on the carer for assistance with tasks of daily living. Planning for essential services for people with disabilities would be important because of the potential for disruption of service; Most jurisdictions vastly underestimated the level of in advance coordination and planning needed to properly address the inclusion and accommodations of people with disabilities. 	<ul style="list-style-type: none"> Communication Others: Policy guidelines and legislative initiatives, ethical consideration, service disruption 	N/A
17	PREparedness, REsponse and SySTemic transformation (PRE-RE-SyST): A model for disability-inclusive pandemic responses and	Jesus et al. (2021)	India	<ul style="list-style-type: none"> To present a model (PRE-RE-SyST) for disability-inclusive pandemic responses and systematic disparities reduction for people with disability based on the findings of a scoping review 	N/A	<ul style="list-style-type: none"> A model that articulated four level strategic action was developed based on the four major themes emerged from the literature: <ul style="list-style-type: none"> - respond to prevent or reduce disability disparities during a pandemic crisis; - prepare ahead for pandemic and other crises responses; - design systems and policies for a structural disability-inclusiveness. - transform society's cultural assumptions about disability. 	<ul style="list-style-type: none"> Others: Disability-inclusive systems, policies, and practices; disability-inclusive pandemic preparedness; discriminatory cultural assumptions 	N/A

Ref	Title	Author, Year	Country	Aim	Participants/ Materials	Key Findings	Capability Wheel Element/s	DIDRR Mechanism
18	Moving beyond “special needs”: A function-based framework for emergency management and planning	Kailes et al. (2007)	USA	<ul style="list-style-type: none"> To provide disability demographics and describes special needs populations to lay the foundation for moving beyond “Special Needs” To proposes a planning and response framework based on the identified fundamental functional needs 	N/A	<ul style="list-style-type: none"> There was a need to develop a more accurate and flexible planning and response framework based on essential, sometimes overlapping, functional needs: communication, medical needs, maintaining functional independence, supervision, and transportation (C-MIST), as well as new approaches to functional support, leadership, service delivery, and training. 	<ul style="list-style-type: none"> Transportation Management of health Personal support Communication 	N/A
19	Preparedness training programs for working with deaf and hard of hearing communities and older adults: Lessons learned from key informants and literature assessments	Kamau et al. (2018)	USA	<ul style="list-style-type: none"> To identify training programmes for emergency response personnel and public health professionals that address the needs of individuals who are deaf and have limited hearing and older adults To identify strategies to improve these training programs To identify gaps in existing training and suggest guidance for addressing these gaps 	Experts who worked with deaf and hard of hearing persons or older adults	<ul style="list-style-type: none"> Frequently made recommendations by the key informants: <ul style="list-style-type: none"> - collaboration across different emergency, state, federal, and advocacy agencies; - involving members from affected communities; - being more widely accessible and affordable; - teaching response personnel varied communication techniques relevant to these communities of interest. 	<ul style="list-style-type: none"> Communication Others: Effective, accessible, and affordable training programs for emergency response personal 	N/A
20	Importance of individualized disaster preparedness for hospitalized or institutionalized patients: Lessons learned from the legal revisions made to the Basic Act on Disaster Management in Japan following the Fukushima nuclear disaster	Yoshida et al. (2021)	Japan	<ul style="list-style-type: none"> To identify the difficulties involved in conducting evacuations for hospitalized/ institutionalized patients following Fukushima nuclear disaster 	Experts who worked with deaf and hard of hearing persons or older adults	<ul style="list-style-type: none"> Key barriers in the context of each case: <ul style="list-style-type: none"> - Case-1: evacuation of patients at Futaba Hospital after the Fukushima Daiichi Nuclear Power Plant (FDNPP) accident in 2011: The mass casualty in this event may have been triggered by changes in the hospital environment caused by infrastructure shutdown, inadequate care due to staff shortage, a delayed evacuation due to communication issues, and prolonged travel related to the evacuation; 	<ul style="list-style-type: none"> Communication Others: Facility-specific evacuation plan, gap between policy and practice 	N/A

Ref	Title	Author, Year	Country	Aim	Participants/ Materials	Key Findings	Capability Wheel Element/s	DIDRR Mechanism
						<ul style="list-style-type: none"> - Case-2: evacuation of nursing-home residents during Typhoon Lionrock in Iwate Prefecture: Casualties in this incident resulted from delay in municipality's evacuation orders, also the facility itself didn't have a communication plan and neither had a manual to conduct an evacuation during flooding; - Case-3: evacuation of the residents of a special nursing home after the torrential rainfall that triggered several landslides in the northern Kyushu region: Although nursing home staffs followed the emergency evacuation plan and the pre-disaster drills, lack of trained personnel and miscommunication led to failure of emergency evacuation plans. 		
21	Building a roadmap for inclusive disaster risk reduction in Australian communities	Villeneuve (2021)	Australia	<ul style="list-style-type: none"> • To share Australia's progress on developing and advancing Disability Inclusive Disaster Risk Reduction (DIDRR) at the local community level through cross-sector collaboration and grassroots innovation 	People with disability, carers, and their representative organisations, service providers from the community, health and disability sectors, emergency managers	<ul style="list-style-type: none"> • The scope of this research encompassed inclusive community engagement and capacity development; combining practice wisdom and research evidence to develop DIDRR policy and practices that leave nobody behind; • DIDRR progressed in three stages including: (a) identifying the scope for DIDRR and giving direction to emergency managers; (b) defining roles and responsibilities for people with disability and the services that support them; and (c) building cross sector mechanisms for sharing responsibility. 	<ul style="list-style-type: none"> • Transportation • Assistive technology • Management of health • Personal support • Communication • Assistance animals • Living situation • Social connectedness 	<ul style="list-style-type: none"> • Participation & Representation • Data & Evidence • Learning & Capacity Development • Accessibility & Capability

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22	Disaster management: Vulnerability and resilience in disaster recovery in Thailand	Busapathu mrong (2013)	Thailand	<ul style="list-style-type: none"> To explore models of disaster management in Thailand To investigate the effects of disaster management on vulnerability and the resilience of women, children, the elderly, and the disabled population, and on the impact of disaster on these subpopulations. 	N/A	<ul style="list-style-type: none"> The five models contributed to knowledge and understanding of disaster management in Thailand and could be widely applied in building resilience for women, children, the elderly, and the disabled: <ul style="list-style-type: none"> - model of royal project and international cooperation on disaster preparedness and response; - ASEAN Socio-Cultural Blueprint; - rights-based approach; - welfare mix model; and - knowledge management model. 	<ul style="list-style-type: none"> Management of health Personal support Communication 	N/A
23	Disoriented and immobile: The experiences of people with visual impairments during and after the Christchurch, New Zealand, 2010 and 2011 earthquakes	Good et al. (2016)	New Zealand	<ul style="list-style-type: none"> To explore the experiences of 12 visually impaired Christchurch residents who lived through more than 12,000 aftershocks throughout 2010 and 2011 	Visually impaired Christchurch residents and three staff members of the Blind Foundation	<ul style="list-style-type: none"> Participants highlighted the importance of communication and technology, personal and agency support, orientation and mobility, health, rebuilding independence, rehabilitation, coping, and resilience. 	<ul style="list-style-type: none"> Transportation Assistive technology Management of health Personal support Communication Assistance animals 	N/A
24	Experience of people with physical disability: Mobility needs during earthquakes	Pakjouei et al. (2018)	Iran	<ul style="list-style-type: none"> To identify the mobility needs of people with physical disability during earthquakes across different provinces of Iran 	Individuals with mobility disability along with an experience of earthquake in six provinces of Iran	<ul style="list-style-type: none"> Study identified seven mobility needs including house and workplace adaptation, spare assistive devices, easy access to vehicles, special facilities for emergency evacuation, adaptation and accessibility of shelters, adapted bathroom and toilet, and transferring by others. 	<ul style="list-style-type: none"> Transportation Assistive technology Others: Special facilities, trained emergency personal, adaptation, and accessibility of shelters 	N/A

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25	People with disabilities as key actors in community-based disaster risk reduction	Pertiwi et al. (2019)	Indonesia	<ul style="list-style-type: none"> To examine the role and contribution of disabled people's organisations (DPOs) leading disaster preparedness initiatives in three separate localities in Indonesia 	Directors, project team members, and external consultants from 3 DPO	<ul style="list-style-type: none"> The contributing factors for and process of DPOs' first engagement in disaster risk reduction were capacity development program, international funding, external support from experts within organisational network and mainstream disaster risk reduction organisations; Strategies to breaking down barriers and ensuring inclusion were data-driven advocacy, leveraging power and influence to break down stigma, resource sharing and sustainability, and engagement with mainstream multi-stakeholder mechanisms; Despite structural limitations, the results demonstrate that the DPOs successfully led disaster preparedness projects in their local communities and contributed significantly to the community-based disaster risk reduction efforts. 	<ul style="list-style-type: none"> Others: Disaster-related disability data, community-level stigma, limited financial resources, multiple stakeholder collaboration 	N/A
26	Vibration signalling in mobile devices for emergency alerting: A study with deaf evaluators	Harkins et al. (2010)	USA	<ul style="list-style-type: none"> To understand how mobile text devices are being used by deaf persons, for possible use in emergency management accessibility planning To study the opinions of mobile device users as to whether pattern and/or length of vibration signal make a difference in terms of their perceived efficacy in alerting someone to an emergency 	Deaf or hard-of hearing individuals who used mobile devices for text communication and who used vibration signals for incoming messages	<ul style="list-style-type: none"> Longer signals received higher ratings from the participants than shorter ones, and three signals with temporal on-off patterns were rated significantly better than a constant vibration. 	<ul style="list-style-type: none"> Assistive Technology 	<ul style="list-style-type: none"> Participation & Representation Data & Evidence Accessibility & Capability

Ref	Title	Author, Year	Country	Aim	Participants/ Materials	Key Findings	Capability Wheel Element/s	DIDRR Mechanism
27	Emergency preparedness and perceptions of vulnerability among disabled people following the Christchurch earthquakes: Applying lessons learnt to the Hyogo Framework for Action	Phibbs (2015)	New Zealand	<ul style="list-style-type: none"> To explore how the Christchurch earthquakes impacted upon disabled people 	Disabled people, disability workers, and disability agency representatives	<ul style="list-style-type: none"> Prior to the September 2010 earthquake at the Canterbury region of New Zealand, disabled people were not prepared for an emergency; Following the earthquake most people took steps to ensure that they were better prepared. However, the majority of disabled people personal emergency preparedness planning was inadequate; Vulnerability was discussed by participants in relation to personal safety, communication, housing, transport and financial hardship; A lack of community preparedness alongside insufficient structures to assist disabled people in the disaster response or recovery phases increased exposure to risk. 	<ul style="list-style-type: none"> Transportation Personal support Communication Others: Financial hardship, disability accessible buildings, facilities, and services 	N/A
28	Frail elderly as disaster victims: Emergency management strategies	Fernandez et al. (2002)	USA	<ul style="list-style-type: none"> To identify the vulnerabilities of elderly to disasters To develop strategies to address these vulnerabilities 	Directors, project team members, and external consultants from 3 DPO	<ul style="list-style-type: none"> The vulnerability of the elderly to disasters was related to their impaired physical mobility, diminished sensory awareness, chronic health conditions, and social and economic limitations that prevented adequate preparation for disasters, and hindered their adaptability during disasters; Frail elderly, those with serious physical, cognitive, economic, and psycho-social problems, were at especially high risk. 	<ul style="list-style-type: none"> Transportation Assistive technology Management of health Personal support Communication Social connectedness Others: Inaccessible disaster assistance, financial hardship, 	N/A
29	Inclusion of people with disabilities, their needs and participation, into disaster management: A comparative perspective	Ha (2016)	Indonesia, Korea, and USA.	<ul style="list-style-type: none"> To push for specific inclusion of people with disabilities, their needs and participation, into disaster management by studying relevant cases from Indonesia, Korea, and the USA 	Representatives from three countries, including government officials, researchers, emergency managers, educators, and volunteers	<ul style="list-style-type: none"> The culture of each country had influenced its own model of conduct and action towards individuals with disabilities; Regardless of national boundaries, the rights of people with disabilities had not been fully respected nor practised; 	<ul style="list-style-type: none"> Others: Olden beliefs and misconceptions on disability, review of fundamental laws, collaboration with international NGOs 	N/A

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						<ul style="list-style-type: none"> From a policy perspective, the field of disaster management had frequently ignored social justice for those with disabilities. 		
30	Locating and communicating with at-risk populations about emergency preparedness: The vulnerable populations outreach model	Klaiman et al. (2010)	USA	<ul style="list-style-type: none"> To describe the vulnerable populations outreach model that Philadelphia's Department of Public Health(PDPH) and Office of Emergency Management (OEM) have used to engage vulnerable populations in emergency planning To offer lessons learned and recommendations for other locations interested in implementing such a model 	N/A	<ul style="list-style-type: none"> Strategies for locating, engaging, and communicating with vulnerable populations about both organizational and personal emergency preparedness: <ul style="list-style-type: none"> - creating a method for bidirectional communication via a free quarterly health newsletter that was distributed to community-based organizations serving vulnerable populations; - engaging vulnerable populations in the planning process in Philadelphia. 	<ul style="list-style-type: none"> Communication Others: Disability inclusion and sustainable partnerships, preparedness training, evaluation of model/practice 	<ul style="list-style-type: none"> Participation & Representation Data & Evidence Learning & Capacity Development Accessibility & Capability
31	Disaster preparedness and response for persons with mobility impairments, results from the University of Kansas Nobody Left Behind Study	Fox et al. (2007)	USA	<ul style="list-style-type: none"> To assess the impact of a major disaster on county-level preparedness for persons with mobility disabilities 	Participants: emergency managers; Materials: county disaster plans	<ul style="list-style-type: none"> People with disabilities were poorly represented in emergency planning; Federal training on the needs of people with disabilities appeared useful, although only 27% of emergency managers reported completing the training; 20% of emergency managers reported having disability guidelines in place; County-level surveillance systems were ineffective; 66% of counties had no intention of modifying their guidelines to accommodate the needs of persons with mobility impairments, citing limitations from (a) costs, (b) limited staffing, (c) lack of awareness, (d) other security demands, and (e) broader responsiveness to all "special needs individuals. 	<ul style="list-style-type: none"> Others: Training, specific guidelines for first responders, awareness, and surveillance 	N/A

