

Appendices

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Examining the health and social impacts of evacuations and interventions that can help to mitigate their effects

22 July 2024

Appendix 1: Methodological details

We use a standard protocol for preparing rapid evidence profiles (REP) to ensure that our approach to identifying research evidence is as systematic and transparent as possible in the time we were given to prepare the profile.

Identifying research evidence

For this REP, we searched Health Systems Evidence, Social Systems Evidence, PubMed, and ProQuest for:

- 1) evidence syntheses
- 2) protocols for evidence syntheses that are underway.
- 3) single studies.

We searched [Health Systems Evidence](#) and [Social Systems Evidence](#) using an open text search for “evacuation.”

We ran separate searches in PubMed and ProQuest for evidence syntheses and for single studies. For evidence syntheses, we searched [PubMed](#) and ProQuest (link unavailable as it is specific to the user) using an open text search for: (evacuat*) AND (disaster* OR avalanche* OR storm* OR drought* OR earthquake* OR flood* OR landslide* OR “tidal wave*” OR tornado* OR wildfire*) AND (health OR economic* OR financial). We limited the search to reviews published in the past 10 years. For single studies, we ran the same search strategy in [PubMed](#) and ProQuest (link unavailable as it specific to the user); however, limited the results to the past three years.

We ran a second search in [PubMed](#) in late June following feedback from the requestors and used the following search terms: (“Climate Change”[Mesh] OR flood OR fire OR storm OR hurricane) AND (“evacuate” OR “evacuation”). We expanded the date limit to five years. In ProQuest (link unavailable as it is specific to the user), we searched for: (“climate change” OR “climate event” OR floor OR fire OR storm OR hurricane) AND (“evacuate” OR “evacuation”) within the title or abstract and limited the results to the past five years.

Links provide access to the full search strategy.

Each source for these documents is assigned to one team member who conducts hand searches (when a source contains a smaller number of documents) or keyword searches to identify potentially relevant documents. A final inclusion assessment is performed both by the person who did the initial screening and the lead author of the rapid evidence profile, with disagreements resolved by consensus or with the input of a third reviewer on the team. The team uses a dedicated virtual

channel to discuss and iteratively refine inclusion/exclusion criteria throughout the process, which provides a running list of considerations that all members can consult during the first stages of assessment. Excluded documents are listed in Appendix 6.

During this process we include published, pre-print, and grey literature, however we did not undertake a specific search for grey literature. We do not exclude documents based on the language of a document. However, we are not able to extract key findings from documents that are written in languages other than Chinese, English, French, or Spanish. We provide any documents that do not have content available in these languages in an appendix containing documents excluded at the final stages of reviewing. We excluded documents that did not directly address the research questions and the relevant organizing framework.

Assessing relevance and quality of evidence

We assess the relevance of each included evidence document as being of high, moderate, or low relevance to the question.

Two reviewers independently appraised the quality of the guidelines we identified as being highly relevant using AGREE II. We used three domains in the tool (stakeholder involvement, rigour of development, and editorial independence) and classified guidelines as high quality if they were scored as 60% or higher across each of these domains.

Two reviewers independently appraise the methodological quality of evidence syntheses that are deemed to be highly relevant using the first version of the [AMSTAR](#) tool. Two reviewers independently appraise each synthesis, and disagreements are resolved by consensus with a third reviewer if needed. AMSTAR rates overall methodological quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. High-quality evidence syntheses are those with scores of eight or higher out of a possible 11, medium-quality evidence syntheses are those with scores between four and seven, and low-quality evidence syntheses are those with scores less than four. It is important to note that the AMSTAR tool was developed to assess evidence syntheses focused on clinical interventions, so not all criteria apply to those pertaining to health-system arrangements or implementation strategies. Furthermore, we apply the AMSTAR criteria to evidence syntheses addressing all types of questions, not just those addressing questions about effectiveness, and some of these evidence syntheses addressing other types of questions are syntheses of qualitative studies. While AMSTAR does not account for some of the key attributes of syntheses of qualitative studies, such as whether and how citizens and subject-matter experts were involved, researchers' competency, and how reflexivity was approached, it remains the best general quality-assessment tool of which we're aware. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, an evidence synthesis that scores 8/8 is generally of comparable quality to another scoring 11/11; both ratings are considered 'high scores.' A high score signals that readers of the evidence synthesis can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the evidence synthesis should be discarded, merely that less confidence can be placed in its findings and that it needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. *Health Research Policy and Systems* 2009; 7 (Suppl1): S8.)

Identifying experiences from other countries and from Canadian provinces and territories

For each REP, we work with the requestors and a subject matter expert to collectively decide on what countries (and/or states or provinces) to examine based on the question posed. For other countries, we search relevant government and agency websites responsible for emergency planning. In Canada, a similar approach was used, searching the websites of the federal and provincial/territorial governments to identify evacuation guidance and plans. While we do not exclude content based on language. Where information is not available in English, Chinese, French, or Spanish, we attempt to use site-specific translation functions or Google Translate. A full list of websites and organizations searched is available upon request.

Preparing the profile

Each included document is cited in the reference list at the end of the REP. For all included guidelines, evidence syntheses and single studies (when included), we prepare a small number of bullet points that provide a summary of the key findings, which are used to summarize key messages in the text. Protocols and titles/questions have their titles hyperlinked, given that findings are not yet available.

We then draft a summary that highlights the key findings from all highly relevant documents (alongside their date of last search and methodological quality).

Upon completion, the REP is sent to a subject matter expert for their review.

Appendix 2: Summary of key findings from highly relevant evidence syntheses and single studies

Evacuation and supports	Population/setting	Impacts
Evacuation	Specific populations	<p><i>Mental health impacts</i></p> <ul style="list-style-type: none"> Four recent single studies found pregnant women and mothers reported experiencing anxiety and psychological distress prior to and during the evacuation, particularly when they were unprepared (e.g., did not have a 'grab bag' ready) (1-4) <ul style="list-style-type: none"> One of the studies noted that the psychological distress placed mothers at risk of developing post-traumatic stress disorder (PTSD) (1) One of the studies also noted that social support and the ability to continue mothering routines were supportive of maintaining overall health and well-being during and following evacuation (2) One of the studies noted that this symptoms of post-traumatic stress, anxiety, and depression continued at three months following evacuation; the study also found higher rates of post-traumatic stress symptoms among mothers with children aged 7 to 17 compared to those aged 0 to 6 (1) One of the single studies noted depressive symptoms and post-traumatic stress symptoms resulting from the stress experiences before, during, and after evacuation from a hurricane were significantly associated with sedentary computer time, smoking cigarettes, and sleeping problems (3) One recent single study found children evacuated during wildfires exhibited elevated rates of probable depression, suicidal thinking, symptoms of anxiety, and tobacco use 18 months following the wildfire (5) One recent single study found evacuation stressors were sufficient to prompt psychological health symptoms in youth (age seven to 17) including post-traumatic stress, anxiety, and depression (6) <p><i>Socio-economic health impacts</i></p> <ul style="list-style-type: none"> One recent single study found that evacuations of Indigenous communities due to wildfires led to family separations creating, emotional distress and logistical challenges (7) <ul style="list-style-type: none"> These effects may be reduced by advanced planning, enhanced communication, and adequate financial support One single study found low-income populations had difficulties evacuating and had shorter evacuation return and relocation time when compared to high-income populations, at times returning before it was safe to do so (8)
	Specific settings	<p><i>Physical health impacts</i></p> <ul style="list-style-type: none"> One recent low-quality evidence synthesis found individuals who are evacuated or relocated during a natural disaster had statistically significant increases in health effects including mortality, diabetes, and weight problems compared to non-evacuated or relocated individuals, particularly for the first 60–90 days following evacuation (9) <ul style="list-style-type: none"> Studies underpinning the mortality meta-analysis often focused on elderly, nursing home residents, and hospitalized populations and as a result may not be generalizable to the whole population (9)

Evacuation and supports	Population/setting	Impacts
		<ul style="list-style-type: none"> One recent single study found evacuation of assisted living residents in advance of a hurricane was associated with increased odds of emergency department visits and nursing home admissions within 30 days, as compared to those that sheltered in place (10) <ul style="list-style-type: none"> The study found no effect on hospitalization (e.g., admission) or mortality (10) One recent single study found evacuation during a wildfire was associated with a 1.72 times increase of inpatient cardiorespiratory visits among durable medical equipment users (11) <ul style="list-style-type: none"> However, another single study found no significant association between evacuation orders and cardiovascular events when compared to non-evacuated populations and controlling for known risk factors (12) <p><i>Mental health impacts</i></p> <ul style="list-style-type: none"> None identified <p><i>Socio-economic health impacts</i></p> <ul style="list-style-type: none"> None identified
	General populations and general settings	<p><i>Physical health impacts</i></p> <ul style="list-style-type: none"> One recent single study found an increase in the likelihood of traffic accidents during evacuations as compared to regular periods of time, even after controlling for traffic characteristics (13) One recent low-quality evidence synthesis identified increases in metabolic syndrome from changes to lifestyle during evacuation (9) <p><i>Mental health impacts</i></p> <ul style="list-style-type: none"> One recent low-quality evidence synthesis found individuals who are evacuated or relocated during a natural disaster had statistically significant increases in symptoms of mental health conditions including depression, PTSD, psychological distress, and sleep problems (9) One recent single study found most participants lacked time to prepare before the evacuation became mandatory and, as a result, struggled with increased stress and uncertainty (14) One recent single study found repeated exposure to evacuations for hurricanes can increase sensitization and result in increased mental health challenges and functional impairment overtime, particularly for those with pre-existing conditions (15) One recent single study found more than a third of evacuees from a wildfire had clinically significant psychological disorder symptoms, including post-traumatic stress, major depression, insomnia, anxiety, and substance use or a combination of these (16) <ul style="list-style-type: none"> Significant predictors of psychological disorder symptoms include having experienced higher levels of stress in the year following the wildfire, decrease in work, poorer health status, decrease in social life, and increase in drug and alcohol use (16)

Evacuation and supports	Population/setting	Impacts
		<ul style="list-style-type: none"> One recent single study found individuals who were unemployed, taking sleeping pills, and had a prior diagnosis of depression were more likely to self-report symptoms of major depressive disorder and PTSD following evacuation from a wildfire (17) <ul style="list-style-type: none"> The study found perceived family support was a significant protective factor against post-traumatic stress symptoms following a traumatic event such as a wildfire and evacuation (17) <p><i>Socio-economic health impacts</i></p> <ul style="list-style-type: none"> None identified
Supports for evacuation	Specific populations	<p><i>General</i></p> <ul style="list-style-type: none"> One recent low-quality evidence synthesis found older adults require specific multifaceted supports during evacuation including supports for daily living, finances, social supports, care for ongoing health needs, religion and culture, and clear dissemination of information to help maintain their mental and physical health (18) A recent single study found special needs shelters should ensure flexible admission, consider the experiences of people with disabilities, and involve people with disabilities in disaster planning and community response (19) <p><i>Mitigation of physical health impacts</i></p> <ul style="list-style-type: none"> One older single study found urban homebound older adults indicated that they felt unprepared for evacuation due to physical disabilities and their complex medical needs would require significant preparation by special needs shelters, on par with those of nursing home residents (20) <p><i>Mitigation of mental health impacts</i></p> <ul style="list-style-type: none"> One recent single study found that support received, clinical variables, and socio-economic context affect resiliency rather than flood exposure variables (21) <ul style="list-style-type: none"> In particular, the study found that being younger (under 25), having a pre-existing anxiety disorder, having pre-existing depression, and relocation all contribute to low resilience after a flood (21) <p><i>Mitigation of socio-economic impacts</i></p> <ul style="list-style-type: none"> One recent single study found that dependent evacuees were unable to sufficiently benefit from the use of a hotel guest room as a shelter during natural disasters without access to caregivers and supports as they were at risk of isolation (22)
	Specific settings	<p><i>Mitigation of physical health impacts</i></p> <ul style="list-style-type: none"> None identified <p><i>Mitigation of mental health impacts</i></p> <ul style="list-style-type: none"> None identified <p><i>Mitigation of socio-economic impacts</i></p> <ul style="list-style-type: none"> None identified
	General population	<p><i>General findings related to supports for the general population</i></p> <ul style="list-style-type: none"> All supports

Evacuation and supports	Population/setting	Impacts
		<ul style="list-style-type: none"> ○ One recent single study identified challenges in delivering supports to evacuees following disasters included shortages of relief staff, difficulty establishing effective coordination roles, and the need for increased planning and communication between local government and stakeholders (23) ○ The study identified that there was generally low awareness within evacuation centres of the need to protect vulnerable people and limited guidance on how to respond to cultural considerations (23) ○ One recent single study found calls from disaster areas, evacuation routes and shelters during sequential hurricane disasters identified the greatest needs as being shelter and housing, medical, food-related, and transportation (24) ● Communication and information <ul style="list-style-type: none"> ○ One recent single study found that supports provided during wildfires can help to encourage evacuation, with the most significant modifiers of behaviour being provision of emergency accommodation, resourcing rural fire services, and timely and accurate information (25) ● Temporary housing and shelter <ul style="list-style-type: none"> ○ One recent single study investigated types and timing of unmet shelter and housing needs during sequential hurricane disasters, with the most common type of support needed being unmet housing needs largely due to financial problems related to rental housing (24) ● Healthcare services <ul style="list-style-type: none"> ○ Two recent single studies found telemedicine can support the continuity care during and after evacuation, in particular one of the single studies found it helped to meet the medical needs of shelter patients and likely reduced the use of emergency medical services and emergency department use (26; 27) <ul style="list-style-type: none"> ▪ One of the single studies found that many patients used telemedicine for medication refill (27) ▪ The other single study noted sex and cultural differences that should be considered including that males, older adults, and individuals that spoke other languages were less likely to make use of telemedicine services (26) ● Mental health services <ul style="list-style-type: none"> ○ One recent single study found that women were significantly more likely to receive information (1.5 times more likely), medication (1.55 times more likely), and psychological (1.86 times more likely) help as compared to men following evacuation (28) ○ One recent single study found the use of an online self-guided treatment program targeting PTSD, sleep and mood reduced symptoms of PTSD, insomnia, and depression among wildfire evacuees as compared to those who did not use the online program (29) ● Cultural and religious services <ul style="list-style-type: none"> ○ One recent single study found activities that support spiritual values and belief, including arts, stories, and religion played a significant role in building community resilience and promoting individual and communal healing following a disaster (30)

Appendix 3: Details about each identified evidence synthesis

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Flood Wildfire Length of evacuation <ul style="list-style-type: none"> Long term Place of evacuation <ul style="list-style-type: none"> Local (e.g., neighbouring town or community) Within province or state Distant (e.g., to another province or state) Inpatient healthcare settings <ul style="list-style-type: none"> Hospitals (including mental health and other specialized hospitals) Long-term care homes Outcomes <ul style="list-style-type: none"> Physical health outcomes <ul style="list-style-type: none"> Death Mental health outcomes <ul style="list-style-type: none"> Post-traumatic stress disorder 	<p>Evacuation can lead to immediate higher rates of mortality, post-traumatic stress disorder (PTSD), depression, and sleep problems (9)</p> <ul style="list-style-type: none"> Individuals who have been displaced due to evacuations have higher mortality, PTSD, depression, and sleep problems rates than those who do not, particularly for the first 60–90 days <ul style="list-style-type: none"> Most literature was focused on evacuation of hospitals and long-term care, which may explain higher mortality rates In most studies, health conditions stabilized with time 	High	No	3/11	2023	Not available	<ul style="list-style-type: none"> None identified
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Length of evacuation <ul style="list-style-type: none"> Long term Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> Information and communication Food and water Temporary housing/shelter Mental health services Social support services 	<p>Older adults require specific multifaceted supports during evacuation including supports for daily living, finances, social supports, care for ongoing health needs, religion and culture, and clear dissemination of information to help maintain their mental and physical health (18)</p> <ul style="list-style-type: none"> This review explored the needs of older adults during evacuation due to natural disasters Older adults require health supports including medical treatment for both ongoing needs and those caused by disasters, psycho-social support, nutrition, and activities for daily living 	High	No	1/9	2022	Not available	<ul style="list-style-type: none"> None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
<ul style="list-style-type: none"> Financial supports Cultural supports (e.g., for Indigenous healing, cultural safety) Religious supports Outcomes <ul style="list-style-type: none"> Physical health outcomes <ul style="list-style-type: none"> Effects on pre-existing conditions Mental health outcomes <ul style="list-style-type: none"> Depression Socio-economic effects <ul style="list-style-type: none"> Property destruction 	<ul style="list-style-type: none"> Socio-economic supports needed include protection of damaged property, financial support, and support from domestic abuse During evacuation, physical mobilities can prevent safe evacuation and special transportation Safe housing during relocation is needed to support complex medical needs and prevent depressive symptoms, as older adults have increased vulnerabilities Older adults trust in government officials is strongly related to their willingness to follow evacuation procedures Information and communication can support safe evacuation; this can be done using television, radio, landline calls, and trusted community members Cultural needs should be considered during evacuation to prevent mental health symptoms, this should include culturally appropriate foods, religious supports, and access to cultural clothing This review emphasized that there is a need to advocate for the needs of older adults during evacuation procedures 						
<ul style="list-style-type: none"> Reason for evacuation 	<p>A range of factors including demographics, socio-economic status, household size and make-up, as well as source of information all affect individual decisions about whether or not to evacuate (31)</p> <ul style="list-style-type: none"> The synthesis examined predictors of evacuation behaviour, which includes studies of individuals' choice or intentions to leave their homes for a safer location in the event of a natural disaster Demographic indicators were strong predictors of individual behaviour, including: <ul style="list-style-type: none"> Female gender was consistently being correlated with evacuation expectations and evacuation behaviour Older age was generally associated with decreased likelihood of evacuation White individuals were most likely to evacuate, while Black individuals reported greater intent 	High	No	7/9	2016	Not available	<ul style="list-style-type: none"> Race/ethnicity/ language Socio-economic status

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	<p>to evacuate from a future disaster but less likely to evacuate in the event of an actual disaster</p> <ul style="list-style-type: none"> ○ Mixed findings were identified for the association with socio-economic status and higher education, though home ownership was often associated with failure to evacuate ○ Household size emerged as an important predictor of evacuation behaviour with those with more children being more likely to evacuate than others while those with disabled members and pets were consistently less likely to evacuate ● Female gender, younger age, lower income, race other than Black, higher post-traumatic stress, physical health symptoms, and negative affect were all significantly associated with reports of having had an evacuation plan prior to a disaster ● Individuals consistently reported greater evacuation behaviour and expectation to evacuate given a mandatory evacuate order compared to voluntary ● Previous experience with a disaster was found have variable effects on intention to evacuate, but previous evacuation behaviour was a robust predictor of future evacuation behaviour ● Sources of evacuation warning also emerged as a common predictor of evacuation behaviour, with information received directly from community officials or from peers, friends, and family as being more likely to result in evacuation 						

Appendix 4: Details about each identified single study

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Frequency of evacuation <ul style="list-style-type: none"> Single Populations <ul style="list-style-type: none"> Individuals with pre-existing conditions (e.g., respiratory or cardiac) Older adults Inpatient healthcare settings <ul style="list-style-type: none"> Nursing homes and other residential care facilities Outcomes <ul style="list-style-type: none"> Physical health outcomes <ul style="list-style-type: none"> Effects on pre-existing conditions 	<p>Assisted living residents found that evacuation was associated with increased odds of emergency department use and nursing home placement within 30 days of hurricane Irma (10)</p>	High	<p><i>Focus of study:</i> To examine the association between evacuation and healthcare outcomes (i.e., emergency department visits, hospitalizations, mortality, and nursing home visits) among Florida assisted living residents exposed to Hurricane Irma</p> <p><i>Publication date:</i> 26 April 2024</p> <p><i>Jurisdiction:</i> Florida, USA</p> <p><i>Methods:</i> Retrospective cohort</p>	<ul style="list-style-type: none"> None identified
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Place of evacuation <ul style="list-style-type: none"> Local (e.g., neighbouring town or community) Within province or state Outcomes <ul style="list-style-type: none"> Socio-economic effects <ul style="list-style-type: none"> Displacement of individuals and communities 	<p>After controlling for traffic characteristics, researchers using a matched case-control approach to analyze the relationship between traffic state variations (in speed, occupancy, and volume) and the likelihood of crash occurrence found that the chance of traffic crashes occurring during a hurricane evacuation is higher during an evacuation period than in a regular period, consequently leading to significant variations in traffic speed (13)</p> <ul style="list-style-type: none"> Data was collected from traffic and crash data for Interstate 75 between 3 September and 16 September 2017, which includes the evacuation period of Hurricane Irma The model in the study can be used to help identify potential crash locations that may be created by prevailing traffic conditions during a hurricane evacuation 	High	<p><i>Focus of study:</i> Assessing the crash risks during evacuation</p> <p><i>Publication date:</i> June 2021</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Case control study</p>	<ul style="list-style-type: none"> None identified
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Wildfire Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> Religious supports 	<p>The findings indicate that spiritual values and beliefs can play a significant role in building resilience and promoting individual and communal healing and recovery post-disaster (30)</p> <ul style="list-style-type: none"> Post-disaster recovery strategies include programs and resources that offer opportunities for reflection to promote shared healing, reinforce a collective sense of identity and social cohesion, and ongoing recovery processes 	High	<p><i>Focus of study:</i> The study explored various meanings and concerns, along with tools and strategies that helped to nurture spiritual resilience and well-being among residents of Fort McMurray following the Alberta wildfire</p> <p><i>Publication date:</i> July 2021</p>	<ul style="list-style-type: none"> None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
			<i>Jurisdiction:</i> Alberta, Canada <i>Methods:</i> Qualitative	
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Wildfire Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> Mental health services Mental health outcomes <ul style="list-style-type: none"> Depression Post-traumatic stress disorder 	<p>Women were respectively 1.50, 1.55, and 1.86 times more likely than men to receive information, medication, and psychological help (28)</p> <ul style="list-style-type: none"> Self-reliance was the most frequently reported reason for not receiving help, and motivational barriers, such as pessimism and stigma, were reported in a higher proportion Probable diagnoses of post-traumatic stress disorder (PTSD), depression, and insomnia were assessed with validated self-report questionnaires 	High	<p><i>Focus of study:</i> This study examines the influence of gender on mental health services utilization and on perceived barriers to treatment one year after the 2016 Fort McMurray wildfires</p> <p><i>Publication date:</i> November 2021</p> <p><i>Jurisdiction:</i> Alberta, Canada</p> <p><i>Methods:</i> Cross-sectional</p>	<ul style="list-style-type: none"> Gender
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Wildfire Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> Information and communication Mental health outcomes <ul style="list-style-type: none"> Anxiety 	<p>Most participants lacked time to prepare before the evacuation became mandatory, which increased stress and uncertainty as they struggled to reunite with their loved ones, retrieve their belongings, and arrange transportation (14)</p> <ul style="list-style-type: none"> This information provides insight into the process of evacuating a wildfire itself and could guide efforts to improve preparedness of individuals and communities in regions prone to wildfires (e.g. having a family communication plan in case of evacuation, planning/identification of evacuation routes, practice drills) 	High	<p><i>Focus of study:</i> This study explored the perceptions of persons affected by the wildfires and evacuation of Fort McMurray in 2016</p> <p><i>Publication date:</i> 11 November 2021</p> <p><i>Jurisdiction:</i> Alberta, Canada</p> <p><i>Methods:</i> Qualitative</p>	<ul style="list-style-type: none"> None identified
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Wildfire Populations <ul style="list-style-type: none"> Children Outcomes <ul style="list-style-type: none"> Mental health outcomes <ul style="list-style-type: none"> Anxiety Depression Post-traumatic stress disorder Personal and community isolation Substance use 	<p>The youth population exhibited elevated rates of probable depression, suicidal thinking, and tobacco use; elevated symptoms of anxiety; and reduced scores for quality of life and self-esteem 18 months after the 2016 wildfire (5)</p> <ul style="list-style-type: none"> Observed higher levels of mental health distress among older students, in females compared to male students, and in individuals with a minority gender identity, including transgender and gender-non-conforming individuals 	High	<p><i>Focus of study:</i> The study examined possible long-term psychological impacts in youth affected by the 2016 wildfire in Fort McMurray</p> <p><i>Publication date:</i> May 20, 2021</p> <p><i>Jurisdiction:</i> Alberta, Canada</p> <p><i>Methods:</i> Cross-sectional</p>	<ul style="list-style-type: none"> Gender
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Flood Place of evacuation <ul style="list-style-type: none"> Local (e.g., neighbouring town or community) 	<p>Analysing the contents of food and meals at served at emergency shelters in Kumamoto, Japan after heavy rains, five menus that supplied nutrients and energy near or above the reference values of the Revised RV were developed</p>	High	<p><i>Focus of study:</i> Meal plans for meeting the reference values using food items available in shelters</p> <p><i>Publication date:</i> June 2023</p>	<ul style="list-style-type: none"> None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> ○ Within province or state • Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> ○ Food and water ○ Temporary housing/shelter • Outcomes <ul style="list-style-type: none"> ○ Socio-economic effects <ul style="list-style-type: none"> ▪ Displacement of individuals and communities 	<p>using the nutritious foods in past shelters or by adding a vitamin-rich beverage (32)</p> <ul style="list-style-type: none"> • The number of evacuees per shelter ranged from 15 to 300 people, and in total, data was collected and analyzed on 86 meals (consisting of food aid, boxed meals, and hot meal services) over 32 days at 12 shelters • Generally, planned menus contained more protein, energy, and vitamins and less salt than the meals that were served at the shelters 		<p><i>Jurisdiction:</i> Japan</p> <p><i>Methods:</i> Case study</p>	
<ul style="list-style-type: none"> • Reason for evacuation <ul style="list-style-type: none"> ○ Wildfire <ul style="list-style-type: none"> ▪ Smoke ▪ Combined wildfire smoke and heat ▪ Pollutants • Evacuation status <ul style="list-style-type: none"> ○ Evacuation order • Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> ○ Information and communication ○ Mental health services • Outcomes <ul style="list-style-type: none"> ○ Physical health outcomes ○ Mental health outcomes <ul style="list-style-type: none"> ▪ Depression ▪ Post-traumatic stress disorder 	<p>The use of an online multidimensional treatment platform accessed by people evacuated from the Fort McMurray fires was found to reduce PTSD, insomnia, and depression symptoms (29)</p> <ul style="list-style-type: none"> • The platform is therapist-guided online self-treatment targeting PTSD, sleep, and mood, consisting of 12 modules offering evidence-based psychotherapeutic components such as psychoeducation, gradual and prolonged exposure to avoided situations and memories, behavioural activation, diaphragmatic breathing, problem-solving strategies, cognitive restructuring, treating nightmares with mental imagery, review and repetition, and exercises in mindfulness, self-compassion, and radical acceptance 	High	<p><i>Focus of study:</i> to document usage data of the online treatment platform RESILIENT by people evacuated from the Fort McMurray, Alberta fires, and to examine their association with the effectiveness of treatment on symptoms of PTSD, insomnia and depression, and adherence to treatment, as measured by the number of modules accessed by participants</p> <p><i>Publication date:</i> 2021</p> <p><i>Jurisdiction:</i> Alberta, Canada</p> <p><i>Methods:</i> Sequential regression</p>	<ul style="list-style-type: none"> • None identified
<ul style="list-style-type: none"> • Reason for evacuation <ul style="list-style-type: none"> ○ Wildfire • Evacuation status <ul style="list-style-type: none"> ○ Evacuation alert • Length of evacuation <ul style="list-style-type: none"> ○ Short term • Frequency of evacuation <ul style="list-style-type: none"> ○ Multiple • Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> ○ Information and communication ○ Food and water 	<p>Incentives for self-evacuation are multifaceted and should consider safety, affordability, and security; uptake of incentives can be supported by increased education (25)</p> <ul style="list-style-type: none"> • Incentives that might promote self-evacuation include emergency accommodation, material aid, accessible routes, personal support, security and protection of property, affordable insurance coverage, alternative power supply, property preparation assistance, return access to property, and financial assistance <ul style="list-style-type: none"> ○ The most significant modifiers were emergency accommodation (33%) and resourcing of rural fire service (36%) 	High	<p><i>Focus of study:</i> Explore the use of incentives for self-evacuation for wildfires</p> <p><i>Publication date:</i> 28 February 2024</p> <p><i>Jurisdiction:</i> Australia</p> <p><i>Methods:</i> Qualitative</p>	<ul style="list-style-type: none"> • None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> ○ Temporary housing/shelter ○ Financial supports 	<ul style="list-style-type: none"> ○ The authors state that these factors should be considered in frameworks for disaster management planning • Approximately 41% of participants were unaware of incentives, suggesting that information and communication is needed to mitigate the impacts of evacuation <ul style="list-style-type: none"> ○ About 60% of participants said that timely and accurate information would encourage them to self-evacuate ○ About 27% of participants said that this could be supported by community education programs • No data on the outcomes of these incentives were reported 			
<ul style="list-style-type: none"> • Reason for evacuation <ul style="list-style-type: none"> ○ Extreme weather event • Length of evacuation <ul style="list-style-type: none"> ○ Short term • Populations <ul style="list-style-type: none"> ○ Pregnant women • Outcomes <ul style="list-style-type: none"> ○ Physical health outcomes <ul style="list-style-type: none"> ▪ Obstetric outcomes ○ Mental health outcomes <ul style="list-style-type: none"> ▪ Anxiety 	Evacuation due to natural disasters can increase anxiety in pregnant women and may exacerbate past traumas (4)	High	<p><i>Focus of study:</i> Explore the impacts of evacuation on pregnancy</p> <p><i>Publication date:</i> May 2023</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Qualitative</p>	<ul style="list-style-type: none"> • Gender/sex
<ul style="list-style-type: none"> • Reason for evacuation <ul style="list-style-type: none"> ○ Wildfire • Length of evacuation <ul style="list-style-type: none"> ○ Short term • Frequency of evacuation <ul style="list-style-type: none"> ○ Multiple • Populations <ul style="list-style-type: none"> ○ People living in areas directly affected by evacuations • Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> ○ Healthcare services • Outcomes <ul style="list-style-type: none"> ○ Physical health outcomes 	An increase in wildfire exposure is associated with increase in outpatient visits and cardiorespiratory inpatient visits two weeks post-evacuation (11)	High	<p><i>Focus of study:</i> Explore the impacts of wildfire exposure on healthcare use in people who use medical equipment</p> <p><i>Publication date:</i> 1 September 2023</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Cross-sectional</p>	<ul style="list-style-type: none"> • None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> Respiratory effects (e.g., bronchitis, reduced lung function) 				
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Wildfire <ul style="list-style-type: none"> Smoke Length of evacuation <ul style="list-style-type: none"> Short term Evacuation status <ul style="list-style-type: none"> Evacuation order Outcomes <ul style="list-style-type: none"> Physical health outcomes <ul style="list-style-type: none"> Cardiovascular effects (e.g., heart failure, heart attack, stroke) 	No significant effects of wildfire evacuation orders or smoke exposure were found on cardiovascular health for persons exposed to wildfire evacuations (12)	High	<p><i>Focus of study:</i> Explore the impacts of exposure to wildfire evacuation order on cardiovascular events</p> <p><i>Publication date:</i> 28 August 2023</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Longitudinal</p>	<ul style="list-style-type: none"> None identified
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Frequency of evacuation <ul style="list-style-type: none"> Multiple Outcomes <ul style="list-style-type: none"> Mental health outcomes <ul style="list-style-type: none"> Post-traumatic stress disorder 	Repeated exposure to hurricanes can lead to sensitization, with increased mental health and functional impairment overtime (15) <ul style="list-style-type: none"> Individuals with pre-existing mental health and stress conditions are more vulnerable to increased prolonged distress post-evacuation 	High	<p><i>Focus of study:</i> Assess the psychosocial outcomes associated with repeated hurricane evacuation exposure</p> <p><i>Publication date:</i> 1 June 2022</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Longitudinal</p>	<ul style="list-style-type: none"> None identified
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> Healthcare services 	Telemedicine can support continuity of care after evacuation; however, there are cultural and sex disparities that should be addressed to increase its accessibility (26) <ul style="list-style-type: none"> Females were more likely to use telemedicine services than males Older adults and white patients were more likely to be familiar with telemedicine Individuals with different languages were less likely to use telemedicine services 	High	<p><i>Focus of study:</i> Examine the use of telemedicine and hospital services post-evacuation</p> <p><i>Publication date:</i> July 2022</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Longitudinal</p>	<ul style="list-style-type: none"> Race/ethnicity/culture/language Gender/sex
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Wildfire Frequency of evacuation <ul style="list-style-type: none"> Single Populations <ul style="list-style-type: none"> Pregnant women Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation 	Pregnant women require specific social, physical, and mental health supports during wildfire evacuation to help maintain their overall health and well-being (2) <ul style="list-style-type: none"> During evacuation women experienced stressors including fear of separation from loved ones, loss of home and possessions, and the well-being of their child Barriers to evacuation for pregnant women included physical mobility challenges, fatigue, increased washroom use, and stress 	High	<p><i>Focus of study:</i> Explore the experiences of women who were pregnant during wildfires</p> <p><i>Publication date:</i> 13 May 2022</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Qualitative</p>	<ul style="list-style-type: none"> Gender/sex

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> ○ Mental health services ○ Social support services ● Outcomes <ul style="list-style-type: none"> ○ Physical health outcomes <ul style="list-style-type: none"> ▪ Obstetric outcomes ○ Mental health outcomes <ul style="list-style-type: none"> ▪ Anxiety ▪ Depression ○ Socio-economic effects <ul style="list-style-type: none"> ▪ Displacement of individuals and communities 	<ul style="list-style-type: none"> ● Facilitators for evacuation included social support, positive attitude, and the ability to continue mothering routines 			
<ul style="list-style-type: none"> ● Reason for evacuation <ul style="list-style-type: none"> ○ Extreme weather event ● Evacuation status <ul style="list-style-type: none"> ○ Evacuation alert ● Length of evacuation <ul style="list-style-type: none"> ○ Short term ● Populations <ul style="list-style-type: none"> ○ Children ● Outcomes <ul style="list-style-type: none"> ○ Mental health outcomes <ul style="list-style-type: none"> ▪ Anxiety ▪ Depression ▪ Post-traumatic stress disorder 	<p>Mothers and children experience unique mental health symptoms related to post-traumatic stress, anxiety, and depression three months post-event, emphasizing the need for family psychosocial supports before and during evacuation (1)</p> <ul style="list-style-type: none"> ● Mothers with children ages 7 to 17 had higher rates of post-traumatic stress symptoms, anxiety, and depression than mothers of children ages 0 to 6 ● Stressors experienced by mothers were mostly attributed to their desire to keep their children safe 	High	<p><i>Focus of study:</i> Explore the effects of the hurricane evacuation stressors on mothers and youth</p> <p><i>Publication date:</i> April 2022</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Cross-sectional</p>	<ul style="list-style-type: none"> ● Gender/sex
<ul style="list-style-type: none"> ● Reason for evacuation <ul style="list-style-type: none"> ○ Wildfire ● Place of evacuation <ul style="list-style-type: none"> ○ Local (e.g., neighbouring town or community) ● Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> ○ Information and communication ○ Food and water ○ Temporary housing/shelter ○ Social support services ○ Financial supports ● Populations <ul style="list-style-type: none"> ○ Indigenous peoples 	<p>Addressing gaps in emergency planning, enhancing communication during crises, and ensuring adequate financial support are essential steps toward better supporting Indigenous communities during wildfire evacuations (7)</p> <ul style="list-style-type: none"> ● The study found that wildfire smoke posed significant health risks, especially for individuals with pre-existing conditions such as asthma ● Evacuations often led to family separations across different host communities, creating emotional distress and logistical challenges ● Both within host communities and among evacuees, there was a strong sense of community support ● Financial assistance varied across communities, with some receiving immediate funds (e.g., meal vouchers) while others faced delays in reimbursement for evacuation-related expenses 	High	<p><i>Focus of study:</i> Factors influencing the experiences of First Nations during wildfire evacuations</p> <p><i>Publication date:</i> 2021</p> <p><i>Jurisdiction:</i> Canada</p> <p><i>Methods:</i> Interviews and surveys</p>	<ul style="list-style-type: none"> ● Socio-economic status

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> ○ People living in areas directly affected by evacuations ○ Individuals with pre-existing conditions (e.g., respiratory or cardiac) ● Outcomes <ul style="list-style-type: none"> ○ Physical health outcomes <ul style="list-style-type: none"> ▪ Effects on pre-existing conditions ○ Socio-economic effects <ul style="list-style-type: none"> ▪ Displacement of individuals and communities 				
<ul style="list-style-type: none"> ● Reason for evacuation <ul style="list-style-type: none"> ○ Extreme weather event ● Evacuation status <ul style="list-style-type: none"> ○ Evacuation order ● Length of evacuation <ul style="list-style-type: none"> ○ Short term ● Frequency of evacuation <ul style="list-style-type: none"> ○ Single ● Place of evacuation <ul style="list-style-type: none"> ○ Local (e.g., neighbouring town or community) ○ Within province or state ● Populations <ul style="list-style-type: none"> ○ People living in areas directly affected by evacuations ● Outcomes <ul style="list-style-type: none"> ○ Mental health outcomes <ul style="list-style-type: none"> ▪ Anxiety ▪ Depression ▪ Post-traumatic stress disorder ▪ Substance use ○ Socio-economic effects <ul style="list-style-type: none"> ▪ Employment and labour challenges ▪ Economic hardship 	<p>A direct association between the health-risk behaviours of mothers in Southern Florida and their stressful experiences before, during, and after Hurricane Irma in September 2017 was found in a survey evaluation of their experiences (3)</p> <ul style="list-style-type: none"> ● 534 mothers with at least one child under 18 years participated; most participants were white, under 35 years old, married or in a domestic partnership, and had either one or two children in the home ● Generally, health-risk behaviours were most significantly associated with evacuation- and hurricane-related experiences and also annual household income while depressive symptoms and post-traumatic stress symptoms (PTSS) were significantly associated with sedentary computer time, smoking cigarettes, and sleeping problems 	High	<p><i>Focus of study:</i> Evacuation and hurricane-related experiences, emotional distress, and their associations with Mothers' health risk behaviors</p> <p><i>Publication date:</i> July 2022</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Survey questionnaire</p>	<ul style="list-style-type: none"> ● None identified
<ul style="list-style-type: none"> ● Reason for evacuation <ul style="list-style-type: none"> ○ Wildfire ● Place of evacuation <ul style="list-style-type: none"> ○ Local (e.g., neighbouring town or community) ● Populations 	<p>More than a third of the 1,510 evacuees of the 2016 Fort McMurray wildfires surveyed in mid-2017 had clinically significant psychological disorder symptoms, including post-traumatic stress, major depression, insomnia, anxiety, and substance use or a combination of these; having a mental health condition and/or experiencing financial stress or strain</p>	High	<p><i>Focus of study:</i> Psychological symptoms among Evacuees from the 2016 Fort McMurray wildfires: A population-based survey one year later</p> <p><i>Publication date:</i> May 2021</p>	<ul style="list-style-type: none"> ● None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> ○ People living in areas directly affected by evacuations ● Outcomes <ul style="list-style-type: none"> ○ Mental health outcomes <ul style="list-style-type: none"> ▪ Anxiety ▪ Depression ▪ Post-traumatic stress disorder ▪ Personal and community isolation ▪ Substance use ○ Socio-economic effects <ul style="list-style-type: none"> ▪ Economic hardship 	<p>prior to the fires were significant risk factors for mental health disorders (16)</p> <ul style="list-style-type: none"> ● Significant predictors of four of the five disorders' symptom severity were a higher level of stress experienced in the year following the wildfires, decrease in work, poorer current health status, decrease in social life, and increase in drug and alcohol use ● Insomnia was the most common psychological disorder amongst the participants 		<p><i>Jurisdiction:</i> Canada</p> <p><i>Methods:</i> Telephone survey</p>	
<ul style="list-style-type: none"> ● Evacuation status <ul style="list-style-type: none"> ○ Evacuation alert ● Populations <ul style="list-style-type: none"> ○ Children ● Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> ○ Information and communication ● Outcomes <ul style="list-style-type: none"> ○ Mental health outcomes <ul style="list-style-type: none"> ▪ Anxiety ▪ Depression ▪ Post-traumatic stress disorder 	<p>Evidence from a study conducted on Florida families after Hurricane Irma suggests that evacuation stressors may be sufficient to prompt psychological and physical health symptoms in youth such as those of post-traumatic stress, anxiety, and depression (6)</p> <ul style="list-style-type: none"> ● Data was collected from reports made 226 mothers of youths aged 7 to 17 living in South Florida three months after Hurricane Irma in 2017 ● The most frequent evacuation stressors reported by parents are difficulties in decision-making, transportation challenges, family separation, and trouble finding a place to stay or getting into a shelter ● Youth mental and physical health can be negatively affected by stressors that occur before a disaster regardless of whether the youth are directly exposed to the actual disaster, and shows a “dose response” relationship between youths’ hurricane exposure and their mental health outcomes ● Preparing youth and families residing in vulnerable areas for potential disaster evacuation or sheltering-in-place appears critical, and encouraging families to develop disaster plans and teaching stress management skills may reduce both youth distress and somatic health problems ● Disaster preparedness materials may need to be expanded to address the emotional and psychological needs of youth and families around the evacuation process 	High	<p><i>Focus of study:</i> Evacuation stressors and youth psychological and physical health</p> <p><i>Publication date:</i> June 2023</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Modelling of data collected from citizen reports</p>	<ul style="list-style-type: none"> ● Age

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Evacuation status <ul style="list-style-type: none"> Tactical evacuation Length of evacuation <ul style="list-style-type: none"> Short term Place of evacuation <ul style="list-style-type: none"> Local (e.g., neighbouring town or community) Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> Temporary housing/shelter Populations <ul style="list-style-type: none"> People with disabilities Older adults Outcomes <ul style="list-style-type: none"> Physical health outcomes 	<p>Dependent evacuees are unable to sufficiently benefit from the use of hotel guest rooms as shelters during natural disasters without access to caregivers and supports, as they may become isolated due to inability to call for help or provide care for themselves (22)</p> <ul style="list-style-type: none"> This brief report is a retrospective analysis of the disaster response to the Atami landslide in Shizuoka Japan, where evacuees were sheltered in two hotels (A and B) Despite the dispatch of disaster medical teams to both hotels, hotel B accommodated dependent aged individuals from the same long-term care facility with their caregivers on the same floor and did not report specific medical problems Dependent evacuees in hotel A were given private rooms with consistent nursing care, but the study reports that this was suboptimal due to restricted access between dependent and caregiver Proactive evacuation and accommodation plans are needed in order to make hotels better evacuation centres able to provide appropriate support for older people who need special care 	High	<p><i>Focus of study:</i> Benefits and drawbacks of using hotels as shelters after a landslide</p> <p><i>Publication date:</i> July 2021</p> <p><i>Jurisdiction:</i> Japan</p> <p><i>Methods:</i> Brief report</p>	<ul style="list-style-type: none"> Age
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Wildfire <ul style="list-style-type: none"> Smoke Combined wildfire smoke and heat Pollutants Evacuation status <ul style="list-style-type: none"> Tactical evacuation Length of evacuation <ul style="list-style-type: none"> Long term Populations <ul style="list-style-type: none"> People living in areas directly affected by evacuations People who have experienced evacuation in the past Outcomes <ul style="list-style-type: none"> Mental health outcomes <ul style="list-style-type: none"> Depression Post-traumatic stress disorder Personal and community isolation 	<p>Unemployment, taking sleeping pills, having a prior depression diagnosis, and the willingness to receive mental health counselling significantly increase the odds of having major depressive disorder (MDD) and PTSD following wildfires (17)</p> <ul style="list-style-type: none"> Data were collected between April 24 and 2 June 2021 through a self-administered online questionnaire completed by 186 individuals belonging to the over 90,000 evacuated residents from Fort McMurray, Alberta during the May 2016 wildfire (the largest evacuation in Alberta's history) The overall prevalence of MDD symptoms in the study sample was 45.0% (76) and the prevalence of likely PTSD among the respondents was 39.6% (65) Perceived family support was one of the solid protective factors for developing possible PTSD after a traumatic event such as a wildfire Policies are required to develop preparedness plans for disasters in the future that provide broad mental health resilience education to the residents in high-risk areas 	High	<p><i>Focus of study:</i> PTSD, major depressive disorder, and wildfires</p> <p><i>Publication date:</i> August 2022</p> <p><i>Jurisdiction:</i> Canada</p> <p><i>Methods:</i> Quantitative cross-sectional survey</p>	<ul style="list-style-type: none"> Socio-economic status

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> Substance use 				
<ul style="list-style-type: none"> Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> Cultural supports (e.g., for Indigenous healing, cultural safety) 	<p>Evacuation centres across two different jurisdictions experience similar challenges during disasters such as a shortage of relief staff and difficulty establishing effective coordination roles, highlighting a need for better defined roles within centres and increased supports for planning and communication between local governments and stakeholders in communities during the non-disaster period (23)</p> <ul style="list-style-type: none"> Data was collected from in-depth interviews with five local government officials from Miyagi prefecture, Japan, and 11 from Queensland, Australia, who were involved in implementing evacuation centres for vulnerable populations Challenges at evacuation centres included low awareness of the need to protect vulnerable people, ensuring adequate resource distribution to support vulnerable people, and responding to cultural considerations 	High	<p><i>Focus of study:</i> Comparative analysis of the Australian and Japanese experiences of evacuation centres for vulnerable populations</p> <p><i>Publication date:</i> July 2022</p> <p><i>Jurisdiction:</i> Australia, Japan</p> <p><i>Methods:</i> Interview data analysis</p>	<ul style="list-style-type: none"> Race/ethnicity/culture/language
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Flood Length of evacuation <ul style="list-style-type: none"> Short term Long term Outcomes <ul style="list-style-type: none"> Socio-economic effects 	<p>Based on location-based data, the authors suggested that low-income populations may have had difficulties evacuating and relocating during Hurricane Harvey in Texas, as they found shorter evacuation return and relocation time than high-income populations (e.g., a short return could be due to living in a rental with no other place to relocate) (8)</p>	High	<p><i>Focus of study:</i> To assess community recovery milestones, evacuation return and home-switch stability.</p> <p><i>Publication date:</i> 26 September 2022</p> <p><i>Jurisdiction:</i> Texas, U.S.</p> <p><i>Methods:</i> Quantitative study with aggregated location-based data</p>	<ul style="list-style-type: none"> Socio-economic status
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Populations <ul style="list-style-type: none"> Older adults Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> Information and communication Social support services 	<p>Urban homebound older adults in Philadelphia indicated that they feel unprepared for evacuations due to their physical disabilities (e.g., mobility), which may lead to the need for complex resources at shelters should they need to evacuate during a mandatory evacuation due to a disaster (19)</p> <ul style="list-style-type: none"> The authors described that the homebound older adults rarely thought about how they may act during a mandatory evacuation 	High	<p><i>Focus of study:</i> To understand the willingness and ability of homebound older adults to evacuate</p> <p><i>Publication date:</i> 24 April 2015</p> <p><i>Jurisdiction:</i> Philadelphia, U.S.</p> <p><i>Methods:</i> 56 structured survey interviews between February to April 20</p>	<ul style="list-style-type: none"> Personal characteristics associated with discrimination (e.g. age, disability)

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
	<ul style="list-style-type: none"> The homebound older adults indicated that mobility issues would be the largest barrier to a successful evacuation The authors concluded that significant resources would be required for this population to avoid strains on local hospitals 			
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Evacuation status <ul style="list-style-type: none"> Tactical evacuation Frequency of evacuation <ul style="list-style-type: none"> Single Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> Information and communication Healthcare services Outcomes <ul style="list-style-type: none"> Socio-economic effects <ul style="list-style-type: none"> Displacement of individuals and communities 	<p>Telemedicine can be operated in a general population evacuation shelter to effectively meet the medical needs of its shelter patients and likely reduce Emergency Medical Services (EMS) and Emergency Department (ED) utilization (27)</p> <ul style="list-style-type: none"> De-identified patient data and survey results were collected to describe the EMS and Emergency Department utilization of patients housed in disaster shelters during a 12-day period following Hurricane Florence <ul style="list-style-type: none"> Data were collected from Wake County EMS, Orange County EMS, and RelyMD, the telemedicine service utilized in the shelters Subjects were those shelter residents in Wake or Orange counties utilizing emergency services A high rate of patients utilized telemedicine for medication refill, indicating emergency prescription refill as a health effect of emergency evacuation 	High	<p><i>Focus of study:</i> Evaluate the implementation of a telemedicine service in hurricane evacuation shelters to determine whether the presence of telemedicine could alter EMS and ED utilization</p> <p><i>Publication date:</i> March 2020</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Cross-sectional study</p>	<ul style="list-style-type: none"> Not reported
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Evacuation status <ul style="list-style-type: none"> Tactical evacuation Frequency of evacuation <ul style="list-style-type: none"> Single Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> Information and communication Food and water Mental health services Social support services Outcomes <ul style="list-style-type: none"> Mental health outcomes <ul style="list-style-type: none"> Anxiety 	<p>Emergency planning to mitigate the stressors involved in the hurricane evacuation experience includes the monitoring and easing of local and highway traffic, ensuring and regulating the delivery of food and supplies during periods of demand, and anticipating the state of panic and unease in evacuees arriving at shelters by making further supports available for families (33)</p> <ul style="list-style-type: none"> South Florida parents of children under age 18 years completed an online survey in the months following Hurricane Irma, assessing perceptions of stress, safety, and evacuation experiences The authors recommend families develop specific disaster plans to mitigate communication and decision-making stressors <ul style="list-style-type: none"> It is also recommended that families limit storm-related media exposure to reduce evacuation stress for future storms 	High	<p><i>Focus of study:</i> Evaluating stressful and positive aspects of the Hurricane Irma evacuation process for families, and comparing perceived safety and stress before, during, and after the hurricane across evacuating and non-evacuating families</p> <p><i>Publication date:</i> March 2019</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Online survey gathering quantitative data and open-ended responses</p>	<ul style="list-style-type: none"> Socio-economic status

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> ○ Socio-economic effects <ul style="list-style-type: none"> ▪ Displacement of individuals and communities 				
<ul style="list-style-type: none"> • Reason for evacuation <ul style="list-style-type: none"> ○ Extreme weather event • Evacuation status <ul style="list-style-type: none"> ○ Tactical evacuation • Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> ○ Temporary housing/shelter ○ Healthcare services ○ Mental health services ○ Social support services • Populations <ul style="list-style-type: none"> ○ People with disabilities 	<p>For Special Needs Shelters (SpNS) to best support a safe evacuation, admittance must be flexible, the governing body must consider the experiences of people with disabilities to inform short-term adjustments, and people with disabilities and disability organizations should be involved as active members of disaster planning and community response (19)</p> <ul style="list-style-type: none"> • Conflicting definitions on SpNS eligibility created a wide range of cascading evacuation, sheltering, staffing, and provision of care challenges <ul style="list-style-type: none"> ○ The SpNS registry has utility before a disaster event but the focus must shift once an event begins to minimize loss of life ○ The most common SpNS registry challenges include registering everyone who requires assistance, updating the registry, and safely evacuating people with access and functional needs • The authors also recommend that the term “special needs” be replaced with “access and functional needs” (AFN) as this more accurately describes the types of provisions people need during a disaster • Data consisted of activity logs, situational reports, news press releases, social media postings on Facebook timelines and Twitter tweets, emergency procedures, policies and plan documents, meeting notes, and summary of internal survey responses during the time of Hurricane Irma (4 September to 29 September 2017) <ul style="list-style-type: none"> ○ Additional data were sourced through unstructured and semi-structured interviews • Data collection of documents and interviews took place from August 2018 to May 2019 	High	<p><i>Focus of study:</i> Present an evaluation framework to assess the facilitating and constraining factors that influenced the emergency response, operation, and management of a Special Needs Shelter Program in Monroe County, Florida during Hurricane Irma in 2017</p> <p><i>Publication date:</i> June 2022</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Formative evaluation</p>	<ul style="list-style-type: none"> • Personal characteristics associated with discrimination (disability)
<ul style="list-style-type: none"> • Reason for evacuation <ul style="list-style-type: none"> ○ Extreme weather event ○ Flood • Evacuation status <ul style="list-style-type: none"> ○ Evacuation order • Length of evacuation <ul style="list-style-type: none"> ○ Short term • Frequency of evacuation 	<p>Among calls to Texas 211 from disaster areas, evacuation routes, and evacuation destinations during sequential hurricane disasters, unmet needs identified included shelter and housing needs (28% of calls), medical needs (18%), food-related needs (15%), and transportation (4%) (24)</p>	High	<p><i>Focus of study:</i> Investigate types and timing of unmet shelter and housing needs during sequential hurricane disasters in Texas</p> <p><i>Publication date:</i> 2021</p> <p><i>Jurisdiction:</i> Texas, U.S.</p>	<ul style="list-style-type: none"> • None identified

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> ○ Multiple ● Outcomes <ul style="list-style-type: none"> ○ Socio-economic effects <ul style="list-style-type: none"> ▪ Displacement of individuals and communities ▪ Economic hardship 			<p><i>Methods:</i> retrospective observational study</p>	
<ul style="list-style-type: none"> ● Reason for evacuation <ul style="list-style-type: none"> ○ Extreme weather event ● Evacuation status <ul style="list-style-type: none"> ○ Evacuation alert ● Length of evacuation <ul style="list-style-type: none"> ○ Short term ● Frequency of evacuation <ul style="list-style-type: none"> ○ Multiple ● Populations <ul style="list-style-type: none"> ○ Older adults 	<p>Older adults were not likely to follow evacuation orders as they perceived the risk of contracting COVID-19 to be greater than the risk of flood (34)</p>	Medium	<p><i>Focus of study:</i> Explore the use of risk communication and emergency managing during hurricane evacuations during the COVID-19 pandemic</p> <p><i>Publication date:</i> 20 October 2021</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Cross-sectional</p>	<ul style="list-style-type: none"> ● None identified
<ul style="list-style-type: none"> ● Reason for evacuation <ul style="list-style-type: none"> ○ Flood ● Evacuation status <ul style="list-style-type: none"> ○ Evacuation order ● Place of evacuation <ul style="list-style-type: none"> ○ Local (e.g., neighbouring town or community) ● Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> ○ Information and communication ○ Mental health services ○ Social support services ○ Financial supports ● Outcomes <ul style="list-style-type: none"> ○ Mental health outcomes <ul style="list-style-type: none"> ▪ Anxiety ▪ Depression ▪ Post-traumatic stress disorder 	<p>In the context of the 2020 Fort McMurray flood, evidence suggests that support received, clinical variables, and socio-demographic context affect resiliency rather than flood exposure variables, and that being younger, having a pre-existing anxiety disorder, having pre-existing depression, and relocation contribute to low resilience after the flood (21)</p> <ul style="list-style-type: none"> ● Data was collected from an online survey one year after the 2020 Fort McMurray flood with 186 responses ● Resilience is based on adversity and positive adaptation (maintaining a healthy, asymptomatic lifestyle after stressful events) ● Respondents under 25 years were nearly 26 times more likely to show low resilience than respondents 40 years and above, and respondents who received less or no governmental support were more likely to express low resilience than those who received absolute support ● Economical and effective mobile health programs, such as daily supportive text messaging, can reduce psychological distress after traumatic events such as floods and improve the resilience of the residents ● Mental health promotion is of key importance in the aftermath of natural disasters, as is adequate governmental and social support 	High	<p><i>Focus of study:</i> Associated factors between flood experience and low resilience</p> <p><i>Publication date:</i> December 2022</p> <p><i>Jurisdiction:</i> Canada</p> <p><i>Methods:</i> Cross-sectional survey</p>	<ul style="list-style-type: none"> ● Age ● Socio-economic status

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristic	Equity considerations
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Extreme weather event Flood Place of evacuation <ul style="list-style-type: none"> Local (e.g., neighbouring town or community) Within province or state Outcomes <ul style="list-style-type: none"> Socio-economic effects <ul style="list-style-type: none"> Displacement of individuals and communities 	<p>Strategies identified for balancing efficiency and fairness of evacuation included a uniform capacity and prioritized high-risk residents with an intermediate time delay (35)</p>	Low	<p><i>Focus of study:</i> to understand the trade-off between efficiency and fairness during evacuation and present strategies for balancing these considerations</p> <p><i>Publication date:</i> 2021</p> <p><i>Jurisdiction:</i> N/A (modelling)</p> <p><i>Methods:</i> Modelling</p>	<ul style="list-style-type: none"> None identified
<ul style="list-style-type: none"> Reason for evacuation <ul style="list-style-type: none"> Other Evacuation status <ul style="list-style-type: none"> Tactical evacuation Place of evacuation <ul style="list-style-type: none"> Local (e.g., neighbouring town or community) Supports provided prior to, during, and following evacuation that may help to mitigate the impacts of evacuation <ul style="list-style-type: none"> Healthcare services Workplace supports Populations <ul style="list-style-type: none"> Children Individuals with pre-existing conditions (e.g., respiratory or cardiac) Inpatient healthcare settings <ul style="list-style-type: none"> Hospitals (including mental health and other specialized hospitals) Outcomes <ul style="list-style-type: none"> Mental health outcomes 	<p>A neonatal intensive care unit (NICU) evacuation simulation of six NICUs in El Paso, Texas involving multiple NICU staff and community first responders improved knowledge and skills among personnel in fire evacuations and introduced first responders to the specialized population of NICU patients (36)</p> <ul style="list-style-type: none"> Over six months, each NICU team of participants (respiratory therapists, nurses, and neonatologists) had to respond to a simulated fire in the NICU itself and vertically evacuate six simulated patients into awaiting ambulances in the parking lot of the hospital with the intent to transfer to another facility Teamwork, patient tracking, and knowledge of evaluation equipment were identified as strengths across all NICUs while the lack of adequate equipment for post-evacuation care, alternative evacuation routes, understanding of the implications of smoke exposure, and incident command structure were identified as areas for improvement 	Low	<p><i>Focus of study:</i> to understand evacuation of neonatal intensive care units in Texas</p> <p><i>Publication date:</i> August 2022</p> <p><i>Jurisdiction:</i> United States</p> <p><i>Methods:</i> Simulation and follow-up survey</p>	<ul style="list-style-type: none"> Time-dependent relationships

Appendix 5: Jurisdictional scan on guidance and planning documents for evacuations due to climate events

Jurisdiction	Document/tool	Key messages on mitigating health and social impacts of evacuation
Canada (national)	Planning for Safety	<ul style="list-style-type: none"> The Canadian federal government's Office for Disability Issues created a safe guideline for building managers and occupants to help people with disabilities evacuate during an emergency The guideline includes information on universal design, understanding roles of emergency managers, specific needs people with disabilities experience, and checklists Specific considerations including assigning support buddies for evacuation, having evacuation devices, a list of at-risk individuals, having clear procedures, clear evacuation procedures, and alerting devices
	Your Emergency Preparedness Guide	<ul style="list-style-type: none"> The Canadian government has prepared a guide for families to prepare for emergency evacuations The information in the guideline includes understanding the risks, creating a plan, identifying health needs, creating a support system, following evacuation orders, creating an emergency kit, and helpful contact information Information for parents include organizing with daycare and education children
<ul style="list-style-type: none"> British Columbia 	Government of British Columbia Evacuee Guidance for the Public	<ul style="list-style-type: none"> The Government of British Columbia provides flood and wildfire evacuee guidance: <ul style="list-style-type: none"> Flood evacuee guidance: <ul style="list-style-type: none"> monitor local radio stations, television news, and social media for the latest information from local authorities on sandbagging stations, possible evacuation procedures, and routes if a flood warning is in effect, shut off electricity to areas that are at risk of flooding and move small appliances, electronics, and smaller furniture to upper floors or areas not likely to be affected make sure vehicles are parked away from streams and waterways remove toxic substances such as pesticides and insecticides from the flood area to prevent pollution use sandbags to block floor drains and toilets to prevent sewage back-up Wildfire evacuee guidance: <ul style="list-style-type: none"> assemble a kit with essentials such as water, food, first aid supplies, medications, important documents, and items for pets move flammable items indoors, take down flammable window treatments, and connect garden hoses fill large containers with water for firefighting purposes do not shut off your natural gas when you receive an evacuation order
<ul style="list-style-type: none"> Alberta 	Government of Alberta Emergency Plan	<ul style="list-style-type: none"> The Government of Alberta provides detailed guidance on what to do before, during, and after a climate emergency/evacuation to ensure safety and preparedness <ul style="list-style-type: none"> Before an emergency: <ul style="list-style-type: none"> establish a household emergency plan detailing how to communicate and where to meet; include contact information for family members, schools, workplaces, and out-of-town contacts assemble essential supplies such as water, non-perishable food, flashlight, batteries, first aid kit, medications, important documents, and cash sign up for Alberta Emergency Alerts to receive real-time information about potential threats and hazards During an emergency: <ul style="list-style-type: none"> pay attention to alerts and follow directions from local authorities if evacuation is necessary, leave immediately, follow designated routes, take your emergency kit, and ensure all household members are accounted for After an Emergency: <ul style="list-style-type: none"> once it's safe, check your property for damage and report it to authorities and insurance companies

Jurisdiction	Document/tool	Key messages on mitigating health and social impacts of evacuation
		<ul style="list-style-type: none"> ▪ contact local organizations and emergency services for support and resources if needed ▪ continue to listen to updates and follow guidance from local officials
<ul style="list-style-type: none"> • Saskatchewan 	Saskatchewan Public Safety Agency Emergency Guide	<ul style="list-style-type: none"> • The Saskatchewan Public Safety Agency's plan offers guidance on emergency preparedness at home • It outlines four essential steps: <ul style="list-style-type: none"> ○ Knowing the risks: <ul style="list-style-type: none"> ▪ understand the specific hazards in your area, such as floods, severe weather, wildfires, and other natural disasters ○ Making an emergency plan: <ul style="list-style-type: none"> ▪ establish how family members will contact each other during an emergency; it may involve using text messages, social media, or long-distance calls ▪ identify out-of-town contacts who can relay information among family members ▪ determine safe exit routes from your home and identify two secure locations to go to – one nearby and one farther away ○ Building an emergency kit: <ul style="list-style-type: none"> ▪ include food and water for at least three days, medications, flashlight, radio, batteries, first-aid kit, important documents, and other essentials ▪ pack clothes, sleeping bags, toiletries, and items for personal comfort ○ Special considerations: <ul style="list-style-type: none"> ▪ plan for special needs, including medical conditions and arrangements for pets and people requiring assistance
<ul style="list-style-type: none"> • Manitoba 	Operational Guidelines for Evacuations (Manitoba) (Schedule 6 of the Provincial Preparedness Programs)	<ul style="list-style-type: none"> • The guidelines aim to provide a common decision-making process, implementation procedure, and standards for orders to be issued for evacuations, including declaring a State of Emergency or State of Local Emergency • The decision tool helps authorities decide how to expedite the evacuation of persons from hazardous areas, control traffic, and provide adequate transport for persons without vehicles to mitigate the health and social impacts of evacuation experienced by the exposed population • It also provides considerations for logistics, such as ensuring that essential supplies such as food, water, clothing, medical equipment and supplies, generators, sanitation devices, and police, firefighting, and public works vehicles are made available to sustain operations and meet evacuee needs
	Wildfire Evacuation Guidelines	<ul style="list-style-type: none"> • Provides information to the public about what to do if a wildfire threatens their home • Includes guidance about ensuring families pack waterproof clothing, food, cash/credit cards, toys and other ways to amuse children, sleeping bags, medications, and waterproof bags • Also provides guidance about how to prepare your car, outside the house, inside the house, and crops and livestock • The guidance aims to ensure the public is prepared to follow evacuation orders if and when necessary, potentially mitigating the health and social impacts that evacuation may have
<ul style="list-style-type: none"> • Ontario 	Emergency preparedness guide	<ul style="list-style-type: none"> • Provides information to the public about how to prepare for emergencies, including evacuations • In addition to establishing evacuation plans and ensuring all necessary supplies are ready, the webpage also provides guidance about how to help ensure children, people with disabilities, and older adults are calm and have their needs addressed throughout the emergency • For example, it is recommended to avoid being dismissive about children's or older adults' concerns or requests, and to reassure them and communicate openly about the plan • This type of guidance can help mitigate stress and other psychological challenges associated with evacuations

Jurisdiction	Document/tool	Key messages on mitigating health and social impacts of evacuation
	Ministry of Health's Emergency Response Plan (MERP)	<ul style="list-style-type: none"> In December 2023, the Ministry of Health's Emergency Response Plan (MERP) was released to provide a resource for emergency planners and health system partners to guide their planning It includes alerting planners to standards like the Joint Emergency Management Steering Committee (JEMS) Standards, which aim to define criteria and expectations of organizing supporting First Nations communities displaced by evacuation, and helps guide the coordination of evacuations
	Long-Term Care Emergency Preparedness Manual	<ul style="list-style-type: none"> The Ministry of Long-Term Care updated the Long-Term Care Emergency Preparedness Manual in May 2022, and aims to support homes to develop effective emergency and evacuation plans The section on evacuation plans provides information about decision-making to develop evacuation plans, prompting homes to consider potential psychological impacts on residents, such as by considering whether families would wish their loved ones to evacuate to a family's residence rather than an evacuation site in advance
	Provincial Emergency Response Plan	<ul style="list-style-type: none"> The Provincial Emergency Response Plan includes a chapter on emergency response and recovery activities, such as for public alerting, monitoring and notification, and activation of provincial evacuation orders Organizations identifying a need for public alerting can contact the Provincial Emergency Operations Centre (PEOC) to initiate a public alert through television, radio, and LTE-connected and compatible wireless devices Municipalities identifying a need for emergency orders to support their response efforts (e.g., mandatory evacuation) can communicate this to PEOC to work with other ministries to notify the Lieutenant Governor in Council to support the municipality
<ul style="list-style-type: none"> Quebec 	Evacuation guidance for the public	<ul style="list-style-type: none"> The Government of Quebec provides guidance for individuals and families about evacuation if authorities provide instruction and recommendations to evacuate It provides essential items that should be packed before evacuating, including medication, personal hygiene items, extra clothes, money, identification documents, keys, and any items necessary for caring for family members with medical or special needs In the event of imminent threat, it advises that families do not waste time retrieving personal belongings or valuables
	Guidance for preparing emergency kits and household evacuation plans	<ul style="list-style-type: none"> The Government of Quebec provides guidance for families to make a household emergency plan in case evacuation is necessary, including to have an emergency kit with essential items needed to meet basic needs of the household for three days Households should also determine where family members should gather and practice evacuation drills, while also determining the route that will be taken to leave the neighbourhood and an alternative route in the event that certain roads are impassable The guidance also suggests families make an inventory of their property, including proof of purchase, photos, or videos, and storing these documents with home and auto insurance policies This guidance can help families better prepare for emergencies and evacuations, potentially helping to mitigate some of the psychological and social impacts of evacuation
<ul style="list-style-type: none"> New Brunswick 	Province of New Brunswick Emergency Measures Plan	<ul style="list-style-type: none"> The province of New Brunswick has implemented a plan for coordinated emergency responses across government sectors The provincial all-hazard plan includes contingency plans evacuation due to major flooding events, a hurricane event, or forest fires The provincial environmental minister and local government has approval to permit evacuation orders The Department of Health is responsible for coordinating the health response, safety monitoring of food sources, developing government institution safety plans (e.g., schools and long-term care facilities), and inspecting environmental contaminants

Jurisdiction	Document/tool	Key messages on mitigating health and social impacts of evacuation
		<ul style="list-style-type: none"> Government department has specific roles to provide supports prior to, during, and after evacuation these include that: <ul style="list-style-type: none"> the department of tourism must help with housing the department of transportation and infrastructure must help maintain evacuation routes
	New Brunswick Emergency Preparedness Guide	<ul style="list-style-type: none"> The New Brunswick Emergency Measures organization has provided a guide to help citizens be prepared in case of evacuation The guide includes a section on understanding risks, planning considerations, emergency kits requirements, safety checklists, resources, and contact information for emergency management coordinators
<ul style="list-style-type: none"> Nova Scotia 	Emergency Preparedness Guide for Persons with Disabilities and Older Adults in Nova Scotia	<ul style="list-style-type: none"> This guide provides evacuation details specific for older adults and people with disabilities including: <ul style="list-style-type: none"> contact information for emergency conditions (e.g., support organizations, community locations, road conditions, message relay for people with hearing disabilities, registered nurses, emergency management office) preparation information for creating a personal ability plan, creating movable escape routes, creating an emergency kit, and having a support network (e.g., neighbours, coworkers) information on how to coordinate needs with municipal emergency management coordinator information on alternative types of accessible (e.g., emergency chairs, flashing or vibrating alarms, extra chairs, communication cards) emergency kits should include information about health condition and needs, instructions for services animals, accessible devices, and sensory protective equipment (e.g., hand fidget) evacuation information on accessing alerts, safety information, and health monitoring post-evacuation information on recharging devices, monitoring health, and replacing used emergency information
<ul style="list-style-type: none"> Prince Edward Island 	Emergency Preparedness Guide	<ul style="list-style-type: none"> The guide contains information for emergency contacts, creating an emergency plan, home safety, creating a personal support network, and managing health issues (e.g., medication and specialized equipment)
	PEI Disaster Financial Assistance Program Guide	<ul style="list-style-type: none"> The guideline provides information on program eligibility, application process, and appeal process
<ul style="list-style-type: none"> Newfoundland and Labrador 	Emergency Preparedness Guide	<ul style="list-style-type: none"> This guideline includes information on evacuation planning and creating an emergency kit The planning document includes information on special health needs, emergency contact information, and safe home instructions (e.g., fire extinguisher) Recommendations for the emergency kits include food, water, first aid kit, cash, tools, cleaning supplies, and contact information
<ul style="list-style-type: none"> Northwest Territories 	Government of Northwest Territories Evacuation Plan	<ul style="list-style-type: none"> The Government of Northwest Territories plan on evacuation preparedness outlines essential steps for planning and responding to evacuations. The plan emphasizes the importance of creating an emergency plan, assembling an emergency kit, and familiarizing yourself with local notification methods and community assembly points <ul style="list-style-type: none"> Common reasons for evacuation include wildfires, floods, and environmental hazards Evacuations are typically managed by local governments, with support from regional or territorial emergency management organizations There are four levels of evacuation advisories: <ul style="list-style-type: none"> evacuation notice (prepare for a potential threat) evacuation alert (be ready to leave on short notice) evacuation order (leave immediately due to imminent danger) evacuation all clear (safe to return home) During an evacuation, bring your emergency kit, follow official instructions, and listen to local emergency officials

Jurisdiction	Document/tool	Key messages on mitigating health and social impacts of evacuation
		<ul style="list-style-type: none"> ○ Access assistance during evacuations at designated shelters, and wait for the official all-clear before returning home, checking for damage upon return
• Yukon	Government of Canada Emergency Plan Preparing for Emergencies	<ul style="list-style-type: none"> • The Government of Yukon refers to federal evacuation guidelines on their website • The Yukon Government's evacuation preparation guideline includes the following: <ul style="list-style-type: none"> ○ relevant contact information ○ household protection (e.g., shutting off utilities) ○ essential information (e.g., water, food, batteries, medication,) ○ escape routes ○ following evacuation alerts
	Yukon Emergency Preparedness Handbook	<ul style="list-style-type: none"> • Yukon Energy has prepared an emergency preparedness handbook including: <ul style="list-style-type: none"> ○ creating an evacuation plan (e.g., floor plans, alternate routes, storage of important documents) ○ preparing an emergency kit (e.g., communication tools, food and water, first aid, personal items, tools, medical information) ○ safe car evacuation procedures (e.g., car kits, navigating downed power lines) ○ emergency phone numbers
		<ul style="list-style-type: none"> • None identified
• Nunavut		
U.S. (national)	You've been evacuated. Now what?	<ul style="list-style-type: none"> • In 2021, the Family of Liaison office created an evacuation resource containing a checklist, contacts, general resources, and frequently asked questions • Information on evacuation benefits and allowances is provided including travel, housing, transportation, education, advance payments to cover evacuation costs of \$500 USD per evacuee and \$1,000 per family
	Ready	<ul style="list-style-type: none"> • The United States Department of Homeland Security has evacuation recommendations on their website • Information provided includes planning involving navigating alerts, shelter routes, family communication, and emergency kits • The website acknowledged that older adults and people with disabilities have specific challenges during navigation; this includes having emergency medications, accessibility devices, and having accessible transportation • Specific tools that might be helpful include having extra hearing aid batteries, power wheelchair, emergency supplies with braille labels, keep models of equipment for insurance, extra glasses, and spare oxygen tanks
	FEMA Disaster Preparedness Guide for Older Adults	<ul style="list-style-type: none"> • Federal Emergency Management Agency (FEMA) developed an evacuation preparedness guideline specifically for older adults • Information includes evaluating unique needs, creating a plan, and engaging with support networks • Plans should involve support networks including family members and healthcare professionals • Additional steps also include understanding how to navigate alerts as well as helpful resources
	Disaster Preparedness Guide for Caregivers	<ul style="list-style-type: none"> • FEMA developed an evacuation guideline specifically for caregivers • Information includes identifying risks and barriers, learning, and making plans • Caregivers should understand person's unique needs and assistive technology needs • Caregivers should also have a support network • Caregivers should acknowledge their barriers • Caregivers can establish partnerships with emergency services to understand local resources
	FEMA Basic Preparedness Guide	<ul style="list-style-type: none"> • This guide provides information on types of disasters, understanding alerts, permitting guidelines, understanding school emergency procedure, communication aids, unique healthcare needs, pet needs, items for emergency kits, and safe shelter (e.g., managing water)

Jurisdiction	Document/tool	Key messages on mitigating health and social impacts of evacuation
Alaska	State of Alaska Emergency Operations Plan	<ul style="list-style-type: none"> • The plan establishes a framework for coordinating emergency management phases in Alaska (i.e., specifying state organization in response to disaster emergencies) • The plan ensures a coordinated effort by all relevant stakeholders (i.e., local, tribal, state, federal, volunteer, and private agencies) to manage emergencies, save lives, and protect property and the environment • The plan also identifies supporting plans and procedures within Alaska's multi-agency disaster management system and provides additional guidance for specific types of emergencies through Incident Annexes • It recommends that local governments should: <ul style="list-style-type: none"> ○ integrate state assistance ○ adopt local Emergency Operations Centre criteria ○ align disaster plans with state and federal plans ○ form neighbourhood disaster groups ○ ensure effective communication ○ consider diverse community needs
	Individual & Family Preparedness Guide	<ul style="list-style-type: none"> • The Individual & Family Preparedness Guide is a resource to help Alaskans develop a Family Emergency Plan • It provides guidance on assembling emergency kits and Go Kits with essential items • The guide offers strategies to mitigate potential home damage and prepares families to shelter-in-place during emergencies • It recommends: <ul style="list-style-type: none"> ○ to plan as a family for emergency communication and actions, keeping a copy of the plan in your emergency supply kit ○ to store supplies for more than seven days, including medications and critical documents, and choose food with a long shelf life that meets your family's needs ○ to purify water for drinking and other uses ○ to maintain different emergency kits for home, quick evacuations, and your vehicle or office
Arizona	Arizona State Emergency Response and Recovery Plan	<ul style="list-style-type: none"> • The Arizona State Emergency Response and Recovery Plan: <ul style="list-style-type: none"> ○ identifies state agency roles and responsibilities during emergencies and disasters ○ does not detail operational procedures, which are covered in agency-specific documents ○ supports the mission of Arizona's Department of Emergency and Military Affairs to provide emergency management and military capabilities ○ establishes the framework for response and recovery operations when local resources are overwhelmed or a state of emergency is declared by the Governor
	Maricopa County Department of Emergency Management Strategic Plan 2024–2026	<ul style="list-style-type: none"> • The Maricopa County Department of Emergency Management Strategic Plan: <ul style="list-style-type: none"> ○ guides comprehensive county-wide emergency management efforts through a multi-year strategy that includes missions, strategic goals, objectives, milestones, and methods of implementation ○ it aims to support community safety before, during, and after disasters, enhancing resilience and engagement across the "whole community" ○ it focuses on five strategic goals with supporting objectives to address risks, prepare for responses, and standardize emergency management practices ○ it directs all Emergency Management and Security Services staff to implement planning, organizing, training, and outreach efforts based on hazards identified in the Maricopa County Hazard Identification and Risk and Consequence Analysis

Jurisdiction	Document/tool	Key messages on mitigating health and social impacts of evacuation
	Arizona Department of Health Services' post-flood guidance	<ul style="list-style-type: none"> • The Arizona Department of Health Services' post-flood guidance provides comprehensive guidance on: <ul style="list-style-type: none"> ○ family preparedness and document replacement ○ temporary housing options through the American Red Cross ○ safety measures upon returning home, including gas and electrical checks ○ health precautions such as tetanus shots and protection from mosquito-borne illnesses ○ guidelines for well water safety and mould prevention during cleanup ○ awareness of flash flooding risks and safe driving practices • It recommends that individuals and families: <ul style="list-style-type: none"> ○ prepare a family emergency plan, including emergency contacts and assembling a disaster supply kit with essential items for at least 72 hours ○ safeguard important documents and know how to replace them if they are lost or damaged ○ keep emergency contacts for utilities and vital services ○ after a flood, return home safely by checking for hazards, avoiding standing water, and protecting yourself from mould, mosquitoes, and contaminated well water
California	California Governor's Office of Emergency Services created the Integrated Evacuation Planning for Jurisdictions and Individuals with Access and Functional Needs	<ul style="list-style-type: none"> • This plan, led by the California Governor's Office of Emergency Services and its Office of Access and Functional Needs: <ul style="list-style-type: none"> ○ empowers local jurisdictions and individuals with access and functional needs to develop comprehensive and inclusive emergency evacuation plans ○ integrates the needs of individuals with access and functional needs (AFN) into California's emergency management systems through stakeholder collaboration ○ mandates the inclusion of AFN considerations in local Emergency Operations Plans, focusing on evacuation preparedness to reduce vulnerability and enhance community resilience ○ offers comprehensive guidance, best practices, and resources to jurisdictions and individuals for developing effective evacuation strategies and enhancing safety during disasters ○ with regards to communicating the evacuation plan, it recommends using a variety of accessible communication methods to inform the community about transportation resources (e.g., social media posts, emergency alerts, press conferences, town halls, digital billboards)
	Los Angeles County's Emergency Survival Guide	<ul style="list-style-type: none"> • The Emergency Survival Guide for Los Angeles County aims to: <ul style="list-style-type: none"> ○ help residents in preparing for, responding to, and recovering from disasters ○ promote self-sufficiency by providing essential tips and resources ○ encourage community preparedness and awareness of emergency situations ○ offer multi-language accessibility to ensure broad dissemination and understanding among diverse communities • It recommends starting a Family Emergency Plan that includes all household members and pets, covering essential actions (e.g., identifying meeting places, evacuation routes, utility shut-offs, emergency policies for schools and care centres)
	California Department of Forestry and Fire Protection's Evacuation Guide	<ul style="list-style-type: none"> • The California Department of Forestry and Fire Protection's Evacuation Guide is designed to help individuals navigate wildfire evacuations effectively <ul style="list-style-type: none"> ○ It provides clear instructions for preparing and executing evacuation plans, monitoring wildfire conditions, and ensuring readiness with emergency supplies and pet care ○ It offers advice on managing power outages during wildfires (e.g., utility safety, maintaining essential supplies, staying informed through reliable channels) • It recommends that, if you are trapped, staying calm and taking specific actions depending on your location:

Jurisdiction	Document/tool	Key messages on mitigating health and social impacts of evacuation
		<ul style="list-style-type: none"> ○ if you are in a vehicle, you should park in a clear area, close windows and vents, cover with a wool blanket, and call 911 ○ if outside, move to a clear area, lie face down, and call 911 ○ if you are at home, gather your family, fill sinks and tubs with water, keep doors and windows closed but unlocked, and stay indoors away from exterior walls and windows
<ul style="list-style-type: none"> • Colorado 	Evacuation Plan Development Tool Kit	<ul style="list-style-type: none"> • The Colorado Department of Public Health provides a tool to help authorities develop a plan to evacuate residents, staff, and equipment • The tool kit guides decision makers and organizations through developing nine sections, including 1) purpose, scope, situations, and assumptions; 2) concept of operations, which defines what the function of the plan is and how it is accomplished; 3) organization and assignment of responsibilities; 4) disaster intelligence; 5) communications; 6) administration, finances, and logistics of evacuations; 7) annex development and maintenance to define who is responsible for coordinating revision of the jurisdiction evacuation annex; 8) authorities and references; and 9) tabs to gather important procedural information for the annex • The tool kit prompts decision makers to think about methods of communicating around language barriers, including for those who are deaf or do not speak English
<ul style="list-style-type: none"> • Florida 	Evacuation Considerations	<ul style="list-style-type: none"> • Florida's Division of Emergency Management provides guidance for families about evacuation considerations • It provides guidance about evacuation options, prompting families to evaluate their unique circumstances and nature of emergency, and have evacuation options including shelters, friend or family homes and out-of-state locations, and to keep a list of these with contact details • It also prompts families to provide special assistance and personal assessments to determine needs during evacuations, and to preregister with local special needs registry as necessary to receive help during emergencies • Finally, it advises families to arrange transportation in advance if they cannot drive themselves and ensure transport can accommodate all necessary supplies, while considering multiple evacuation routes to avoid potential travel obstacles and sharing evacuation plans with support networks
	Bureau of Environmental Health Group Care Program Preparedness Toolkit	<ul style="list-style-type: none"> • The State of Florida Department of Health's Bureau of Environmental Health provides a preparedness toolkit for group care, including considerations for evacuation • It prompts group care facilities to consider protocols for evacuation and ensuring the health and well-being of residents during evacuations, such as systems for identifying residents during an evacuation, transportation requirements and ensuring contracts to meet these requirements are in place, evacuation floor plans, and a list of evacuation sites registered
<ul style="list-style-type: none"> • Louisiana 	Louisiana Emergency Preparedness Guide	<ul style="list-style-type: none"> • The Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) aims to help residents prepare for emergencies, especially coastal areas prone to natural disasters • The guide focuses on providing guidance for developing evacuation plans (e.g., mapping out evacuation routes, multiple locations to seek refuge during emergencies), personal preparedness (e.g., conducting personal assessments, making transportation arrangements, preparing emergency kits), and community resources such as contact details for local agencies like the American Red Cross and United Way
<ul style="list-style-type: none"> • New Mexico 	Ready, Set, Go! New Mexico	<ul style="list-style-type: none"> • The New Mexico Energy, Minerals and Natural Resources Department provides a wildland fire action guide for the public, which prompts families to prepare for evacuation, tasks as the fire approaches, and tips for leaving during evacuation

Jurisdiction	Document/tool	Key messages on mitigating health and social impacts of evacuation
		<ul style="list-style-type: none"> Preparing for wildland fires includes prompting families to create a family disaster plan with meeting locations and communication plans, ensuring the family knows how to shut off gas, electric, and water mains, preparing an emergency supply kit, and having an out-of-area contact designated As the fire approaches, families should alert family and neighbours, prepare the house and outdoor surroundings according to a checklist, and prepare emergency supplies including a three-day supply of water and non-perishable food, an extra set of car keys, credit cards, cash, important documents, and easily carried valuables and irreplaceable items When leaving to evacuate, families should go to a predetermined location that is a low-risk area, with several routes in case some are blocked by fire
• Oregon	Oregon Community Wildfire Protection Plans (CWPP) Planning Tool	<ul style="list-style-type: none"> The Oregon CWPP Planning Tool provides professional planners with updates on CWPP and Natural Hazard Mitigation Plans (NHMP), data resources, and full wildfire risk inventory reports It also provides planners with templates to create Advanced Wildfire Reports and Social Vulnerability Reports to help identify and respond to potential threats and challenges for populations faced with the possibility of evacuation
	Preparedness Tools for Oregonians	<ul style="list-style-type: none"> The Oregon Health Authority provides tools for families and organizations to build emergency kits and prepare for potential hazards such as earthquakes, flooding, wildfires, and windstorms The tools include a cookbook and emergency kit checklist for use in the event evacuation is necessary
	Oregon Wildfire Response & Recovery's wildfire evacuation checklist	<ul style="list-style-type: none"> The wildfire evacuation checklist provides families with information about what to do during evacuation such as stay informed (e.g., by checking social media, TV, and radio for updates), plan possible evacuation routes, plan for emergency shelter, checking in with neighbours, and packing important items such as medication, medical devices, eyeglasses, food and water, sanitation items, first aid kits, flashlight, gloves and eye protection, N95 masks, documentation, credit cards/cash, hygiene items, and other irreplaceable items if time allows
• Texas	Hurricane Preparedness	<ul style="list-style-type: none"> Texas General Land Office provides hurricane preparedness information for families to help 1) protect their personal documents and special items, 2) build their disaster evacuation kit, 3) buy flood insurance, 4) flood proof their home and take steps to minimize flood damage, and 5) develop a family evacuation plan, including using the Texas Department of Transportation evacuation routes resource The Disaster Evacuation Checklist complements this information as an additional resource
	Hurricane preparation – evacuation and contraflow routes	<ul style="list-style-type: none"> The Texas Department of Transportation provides information about evacuation routes to help citizens prepare for hurricane evacuations
	Texas Ready Disaster Supply Checklist	<ul style="list-style-type: none"> The Texas Department of State Health Services provides a guide for families to prepare for evacuation, which includes 1) be informed, 2) make a plan, and 3) build a kit, with additional videos and other resources available to help guide this process Their disaster supply checklist includes food and water, first aid, medication, hygiene products, communication, lighting, document bag items, additional items when evacuating by car, first-aid kits, emergency documents, and needs assessments for people with disabilities and those with access and functional needs, and pet supplies
• Washington (state)	Be Prepared. Be Safe: Wildfires	<ul style="list-style-type: none"> The Washington State Department of Health provides information for the public about what to do in the event of evacuation as a result of wildfire, including preparing the house (e.g., shut off utilities, locking doors, turning off lights), choosing a route away from hazards or move to safety zone, and preparing a 72-hour emergency supply kit with water, food, and protective clothing
	Resources and facilitation toolkits	<ul style="list-style-type: none"> The Washington State Fire Adapted Communities Learning Network provides resources and facilitation toolkits to help communities prepare for and respond to wildfires

Jurisdiction	Document/tool	Key messages on mitigating health and social impacts of evacuation
	Be Read Pocket Guide	<ul style="list-style-type: none"> The guideline includes information on understanding the risks, making an evacuation plan, creating an emergency kit, steps for specific weather events, and emotional preparation Information for emotional preparation include understanding common biopsychosocial reactions (e.g., stomach aches, insomnia, irritability), creating support networks, and acknowledging stress may last several weeks
	Emergency Preparedness Guide for Muskego Cree Families James Bay First Nation Community	<ul style="list-style-type: none"> In collaboration with the Moose Cree First Nation, the Canadian Red Cross created a guide for First Nations communities as they are vulnerable to natural disasters Details include the importance of preparedness, knowing risks, making evacuation plans (e.g., specific contact information), and creating emergency kits A specific guideline for elders was created addressing information on preparing emergency kits for people with type 2 diabetes (e.g., test strips, treatment, medication, insulin pen) as well as mobility and assistive devices
	Let's Plan for the Unexpected	<ul style="list-style-type: none"> The Canadian Red Cross created a plan specifically for families to prepare for evacuations The information includes types of disasters, creating emergency kits, and returning to homes post-evacuation The guideline highlights specific challenges children and teenagers may face including: <ul style="list-style-type: none"> children 7 to 12 may experience include anxiety, fear of separation, headaches, loss of appetite, irritability, and nightmares teenagers may experience strong emotions, sleep disturbances, anger, substance abuse, suicidal tendencies, loss of connection to friends, and physical challenges The guideline provides suggestions for children, including to avoid punishments, explain situations, acknowledge fears, give tasks, promote expression of fears, maintain routine, encourage exercise, and allow family time The guideline provides activities for families to do together to prepare for evacuation (e.g., emergency phone call simulation, finding items that would be useful in a power failure)
	Disaster and Emergency Preparedness for Older Adults	<ul style="list-style-type: none"> The American Red Cross created a disaster guideline for older adults Information for preparing for an evacuation includes identifying likely emergencies, learning about community resources, signing up for alerts, getting first aid training, assessing health needs (e.g., medical devices), and building support networks Information regarding developing an evacuation plan include understanding power needs, insurance, communication plans, gathering supplies, creating an emergency kit, and gathering important documents Guidelines for during an evacuation include staying informed, locating shelters, and asking for help Post-evacuation guidelines include safe return, working with trusted sources, managing property damage, understanding risk of electrocution, documenting damage, and leaning on support network A condensed checklist can be found here Tips for caregivers include understanding roles and expectations, having training, effective communication, providing emotional support, and having a picture of person under care <ul style="list-style-type: none"> A checklist for caregivers includes tips for considering needs (e.g., mobility limitations), routines, conditions, and healthcare (social security number), gathering emergency supplies, staying connected, understanding physical dangers and scammers, and dealing with biopsychosocial challenges (e.g., nutrition and emotion) Information very similar to above-described Canadian guide

Appendix 6: Documents excluded at the final stages of reviewing

Document type	Hyperlinked title
Evidence synthesis	Response strategies for promoting gender equality in public health emergencies: A rapid scoping review
Guidelines	Fire safety and emergency evacuation guidelines for intensive care units and operating theatres: for use in the event of fire, flood, power cut, oxygen supply failure, noxious gas, structural collapse or other critical incidents: Guidelines from the Association of Anaesthetists and the Intensive Care Society
Single study	Association of perceived environment and physical activity in older adults after the Great East Japan earthquake Ten-year follow-up of earthquake survivors: Long-term study on the course of PTSD following a natural disaster Assessing the effectiveness and the economic impact of evacuation: The case of the island of Vulcano, Italy Explain the challenges of evacuation in floods based on the views of citizens and executive managers The mental health of long-term evacuees outside of Fukushima prefecture after the Great East Japan earthquake Impact of evacuation on the long-term trend of metabolic syndrome after the Great East Japan earthquake Long-term, community-based approach for affected people having problems with mental health and lifestyle issues after the 2011 Fukushima disaster: the Fukushima health management survey Poor environmental conditions created the acute health deteriorations in evacuation shelters after the 2016 Kumamoto earthquake Restoration of clean water supply and toilet hygiene reduces infectious diseases in post-disaster evacuation shelters: A multicenter observational study Dietary pattern changes in Fukushima residents after the Great East Japan Earthquake: The Fukushima health management survey 2011–2013 The mental health status of children who have been evacuated or migrated from rural areas in Fukushima prefecture after the Fukushima daiichi nuclear power station accident: Results from the Fukushima health management survey Association between atrial fibrillation and white blood cell count after the great east Japan earthquake: An observational study from the Fukushima Health Management Survey Modeling service quality and satisfaction of evacuation center using partial least squares structural equation modelling (PLS-SEM) After the earthquake: The comparison of psychological status of resident and earthquake survivor cancer patients Disease and injury trends following heavy rains in Western Japan in 2018 Validity and reproducibility of food photographic estimation for evaluating meals in evacuation shelters Specifying evacuation return and home-switch stability during short-term disaster recovery using location-based data Loss of participation among evacuees aged 20 to 37 years in the disaster cohort study after the great east Japan earthquake Impact of lifestyle and psychosocial factors on the onset of hypertension after the great east Japan earthquake: A seven-year follow-up of the Fukushima health management survey Association of living in evacuation areas with long-term care need after the Fukushima accident A study on nursing personnel operations to ensure evacuation safety during medical facility disasters Effective cross-national respectful partnership: A case study of peace corps to volunteer COVID-19 volunteer evacuation Rising from the ashes by expanding access to community care after disaster: An origin story of the wildfire mental health collaborative and preliminary findings The lingering impact of Hurricane Katrina: Examining the physical health, mental health, and racial equity impacts of disaster response Trends in suicide mortality in 10 years around the Great East Japan Earthquake: Analysis of evacuation and non-evacuation areas in Fukushima Prefecture Factors hindering social participation among older residents from evacuation zones after the nuclear power plant accident in Fukushima: The Fukushima health management survey Dyslipidemia before and after the Great East Japan Earthquake: A population-based 10-year study using the National database in Japan Obesity and glucose metabolism abnormalities by post-disaster evacuation The utilization of emergency department and outpatient clinics among evacuated victims after the 2023 Turkey earthquake The usefulness of brief telephone intervention after a nuclear crisis: Long-term community-based support for Fukushima Evacuees Long-term follow-up of affected residents after lifting evacuation orders in Fukushima Prefecture, Japan: Findings from an interview-based psychological survey

Document type	Hyperlinked title
	Trends in lifestyle-related diseases and their risk factors after the Fukushima Daiichi Nuclear Power Plant accident: Results of the comprehensive health check in the Fukushima health management survey
	Modeling service quality and satisfaction of evacuation center using partial least squares structural equation modeling
	Service-learning experiences related to health support activities for residents who have returned home after evacuation due to a radiation disaster
	Wildfire response and recovery: The importance of coordinated care and social support
	Relationship between evacuation after the Great East Japan Earthquake and new-onset hyperuricemia: A 7-year prospective longitudinal study of the Fukushima Health Management Survey
	A six-year prospective study on problem drinking among evacuees of the Great East Japan Earthquake: The Fukushima Health Management Survey
	Relationship between risk of hyper-low-density lipoprotein cholesterolemia and evacuation after the Great East Japan Earthquake
	Evacuation after the Great East Japan Earthquake is an independent factor associated with hyperuricemia: The Fukushima Health Management Survey
	Influence of post-disaster evacuation on childhood obesity and liver dysfunction: The Fukushima Health Management Survey
	Evacuation at home delayed the first medical intervention in Minamisanriku town after the 2011 Great East Japan Earthquake
	Pregnancy outcomes among evacuees of the Sinabung volcano, 2010–2018 (North Sumatra, Indonesia): A matched cohort study
	Understanding mothers' worries about the effects of disaster evacuation on their children: A cross-sectional study
	Assessing trauma healing methods for Volcanic disaster evacuees in Indonesia
	Gendered experience of disaster: Women's account of evacuation, relief and recovery in Nepal
	Wildfire evacuation patterns and syndromes across Canada's forested regions
	Improving evacuation compliance through control: Implications for emergency management policy and disaster communications
	Relationship between physical activity/exercise habits and the frequency of new onset of lifestyle-related diseases after the Great East Japan Earthquake among residents in Fukushima: The Fukushima health management survey
	The associations between evacuation status and lifestyle-related diseases in Fukushima after the Great East Japan Earthquake: The Fukushima health management survey
	Factors related to the willingness of people with mental health illnesses living in group home to disclose their illness to supporters during disaster evacuation: A cross-sectional study
Book chapter	Telephone supports in Health effects of the Fukushima nuclear disaster
	Telerehabilitation in disasters in health effects of the Fukushima nuclear disaster
Commentary	Observations from emergency management of dialysis patients evacuated from the US Virgin Islands to Puerto Rico following hurricane Irma

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