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A guide to post-flooding community level psychosocial response and recovery in Canada

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Key Messages

- Relationships are foundational to all public health practices and activities to support community psychosocial and mental health post-flooding.
- When strong relationships are established, people involved in flood response can quickly mobilize and work together towards community recovery. Strong relationships can reduce reliance on external supports and facilitate a greater reach among community members, including people who are isolated or systemically excluded.
- Relationships take time and energy to develop and maintain and people in the relationships are not interchangeable. It is valuable to invest time and resources into creating and maintaining relationships and trust within communities, across levels of government, and with Indigenous nations. This usually requires leadership and funding support.
- We identified seven public health practices for supporting community psychosocial and mental health recovery after a flood: centring community leadership; strengthening community connections; centring reconciliation and Indigenous views of well-being; prioritizing and supporting responder well-being; collaborating and coordinating between public health, other sectors, and external agencies; communicating and engaging with community; and gathering and sharing insights, stories, and lessons learned.
- Public health and psychosocial emergency responders must adapt their practices to the strengths, needs, resources, and relationship structures of their specific community and unique disaster context. We provide a list of Canadian resources and tools that can be adapted to the local context.

Introduction

Flooding is the most common climate-related disaster globally, and floods are increasing in frequency across Canada.¹ Along with the physical and economic impacts, climate-related disasters such as flooding have devastating effects on people’s psychosocial well-being and mental health.² Please see **Appendix A** for a visual summary of the factors, impacts, and interventions related to climate disasters and mental health.³ The psychosocial and mental health impacts of flooding are disproportionately felt among systematically excluded groups such as children and youth, older adults, Indigenous Peoples, people with disabilities, and people living in low socioeconomic conditions.¹ Systemic exclusion refers to social

structures, policies, and practices that limit access to health, opportunities, and thriving for specific groups of people because of social circumstances and characteristics such as location of residence, race, class, and gender.

Post-flooding psychosocial and mental health recovery requires many people to work together alongside affected communities. Public health professionals and emergency psychosocial response teams in communities across Canada need action-oriented guidance to support community recovery after flooding and other disasters. With that in mind, the National Collaborating Centre for Environmental Health (NCCEH) contracted PolicyWise for Children & Families (PolicyWise) to create a guide for use by Canadian public health professionals directly or indirectly involved in flooding response and/or recovery. In this guide, PolicyWise identifies and describes post-flooding practices that Canadian public health professionals can adapt and apply in their local context. We also outline contextual factors that may influence the effectiveness of these practices for diverse communities and circumstances. We build on our preliminary research into the mental health and psychosocial well-being impacts of flooding, with emphasis on systemically excluded groups.⁴

Methodology

The PolicyWise research team searched, selected, and reviewed scholarly and practice-based sources related to community psychosocial and mental health practices for responding to and recovering from flooding or other disasters within the Canadian context. We included sources published in the last five years to ensure that the findings reflected current promising and leading practices. We excluded sources that did not consider any community level practices or interventions. Please reach out to contact@ncceh.ca for a full description of search details.

In addition to insight gained from the literature, we continued our engagement with our pan-Canadian practice advisory committee, as first described in our preliminary report.⁴ Advisors included government and non-profit leaders in emergency psychosocial response and recovery from across Canada. We met virtually with the advisory committee members over the project period, and incorporated their written and verbal input into this document. We also supplemented these findings with data gathered from key informant interviews. NCCEH staff and advisory committee members recommended key informants who could share their experience and expertise on the topic of community psychosocial and mental health recovery post-disasters. See **Appendix B** for the interview guide.





To fill in gaps identified during our analysis, we conducted additional focused searches and included other relevant resources. Throughout the research process, we applied an equity lens to understand the equity implications of the recommended practices.

Results

In this section, we examine how relationships are foundational to all practices and activities in support of post-flooding psychosocial and mental health recovery. Then, we address seven community level practices that can be adapted for diverse Canadian communities (**Figure 1**). Finally, we discuss system-level considerations for applying these practices.



Figure 1. Public health practices grounded in relationships to support community mental health and psychosocial recovery after a flood or other climate-related disaster.

Relationships are essential to post-flooding community level response and recovery practices

We found that relationships were foundational to all practices and activities to support community psychosocial and mental health recovery post-flooding. Being grounded in relationships involves developing and maintaining trust and respect, being and feeling connected to people, understanding people's specific skills, and communicating widely and equitably. When strong relationships are established, people involved in flood response can quickly mobilize and work together towards community recovery. Strong relationships can reduce reliance on external supports and facilitate a greater reach among community members, including people who are isolated or systemically excluded.

Identifying and leveraging existing relationships

Every community has established relationships and trust. It can be helpful to think about relationships beyond the people who are specialized in disaster or emergency response. Even relationships with people who are not formally tied to disaster response can be leveraged during a disaster. For example, an advisor shared that in a community with a factory that employed many people, public health responders partnered with factory leaders to identify employee needs and culturally appropriate approaches to communication with employees. In a community with farms significantly affected by a flood, a municipality hired community liaisons who were familiar with the farming industry who could easily build relationships based on common understanding and language (key informant).

Consider how community relationships can be leveraged as quickly as possible post-flooding. When a disaster occurs, responders may ask:

- What are the existing relationships within the community?
- Who has a voice that is listened to, respected, and trusted?
- Where are the community ties?
- Who are the people we can bring together? What skills do they have?

Advocating for and allocating resources to create and maintain relationships

Advisors and key informants emphasized that, across contexts and communities, relationships are essential but are often taken for granted, under-resourced, and under-funded. Relationships take time and energy to develop and maintain and people in the relationships are not interchangeable. For example, when there is role turnover, new relationships and trust must be built. Advisors noted that role turnover often resulted from the ending of initiatives and related funding, which they associated with a lack of understanding of the importance of psychosocial support work. Acknowledging the value of and



budgeting time and resources for relationship building is vital for post-disaster community psychosocial well-being. A key informant explained:

Managers look at somebody's timesheet and go, "Oh, you spent an hour and a half at a meeting this week off site, what's the value in doing that?" And so, to get leadership to understand that building relationships and building capacity, especially in this day and age of government funding, it's critical for recovery, it's super important for the best functioning for our families and our communities.

Community level practices and contextual considerations to promote post-flooding mental health and psychosocial well-being

To support post-flooding psychosocial and mental health recovery, public health professionals and emergency psychosocial responders can undertake a combination of the following strategies:

- Centring community leadership
- Strengthening community connections
- Centring reconciliation and Indigenous views of well-being
- Prioritizing and supporting responder well-being
- Collaborating and coordinating between public health, other sectors, and external agencies
- Communicating and engaging with community
- Gathering and sharing insights, stories, and lessons learned

We elaborate on each of these practices and discuss specific activities and contextual considerations in the sections that follow. Note that all strategies are grounded in and benefit from strong relationships. They should be adapted to the strengths, needs, and existing resources of the specific community context and circumstances. In **Box 1**, we provide a list of recently developed resources and toolkits relevant to the Canadian context.

Centring community leadership

Convening community leaders. Local communities are experts in their context and realities, making them best positioned to describe their strengths, resources, needs, and priorities.⁵ Each community is different, and it is necessary to “*be careful of cookie cutter [approaches]*” (key informant). Community leaders can bring groups together for dialogue, action planning, and resource sharing. During the 2018 floods in the British Columbia boundary region of Grand Forks, community leaders from public health, mental health and substance use, school districts, human services, housing, and law enforcement quickly formed a wellness working group based on their existing relationships. A key informant shared, “*at the table, we*



would sit there and identify [an issue] and then ask who at the table can throw something in, whether it's money, resources, personnel, whether it's running a group, it's direct action, piece by piece, who could do what." As psychosocial and mental health recovery can occur over years, it is necessary to maintain dialogue among community leaders beyond the immediate aftermath of the disaster. For example, after the wildfires in Fort McMurray, a recovery working committee that included leaders from multiple sectors "kept the conversation of mental health recovery alive" (key informant).

Box 1. Select external resources and toolkits

Here is a list and brief description of practice-relevant resources for post-disaster psychosocial and mental health recovery in Canada.

- [BC Mental Health and Wellness Recovery Toolkit](#)
Health Emergency Management BC (2021) created a toolkit to provide guidance for practice response to flooding and wildfire events in the immediate, mid, and longer terms.
- [Door to Door Outreach Toolkit – A Strategy for Building Community Connections and Wellness Post-Disaster](#)
Alberta Health Services (2016) developed a toolkit for conducting door-to-door outreach in communities affected by disasters.
- [Post-Disaster Mental Health Impacts Surveillance Toolkit](#)
The Institut National de Santé Publique du Québec (2019) created a toolkit that includes measurement tools and guidance for professionals to understand the mental health impacts of flooding on residents of affected communities.
- [Trousse d'outils pour réduire les impacts psychosociaux des populations touchées par des évènements météorologiques extrêmes](#)
ARICA (2020) created this toolkit for professionals to use to reduce psychosocial impacts of climate disasters. The toolkit is available in French.
- [Working Together in an Emergency – Three-Step Social Sector Activation Guide for Host Communities](#)
The Kamloops Food Policy Council and United Way British Columbia (2022) developed a guide for host communities where emergency-affected people relocate.
- [Guidance for Conducting Trauma- and Violence Informed Programs during a Pandemic, Crisis, or Other Emergency Situation](#)
The Centre for Research and Education on Violence Against Women & Children (2022) created a guide for conducting trauma- and violence-informed, community-based programs during times of crisis such as climate disasters with individuals who have experienced gender-based violence.

Listening to youth voices. Children and youth may be disproportionately impacted by a disaster such as flooding.⁶ It is important to include youth voices and recognize their experiences and expertise within psychosocial recovery teams.⁷⁻⁹ For instance, in partnership with local Boys and Girls Clubs, researchers used an arts-based "paint nite" activity to better understand the experiences of youth following the 2013

southern Alberta flooding.⁹ In Fort McMurray, youth expressed their experiences of the 2016 wildfires through music in an initiative called #YouthVoicesWB.¹⁰ Adults in the community have a responsibility to elevate youth voices. A key informant from the Canadian Red Cross discussed implementing a “youth capacity building program that's occurring in Fort Simpson [NWT] that's as a result of working with the community [after the 2021 flood].”



Supporting local action. People working at each level of government influence psychosocial recovery at the community level. Advisors and key informants discussed how “champions at higher levels” and “people inside [provincial] government mirroring your position” were crucial for municipal leaders to effectively support community psychosocial recovery. Public health responders can both act as champions for communities, as well as look to their own organizations and relationships for people to champion them. Champions can help communities receive the resources they need for local action. Strong working relationships between communities and provincial public health departments can also ensure that psychosocial recovery efforts are appropriate to the flood affected community. These relationships may reinforce existing local organizations and resources. An advisor working on First Nations community recovery following the 2011 flooding in Manitoba shared:

It was really linking in with their Friendship Centres, linking in with their women's shelters, linking in with their support groups that already existed. For the most part, those entities were kind of diminished, because the people that were working within them had been impacted by the flood themselves. So, it was kind of working alongside them. And so, I think we built relationships, because we didn't create something entirely different. We just bolstered their existing resources.

A key informant in provincial public health shared how they would have liked to know that the relationships with local communities started early and could last many years:

You're going to have to work with the community for a long time. So, think about all of your decisions and actions and the way you communicate, not only for today, tomorrow and next week, but you're setting the basis for a long-term relationship with the community.

Strengthening community connections

Taking a strength-based approach. Strengthening community connections can contribute to healing, well-being, and capacity building. A strength-based approach, also called an asset-based or salutogenic approach, involves focusing on strengths, opportunities, resilience, and positive health outcomes, instead of problems, deficits, risks, and negative health outcomes.¹¹ Key informants shared the importance of taking a relational and strength-based approach to community response post-flooding:

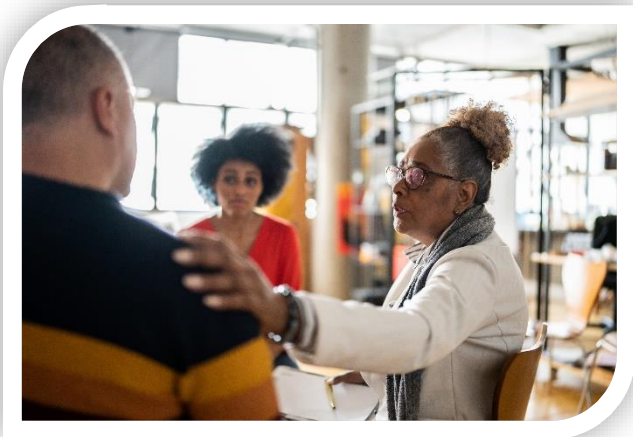
We encourage communities to not look at their deficits, but to just really go like, what [capacities] do we have here? And we're not victims, and we're not going to have things done to us. We're going to guide this in our way that's authentic for our community and our people.

We're really adopting an empowering approach and asset-based approach, so we don't try to see people as a bunch of problems and risk factors, but rather to see them as potential and strengths and resources and assets to the community.

In the context of community connections, this could mean considering how social networks that include neighbours, friends, and family have a strong positive influence on post-flooding recovery for families, children, and youth.^{9,12}

Gathering as a community. Gatherings act as informal psychosocial resources to build friendships and a sense of community.^{7,12,13} Key informants explained that communities often organize events to bring neighbours, friends, and families together, such as dinners, traditional healing circles, cultural events, and arts-based activities. To reach people who may not usually attend a social gathering, an advisor suggested pairing opportunities for social connection with an event in which tangible disaster-related support was being offered, such as financial or cleanup support. Offering non-traditional psychosocial and mental health supports and activities such as mindfulness classes and other community programs may also help to reduce stress.¹² Psychosocial recovery-supportive events may also include disaster anniversary memorials and related activities organized by public health professionals and ideally in collaboration with community partners.¹³ In some cases, gatherings could be to talk about flooding experiences and offer support but often they are simply meant to promote social connection. It is important to balance gatherings and activity opportunities with provision of formal mental health services to address grief and trauma.¹²





Different cultural and sociodemographic groups in the community will attend different types of events. Consider the accessibility and appeal of the gathering or event based on an understanding of the local community context. A key informant explained:

If I just want to have a lot of people attending my activity, that's easy. I'm just going to put some posters everywhere and on a Facebook page and, oh, wow, we're so good, we had 50 participants. But if it's always the same participants, and we don't try to make some efforts to reach out to those

who usually tend to stay home and you know, are isolated, I don't think we're gonna reach this principle of equity and inclusiveness.

Creating and rebuilding gathering places. Physical spaces where people gather are often impacted by floods. Examples include churches, seniors' centers, and recreation centers.⁷ During the 2018 flood in Saint John, New Brunswick, the community centre that acted as a community hub was destroyed, leaving the community without a place to gather.¹⁴ Similarly, youth in southern Alberta often gathered at the movie theater, which was then closed for several years following the 2013 flooding. Afterwards, many accessed the community recreation centre but there were still limited options for youth-friendly public gathering places.¹⁵ Working towards re-establishing areas where people can get together or provide opportunities such as community events for people to socialize can have a positive psychosocial impact for adults, children, and youth.¹⁵ Rebuilding faith-based institutions and churches can also help to provide places of healing, connection, and community action.^{7,12}

Coordinating volunteers. Previous disasters have shown that community members often want to contribute to disaster response and recovery by volunteering. In some regions, such as in rural unincorporated communities in New Brunswick, emergency services are entirely volunteer-based and rely on provincial government funding and assistance.¹⁴ Providing support to the community as a volunteer can act as a coping mechanism to reduce stress and improve feelings of control.¹⁴ Helping others improves sense of community, which benefits both people giving and receiving aid.^{16,17} Volunteers bring their willingness to help, connections to their networks, knowledge of the local context, and diverse skills, which can increase community capacity and reduce disaster recovery time. However, the ways that volunteers mobilize can vary significantly between disasters and there are challenges related to issues like safety, communication, and needs assessments.¹⁸ Working with emergency volunteer coordinators can help with municipal-level distributed governance of citizen volunteers.¹⁸ This could involve tasks such as registering and recording the work of volunteers, training and providing direction, and regularly checking in on volunteer well-being, as they may be both acting as a responder and impacted by the disaster. It is relevant to note that communities that engage citizen volunteers in their emergency management planning tend to be more resilient when a disaster does occur.¹⁸



Building local community capacity. Community capacity building extends across the recovery and preparation phases of disaster response.^{8,14} Community connections act as informal supports and psychosocial protective factors, and increase resilience, preparation, and mobilization in future events.¹² Local capacity can be improved by creating opportunities for community members to connect, interact, and make meaning from the disaster experiences.¹³ To accomplish this, it is important to prioritize funding and training of local agencies and resources to support long-term recovery and local community capacity building.^{12,19} A key informant shared an experience highlighting the relationship between funding and local capacity: *“we had the chance to receive some specific funding to deploy a local psychosocial outreach team. So, we have the human capacity to go from good ideas to concrete actions on the ground.”*

They continued to explain the role of improved local capacity in responding to future events, specifically the COVID-19 pandemic:

Because you can imagine that having this [local] team already in place when the pandemic struck, it was really an asset for the community, we were already connected. And already, we had developed relationships and trust with all the partners, so it was much easier to develop small and bigger initiatives to try to support the psychosocial health of people that were affected by the pandemic, as well as the previous disaster.

Centring reconciliation and Indigenous views of well-being

Partnering with Indigenous communities, knowledge keepers, and Elders in decision making. In accordance with the United Nations Declaration on the Rights of Indigenous Peoples,²⁰ Indigenous Nations have a right to make decisions affecting their territories. This includes decisions about flooding recovery and adaptation. Listening to the knowledge and wisdom shared by Elders is crucial, including their perspectives on strategies to heal from flooding and forced displacement.⁷ First Nation Elders have highlighted the need for stronger relationships with government, noting that dialogue and relationship building between First Nations and local government are important to advance reconciliation.^{7,8} Other relationship-based practices are to have conversations with people in Friendship Centres and to partner with First Nations to help develop community-based emergency plans, communications strategies, and funding applications.^{7,8,17,21,22} Engaging in these practices may help support Nation capacity building.

Recognizing that every Indigenous community is unique. Learning about, respecting, and engaging in unique traditional processes, such as providing tobacco and/or honoraria to Elders, will contribute to respectful working relationships with Indigenous communities.²¹ The nature of working relationships and types of supports Indigenous communities will want from external agencies and governments will vary. For example, an advisor shared how after a disaster some First Nations communities wanted wellness supports from traditional healers, whereas others preferred support using a critical incident stress management (CISM) approach applied in a culturally responsive way. CISM is a structured

intervention approach to support people and groups experiencing traumatic events. It is delivered by trained professionals including mental health professionals, first responders, and community leaders.



Another advisor from Manitoba shared an example about the decisions of whether and when to evacuate an Indigenous community due to flooding. Such evacuations can have long-lasting psychosocial impacts. The advisor described the complexity involved with possible evacuations:

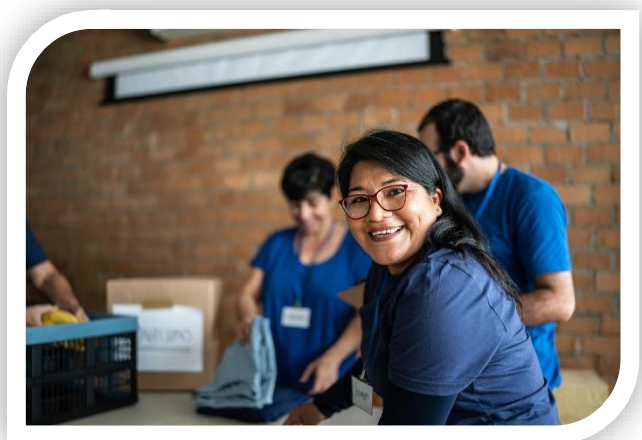
The majority of our First Nation communities are northern remote. So, every evacuation is not by vehicle, it's by plane. It's evacuating whole communities out even when the threat is somewhat minor. But you know, if you don't get the timing right, then all of a sudden, there can be huge life safety issues. So, you know, we may be evacuating prematurely, or delaying repatriation.

They explained that such a complex situation did not have a clear solution, but noted the importance of working with Indigenous-led organizations and consulting with Indigenous leaders early and in an ongoing way to plan for and execute flooding-related evacuation if deemed necessary.

Integrating Indigenous views of well-being. The concept of relationships for Indigenous Peoples extends beyond humans to include relationships with the land, animals, and all living things. Environmental health is not separate from human health, so the impact of flooding on the land has significant impacts on community well-being and recovery.^{7,8} One example among many is the connection between the sustainability of culturally important species such as salmon in the Lower Fraser with the overall well-being of First Nations.⁸ It is crucial to integrate holistic views of well-being in psychosocial recovery practices.

Prioritizing and supporting responder well-being

Community responders and front-line service providers support community recovery while often navigating their own flood experiences that may include personal losses and trauma.¹⁵ In some cases, responders become overwhelmed, burned out, or experience other forms of distress. A key informant shared, *“we saw a massive amount of burnout. We lost a lot of our best and brightest emergency managers after this whole incident [of flooding in BC].”* Training responders to recognize the sign of stress, burnout, and secondary trauma can help mitigate these impacts.²³ Working in teams rather than alone, and building relationships and trust among disaster response teams, such as during ongoing training and practice disaster scenarios, can help support responder well-being.¹⁷



Leaders across organizations have a role in implementing processes that prioritize the health and well-being of responders.⁵ Both advisors and key informants stressed the importance of leadership in closely monitoring responders and supporting them early and often before negative impacts on mental health develop, particularly since responders may be *“overly optimistic over the amount of time and effort that they are able to provide before being willing to take a break”* (advisor). Another advisor suggested that disaster response leaders evaluate the effectiveness and availability of different types of well-being supports and programs to better *“coordinate what exists and advocate for what is missing”*.

Collaborating and coordinating across sectors and agencies

Connecting and integrating across sectors. After flooding, public health practitioners work closely with other sectors and agencies to support community psychosocial recovery. Specifically, they work with:

- **Primary care.** Although most people impacted by flooding will not develop a long-term mental health condition, some may require access to clinical mental health services. Working with clinical health practitioners such as physicians, social workers, and nurses will help meet community mental health needs. Mental health stigma is a challenge. This is particularly true in rural and remote communities where there is high perceived stigma associated with disclosing a mental health concern or condition to local healthcare practitioners.¹² Dismantling mental health stigma, with guidance from public and clinical health, will help support community psychosocial and mental health recovery. An approach suggested by an advisor was to include mental health practitioners in multi-disciplinary teams to destigmatize the role and coordinate resources.
- **Housing and basic needs.** Community psychosocial and mental well-being can rapidly decline due to insecure housing following a flood.¹⁷ As a key informant said, *“housing is one of those necessities of life that is directly needed for wellness.”* Working closely with housing services to improve housing access will impact well-being. It may also help for frontline responders and other staff who provide basic needs such as temporary shelters to be trained in psychological first aid (**Box 2**) or other forms of support for mental health, trauma, grief, and loss.¹²
- **Education.** Integrating and fostering connections between the education and mental health systems can have many benefits.²⁴ For example, partnering with schools can help reconnect school-aged children and youth with their school-based social network, re-establish a routine for families, and understand how children and youth attending school are doing to allow for earlier mental health interventions. Key informants shared how K-12 school district representatives were always important contributors to discussions and decisions about community response and recovery after flooding events.
- **Arts, culture, and recreation.** Offering and supporting activities grounded in arts, culture, and recreation can support long-term well-being and social connection. A key informant said, *“what we found out is that we need to diversify the range of activities so that everybody can find a way to get*



connected with an initiative or activity.” Collaborations between public health and the arts and culture sector was important for community recovery in the years following the train derailment in Lac Mégantic, QC.¹³

- **Infrastructure and transportation.** Key informants shared how rebuilding in flood-affected areas can be a sensitive and divisive topic in communities when some people want to rebuild and others don't, or there is a lack of public understanding about the rebuilding approach in relation to preventing future floods. Collaborating with infrastructure teams tasked with reconstruction efforts can ensure that psychosocial and mental health are considered when communicating and engaging with the public.²⁵
- **Non-profits, charities, faith-based and community-based organizations.** Coordinating efforts between external and community-based organizations, including succession planning, helps to prevent gaps in service provision.¹² Collaborating with local organizations and leaders when external agencies are transitioning out of the community ensures that community needs are met during the long recovery process.¹⁹ For example, when the Canadian Red Cross provides services related to psychosocial support, the first step when they enter a community is to build relationships and contextual understanding. A key informant said, *“it's by attending the meetings that I got to learn who the key players are”*.

Applying an internal communications strategy can help to streamline administrative processes and bring different groups together in a coordinated way.^{17,26}

Providing systems navigation support. People and families may need support in several areas, such as accessing education for children, employment, housing, and health services.⁷ Having one point of contact can help connect people with the varied services that they need. This aligns with a trauma-informed care approach^a and can help reduce uncertainty and the burden of navigating a complex support services system among people experiencing stress and anxiety. For example, culturally responsive support services would be required for Indigenous Peoples who are evacuated from their community to an unfamiliar urban setting. This was the case for several First Nations communities displaced to Winnipeg, Manitoba by human-made flooding.^{7,27}

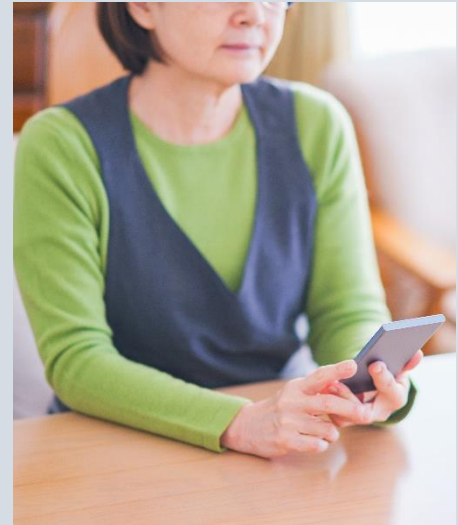
^a Being directly or indirectly affected by a flood can lead to trauma. **Trauma-informed care** involves creating physically, emotionally, and culturally safe environments and relationships. People have choices in decisions that impact their care and recovery. Trauma-informed practitioners recognize the signs of trauma and focus on preventing further trauma or re-traumatization.

Box 2. Psychological first aid

Psychological first aid (PFA) is an evidence-informed intervention designed to reduce initial distress and foster coping after a disaster, emergency, or other traumatic event. It can be used with children, adults, and families.

There are a number of free or low-cost opportunities for impacted individuals, volunteers, and first responders to learn PFA basics, including:

- The [PFA Mobile app](#) from the National Child Traumatic Stress Network, which supports providers in training and delivery of PFA interventions.
- Online courses provided by the [Disaster Psychosocial Services Program](#) (Health Emergency Management BC).
- Online or in-person training for individuals or those seeking PFA certification offered by the [Canadian Red Cross](#).



Communicating and engaging with community

Providing timely information and addressing community concerns. Community members want to feel engaged and informed about decisions that affect them. Feeling informed and having safe opportunities to connect and discuss can help people manage their stress, worry, and fear, and begin to make meaning of their flooding experiences. To help with this, consider addressing concerns immediately after the flooding event and ensure awareness of the available psychosocial and mental health resources.¹² Seeking guidance from and collaborating with community leaders and champions can facilitate accessible and trustworthy communication with the public.

Relationships with community members begin to develop from the start of the disaster, as highlighted by a key informant: *“this partnership that you're building, then the trust that you're building, it's starting today and not in two years.”* It is important for leaders to inform and provide a sense of support for people who live in their community.²⁵ Note that passive community engagement may not support the public's sense of belonging, improve dialogue, or create collective action during the post-flood recovery period.²⁵ Consider opportunities for more active engagement with the community, like hosting town halls, open houses, or other forms of interactive meetings.²⁵ Using virtual platforms and social media may



help to engage more people and provide “real time” updates, although it is important to choose communication strategies that are most appropriate for the flood-affected community.

A key informant from the Canadian Red Cross shared how they created a community level online knowledge exchange collaborative after a disaster:

What I did is I called all of our key [mental health and psychosocial support] partners. And I had, it was called a knowledge exchange. So twice a week, I had an open Zoom [meeting], and people would just drop in and share information. “Oh, where do you go charge your phones?” “Oh, there's a charging station over here.” And then what we did is we actually, we secured funds to support the collaborative.

Engaging in accessible and equitable communication. When creating communication and engagement plans, it is important to prioritize accessibility for people with different abilities including linguistic, physical, and cognitive, and people with varied circumstances such as people who are unhoused or with precarious housing, immigrants, and young people. Other important considerations are to know which languages are spoken in the community and offer translation support, and to partner with organizations that are connected to community for assistance. For example, a key informant involved in responding to the 2016 Fort McMurray wildfires said, “during the first couple of months, we weren't allowed to drink water because the water system had been compromised. So, the Multicultural Association translated that [announcement] into like nine or 12 languages.” In southern Alberta, researchers offered translation in Spanish and Tagalog for youth, parents, and guardians⁹ and in Siksika First Nation, responders provided services in the Blackfoot language.¹⁷ Using diverse communication channels can increase the chance that information reaches all community members. While social media can be a helpful tool to communicate with the public, it is necessary to use other modes as well because some people do not have access to computers or have social media accounts.

Another consideration is that family connections that usually facilitate news sharing may have been disrupted by evacuation.¹⁷ Key informants shared that it was helpful to have a dedicated communications role as part of the disaster response and recovery team to create daily and weekly external communication plans.

Improving awareness of resources and supports. Ensuring that community members



are aware of the psychosocial services and resources available to them is an ongoing challenge, particularly for systemically excluded groups. For example, Siksika First Nation flood evacuees experienced a lack of information sharing about available resources such as counselling and other basic and health services.¹⁷ Some ways to improve awareness are to use in-person modes of communication and outreach to meet people where they are. For example, door-to-door initiatives can help raise awareness about the supports available.^{5,17} On-the-ground “door knocking” was used as a form of community outreach during the Southern Alberta flooding to increase awareness of services and supports available to residents. The outreach teams in High River and Bragg Creek who used door knocking in the years following the flooding found it helpful to connect with residents and better understand their unmet needs.⁵ Outcomes included that the public was able to share their experiences and feel heard and there was improved situational awareness.⁵ Alberta Health Services created a guide for door-to-door outreach during disasters, which is provided in **Box 1** alongside other response and recovery resources.

Engaging with community informally. Meeting people where they are physically located such as community gathering spaces can build trust, relationships, and understanding of the local context. For example, building relationships with people in community gathering spaces has been at the heart of the community-based approach used by the Psychosocial Outreach Team in Lac Mégantic in Quebec.¹³ This team decided to locate their offices in community to facilitate trust and accessibility:



It's just being really at the frontline everywhere, being very visible, being at the shopping, at the grocery store, you know, going to all the public events, going to the bars, going to schools at lunchtime. We just go, walk around, and say “hey, want to have a coffee with us?” with the teachers, it's just being very accessible in an informal way.

A key informant spoke about how they reached out and built relationships with people in places where they were:

If we do go there, reach out to them, and then invite them specifically and develop this specific relationship with them. And then finally, after a couple of attempts, they're finally going to come

and say, “Oh, wow, okay. It was a good idea to attend this activity.” To be inclusive and to have equity, you will need to have dedicated people that have enough time to build these relationships.

Gathering and sharing insights, stories, and lessons learned

Using data to understand, adapt, and advocate. Data can help public health professionals understand community needs in real time and in the long-term.¹¹ This also allows them to use what they learn to advocate for funding and resources and provide responsive services.^{8,13} Key informants recommended to collect data as quickly as possible, “*the quicker we do an assessment, the quicker we can provide assistance.*” For example, case managers in Grand Forks, British Columbia used a brief screening tool repeated every 90 days with community members to assess well-being over time. A key informant said, “*we didn't want it to be too overwhelming and too burdensome*” for community members or case managers.

Partnering for data collection and analysis. Researchers are skilled at supporting data-related needs, which can contribute to community capacity. A key informant said that partnering with researchers was helpful to collect, analyse, and disseminate community level data about psychosocial and mental health issues. Their data-informed findings helped them demonstrate and advocate for resources to address the psychosocial needs the community were experiencing:

One thing I've learned is that we need to document, we need to have data. I don't think that any of this [community response and recovery] would have been possible without data, because we felt there was something wrong, but without any data, what are you going to do? You're gonna go see the Minister of Health and say, “Hey, I don't feel good about the community.” And then he's gonna say, “You know, I don't feel good about a lot of communities. What do you want me to do?” And so having data is key.

Applying data collection methods that are minimally invasive, community-based, and culturally responsive. When planning to collect data, it is helpful to determine if there are existing sources of population-based psychosocial and mental health data that can be leveraged.²⁸ If gathering primary data, some principles to consider are to only collect what is needed, keep it simple, and gather stories, first person accounts, and other narratives. For example, using focus groups or interviews with key informants may limit the burden on people affected by flooding.¹⁴ Focus groups can help to gather data while also offering social support to participants with a shared experience of flooding.¹⁴ Arts-based methods can help to engage with children and youth in a trauma-informed way.^{9,10} Taking a community-based approach promotes data collection and analysis that benefit the community and build local capacity. When working with First Nations and their data, it is important to apply the First Nations



principles of Ownership, Control, Access, and Possession (OCAP).^b OCAP is specific to First Nations.²⁹ Thus, when working with other Indigenous Peoples, it is important to identify culturally responsive data principles, practices, and protocols that are specific to the community affected by the disaster.

Sharing lessons broadly and accessibly. This can aid communities who face flooding events in the future. It can also direct future planning and preparation in the community, facilitate relationship and capacity building, and support resourcing. Although each disaster and context are unique, communities can learn a lot from each other and adapt and apply lessons learned.¹⁷ Communities can use what others have learned to advocate for specific resourcing or support from government and other funders. A key informant talked about the importance of integrating knowledge sharing into public health plans:

We've been doing a lot of knowledge transfer everywhere. It can be to schools, municipalities, the government at any levels, from international to small municipalities here in Quebec. We're open to share our story to anybody who wants to hear it, and it takes up time. So, you need to integrate this in your planning.

Sharing insights and lessons learned can take many forms. Some examples are internal presentations, public presentations such as webinars, conference presentations and forums, policy briefing notes, newsletters, consultations, public-facing reports, and even art exhibits.

Using data to plan and heal. Preparedness planning can help community members cope with traumatic experiences, reduce stress, and improve a sense of control.¹⁴ In Saint John, New Brunswick, communal problem-based coping occurred when the community came together to develop a preparedness plan for future flooding events.¹⁴ Reflecting and applying what was learned post-flooding can help communities be better prepared for subsequent events. This can be done using a collective and reflective approach that includes diverse community members and organizations. Adopting a “nothing about us, without us” approach ensures communities directly benefit from data usage and sharing. A key informant shared how their community engaged in a collective day of reflection that served several purposes: to bring people together, to reflect on the events that happened since the disaster from a strength-based perspective, and to create a community resilience plan.¹³

^b **OCAP**[®] is a registered trademark of the First Nations Information Governance Centre (FNIGC). Adhering to OCAP principles ensures that First Nations have **ownership** over the data, information, and cultural knowledge of their community; they have **control** over the decisions about planning, collection, management, and application of data; they have **access** to their data and control over who else can access it; and they control the physical **possession** and protection of their data. The FNIGC [website](#) provides information about training opportunities, tools, and resources for understanding, respecting, and applying OCAP principles when working in relationship with First Nations and their data.

System level considerations to strengthen community psychosocial and mental health post-flooding

There are challenges and opportunities at the system level that impact community level psychosocial and mental health recovery after a disaster. Raising awareness and advocating for support and changes can help address some challenges. System level considerations include:

- ✓ **Funding structures and cycles.** Post-flooding psychosocial and mental health recovery require sustained, long-term, and adequate funding. Yet, funders typically provide immediate post-disaster relief rather than supporting preparedness and planning. For external agencies such as the Canadian Red Cross, how much money is raised for disaster response is the primary factor influencing the depth of programming offered and duration of the organization's stay in the community. Inconsistent funding is a challenge given the direct relationship between response and preparedness and the long-term timeline for recovery. Maintaining long-term relationships and disaster psychosocial teams without funding can be difficult. Partnering with other organizations could help meet recovery needs when there are funding gaps.
- ✓ **Disaster preparedness.** Disaster management phases overlap. There are opportunities to learn from other flooding events and collaborate across jurisdictions to develop disaster preparedness plans. Preparing for another disaster can also contribute to psychosocial recovery. First steps could include forming new relationships and developing emergency response teams that are informed and trained on psychosocial and mental health. Some jurisdictions in Canada have formal psychosocial emergency response teams such as the Health Emergency Management Disaster Psychosocial Services program in British Columbia, whereas many do this work *"off the side of their desks"*. An advisor suggested that a good place to start to create formal psychosocial teams could be to embed emergency response and recovery training in existing public health portfolios.
- ✓ **Long-term recovery timelines.** Psychosocial recovery lasts years and community needs change over time. A key informant shared the need for long-term planning and resourcing, *"when we're talking about pretty large catastrophes affecting the community, I think that we need to think about a five-year or ten-year plan."*

Summary

In this guide, we outlined strategies for public health professionals responding to a flood to reimagine, extend, or adapt for their circumstances, local populations, and context. Our goal was to guide, not to prescribe. As one of our advisors explained:



Some might feel [there is] not enough specific direction or action steps [in this guide]. Yet, I don't feel that you could possibly be more directive. There is just too much situational variability and trying to do any more would be just too prescriptive.

We note several limitations related to our approach and the sources that we included. We excluded sources from outside of Canada, which may have had novel or relevant information about possible community level strategies. Although we had advisors and key informants from rural, urban, and remote-urban locales from across the country, none of them were from First Nations or Indigenous communities. We were also unable to obtain direct representation from Saskatchewan, the Maritime provinces, and the territories. That said, some advisors and key informants had worked closely with First Nations and Indigenous communities in response to climate disasters. We also included scholarly articles in which researchers from New Brunswick shared evidence related to flooding responses in Saint John.

With climate related disasters on the rise across Canada, many communities face concurrent and/or repeated events. For example, several of the sources we included came from communities that had experienced flooding following another flood, fire, or train derailment. In this guide, we described seven community level strategies and multiple sub-strategies to promote psychosocial and mental health recovery post-flooding (**Figure 1**). Noteworthy was the foundational role that relationships played across all strategies and sub-strategies. Regardless of the community context or circumstances, strong relationships facilitated recovery-oriented actions. This theme was recurrent in the input gathered from advisors, key informants, and the literature, both in regards to flooding and also more broadly in response to or recovery from any crisis or climate-related event. The intent of this guide was to spark further conversations and learnings, facilitate preparedness and capacity building, and help public health professionals in their work with communities now and into the future.

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Appendix A – Factors that influence the psychosocial impacts of climate change, including flooding

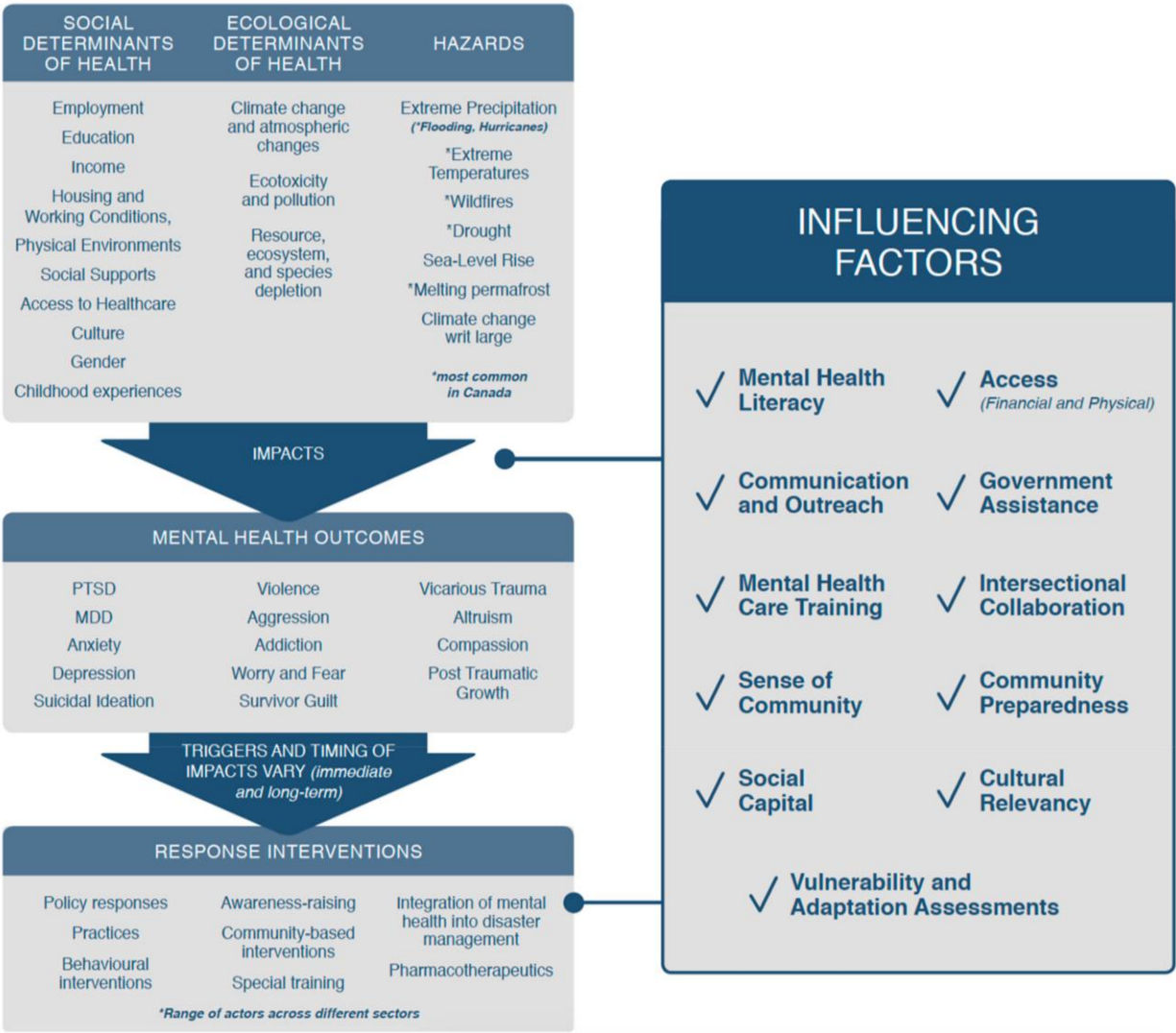


Figure source: Hayes et al., 2019. Reproduced with permission.

Appendix B – Key informant interview guide

PolicyWise researchers conducted semi-structured interviews online with key informants in November 2022. All key informants had direct experience in community psychosocial and mental health response and recovery following one or several disasters. The interviews were conversational and broadly addressed the following questions.

“What” – Leading and emerging/promising practices at the community level

- Can you tell me about your experience in community psychosocial and mental health post-flooding? What types of activities, programs, supports, training, etc. are critical?
- Can you tell me about some successes that you’ve experienced related to post-flooding psychosocial and mental health recovery? What helped to make them a success?
- What are some of the main challenges you’ve experienced related to post-flooding psychosocial and mental health response and recovery? For example: How to ensure that all community members are aware of and able to access the supports and services that are available?
- In your view, what is the relationship between preparation, response, and recovery?
- Given that psychosocial and mental health recovery is long-term and may need to consider the accumulation of events, how can we keep momentum going? Particularly considering challenges with funding and other resourcing.

“Who” – Roles and responsibilities

- Which organizations, agencies, and community groups are involved in developing, delivering, and / or coordinating response and recovery efforts?
- How does coordination occur across levels of leadership? Types of practitioners? Different organizations? What works or doesn’t work about this approach?

Context – Community adaptations, equity considerations

- Adaptation to the local context is critical for effective psychosocial and mental health response and recovery. What approaches do you use to understand local community needs, strengths, and challenges? Can you give an example?
- How is equity for systemically excluded groups addressed? For example, for people living in rural communities, Indigenous Peoples, youth, or racialized people.



Needs

- What resources, training, or support are most helpful to promote psychosocial and mental health recovery and why? What kind of resources, training, or support do you wish you and/or your team had access to?

Outcomes and evaluation

- What would the outcomes of an effective recovery look like?
- How are recovery efforts evaluated?

Lessons and knowledge sharing

- What advice would you give to another community going through a similar situation?
- How would you like to see knowledge about psychosocial and mental health recovery shared?

Wrap up

- Is there anything else you'd like to share that we haven't discussed?



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