Chapter 9: Mental Health KEY FINDINGS • Evidence from recent B.C. wildfires and floods indicate that the emotional impact from these events

- Evidence from recent B.C. wildfires and floods indicate that the emotional impact from these events
 persists long after the immediate threat subsides. Individuals may experience emotional trauma,
 worry or grief, stress from the financial strain of recovery, and anxiety about returning to normalcy
 or the possibility of future catastrophes.
- Evacuations during these events can be traumatic experiences, with factors such as lack of preparation, loss of belongings, and separation from family compounding stress. Some communities have been impacted by multiple evacuations, leading to increased mental health challenges.
- The **slower onset and longer-term impacts** of climate change on mental health are significant and showing up differently for youth, who are thinking about what their future will look like, and for Indigenous Peoples, who are experiencing profound changes to their relationship with the land, cultural well-being, and identity.
- Indigenous Peoples in B.C. are at higher risk of experiencing mental health impacts from climate-related disasters due to increased exposure, ongoing impacts of colonialism and systemic discrimination, compounding trauma, and psychosocial impacts during evacuations. Providing specialized mental health services and culturally appropriate support is crucial.
- Climate-related events in B.C. and growing awareness of the urgency, scale, and complexity of climate change are causing **heightened climate anxiety**, also known as "ecoanxiety," represented by heightened feelings of helplessness, grief, and fear in response to escalating climate-related threats.
- Indigenous Peoples, children and youth, women, rural and remote communities, farmers and ranchers, and those with existing mental health and substance use issues are **disproportionately affected** by the mental health impacts of climate change.
- A comprehensive, cross-governmental approach is essential for building climate-resilient mental health systems. **Opportunities for action** include:
 - Improve monitoring of mental health indicators for climate-related events;
 - Develop mental health preparedness and recovery strategies through community capacity building;
 - Community gatherings for healing, rapid and sustained psychosocial support
 - Enhance capacity for mental health programs; and
 - Improve access to culturally relevant, Nation-led mental health and wellness support.

9.1 Mental health impacts

With the increasing frequency and intensity of climate-related events in B.C., there is mounting concern about the impact that climate change is having on mental health, and an interest in finding psychosocial¹ adaptations to protect mental health and social well-being. A significant body of research links both acute (e.g., wildfires, floods, extreme heat) and slow onset (e.g., drought, sea-level rise) climate-related events with impacts on mental health [548,725]. Many individuals are experiencing feelings of anxiety, worry, and grief as their awareness of and experiences with climate change grows [726]. Incidents of anxiety, depression, and post-traumatic stress disorder (PTSD) are likely to increase significantly during climate-related disasters [500,548,725,727].



Following climate-related events (e.g., wildfires or floods), the majority of affected individuals will benefit from basic mental health support, but a smaller fraction may eventually require more specialized health care services [75]. Among those particularly at-risk are individuals with severe mental health issues and those who require extra support during emergencies (e.g., older adults, young people, or those at higher risk of climate impacts). Also at higher risk of mental health impacts are Indigenous Peoples, who continue to experience the ongoing impacts of colonialism, systemic discrimination, and racism [273].

In B.C., mental health impacts are frequently reported following extreme climate-related events, including extreme heat ^[728], wildfires ^[75], flooding ^[500], and drought ^[729]. The 2017, 2018, and 2021 wildfire seasons were all followed by reports of PTSD ^[730-733], depression, emotional trauma ^[342], and anxiety and fear ^[34]. One study found that exposure to wildfire smoke may have mental health impacts such as depression and anxiety, particularly during episodes of chronic and persistent smoke events ^[734], but more research is needed to tease out the mental health impact of exposure to wildfire smoke, the impact of evacuation, and exposure to wildfires overall.

In communities impacted by these events, there were measurable increases in the need for mental health services, including increased emergency department visits for mental health and substance use services, and increased demand for family support, counselling, and victim services [75]. In the aftermath of recent heat waves, wildfires, and floods, mental health case workers have also identified a notable increase in substance use/overdose, gender-based violence, and children's behavioural disruptions [34,75,509,735]. However, climate-related events can also lead to positive mental health outcomes, such as a sense of community cohesion or connectedness as communities come together to support each other in the aftermath of disasters [509].

People in B.C. also face slow-onset hazards, such as drought and sea-level rise, and increasing knowledge and awareness of climate threats here and around the world; both can influence mental health and well-being by affecting one's sense of place and triggering emotional responses of anxiety, grief, anger, helplessness and depression [548].

¹ Mental health is one aspect of the broader definition of psychosocial health. Psychosocial health is defined as the interplay between social well-being —which arises from relationships with others and one's context and culture—and psychological well-being, which includes thoughts, feelings, and behaviours. [548]

Lingering and long-lasting mental health impacts

"We need to think differently about recovery. In many cases, we learned that almost one year after the events, be they flood/debris flows or wildfires, those who lived through these life-altering events continue to rebuild. This rebuilding extends beyond homes and physical structures to include the emotional trauma that lingers long after such events." – Addressing the New Normal: 21st Century Disaster Management in British Columbia [75]

Even after the flames subside or flood waters recede, the emotional impact of these events often endures—manifesting in survivor guilt ^[548], stress from the financial strain of rebuilding ^[736], concerns about returning to a sense of normalcy or talking about the event ^[737], and deep-seated anxiety that a similar catastrophe could occur ^[738]. Sometimes, the smell of smoke or heavy rain may trigger renewed fear and anxiety ^[56,349,731].

For many, these responses to trauma tend to subside once security and safety are established. But for others, longer-lasting effects can include a lost sense of place alongside ongoing mood and behavioural disorders that can last months—or even years [500,739].

"The amount of grief that was triggered from the first flood to the second flood... I have a lot of Elders that reach out to me as a trauma therapist for residential school students, that want to talk about the anxiety that they have every time it rains."

—Risk to Resilience Project Indigenous sharing circle participant

B.C. residents experience short -and long-term mental health impacts from flooding

Following the 2021 atmospheric river (AR) flood events, numerous reports have described how people impacted by floods or injured in associated landslides have experienced longer-term post-traumatic stress disorder (PTSD) [506,523,534,740-743].

Findings from a survey of 107 Abbotsford residents indicated high levels of probable PTSD, and persistent lower levels of resilience even 18 months after the 2021 AR-flood events ^[534]. Similarly, after the 2018 Grand Forks flood, Interior Health and local service providers reported increased anxiety, depression, and PTSD, along with a substantial increase in demands for mental health supports, including school-based mental health services ^[509]. And following the 2018 flood in the Regional District of Kootenay Boundary, the Canadian Red Cross reported 318 referrals to external mental health and well-being supports ^[744].

"When you say atmospheric river, there are people that go into panic mode, because they think they're gonna lose everything again... People are still trying to cope with what happened."

—Mayor Spencer Coyne, Town of Princeton [742]

Delayed mental health impacts

"When I worked in community, I was so busy taking care of everyone else...I never really dealt with the impact [the wildfire] had on me ... [When] I finally had a breather from all these compounding emergencies...[I realized] it was the trauma I had experienced for the past four years or five years, and [I was] just finally being able to work through that."

—Risk to Resilience Project Indigenous sharing circle participant

Some community members may not feel that they need mental health support for months, or even years, after an event. *Risk to Resilience Project* focus group and Indigenous sharing circle participants described how the initial shock and adrenaline rush during a wildfire or flood event can mask the emotional toll. However, as time goes on and the immediate danger subsides, the full extent of the mental health impacts (such as depression, anxiety, and grief) may become more apparent, resulting in delayed mental health impacts. Evidence shows that after an environmental disaster event, suicides peak at around two years post-event [745].



Evacuation-related mental health impacts

Evacuations can be traumatic experiences during which a number of factors, identified by the *Risk to Resilience Project*, can contribute to and compound stress. These include lack of preparation time, loss of belongings, length of time displaced, and differences between home and host communities [746]. In B.C., mental health impacts reported during wildfire or flood evacuations included acute stress and fear [324,347], as well as emotional trauma [275,352,731,736].

Evacuees report feeling unprepared and confused about where to go [275], and stress at being separated from family and friends [324]. They also express concerns about property loss [276,747]. Many report having difficulty coping with sickness, loneliness, and loss after being separated from their families, friends, and communities [748].

Some communities have been impacted by multiple evacuations and re-evacuations, which carry additional strain, uncertainty, and compound mental health impacts. In 2021, some wildfire evacuees from Lytton were evacuated from their host communities under new wildfire evacuation orders [275], and again during the November 2021 flood event [748]. That same year, Merritt residents were on evacuation alert twice in three months: on August 15 due to wildfires, and again on November 15 due to floods [44]. The trauma of experiencing multiple climate-related events, sometimes in the same year, and subsequent compounding impacts, can lead to stress and burnout, with a toll on individual and community mental health and well-being.

"The amount of compounded trauma out there just keeps increasing all the time, which means they're coming to us more and more for resources."

—Risk to Resilience Project focus group participant

For some, displacement is a short-term ordeal, but others may not return home for several weeks or months due to extensive damage. Many individuals remain displaced from the 2021 AR-flood events, including residents from the Nicola Valley, Merritt, and Princeton [273], and many residents from Lytton remain displaced due to the 2021 wildfires [749]. Some face the prospect of permanent relocation. There are substantial cascading psychosocial consequences of prolonged displacement, as the erosion of community unity and mental health impacts are compounded by the challenges of accessing education and employment.

Adaptation in action: Information for psychological support during and after disasters

The Canadian Mental Health Association (CMHA) in B.C. has developed a public resource of mental health tips to cope in an evacuation due to an environmental disaster, which includes information on the mental health of children and youth, and the First Nations Health Authority has developed a resource on Recognizing and Addressing Trauma and Anxiety During Disasters. The CMHA also launched a telehealth program (Talk in Tough Times) following the 2017 wildfires in B.C. to support adults and teens experiencing depression, stress, or anxiety following the fires.

Psychosocial Impacts

"We know that whenever people are out of their homes for an extended period of time...the domestic violence numbers go way off the charts."

—Risk to Resilience Project focus group participant

Climate-related disasters in B.C. have also led to secondary impacts, such as economic stress from loss of livelihood [342], substance abuse [727], and an increase in domestic conflict and violence [735,750]. As a result of the increase in stress and substance use, the risk of gender-based violence increased in B.C. during wildfire and flooding events [342,509,735], compounded by the disruption of social support networks and resources that can provide protection from violence in the home [751].

Following the 2017 and 2018 wildfire seasons in the B.C. Interior, one impacted community had a 32-percent increase in domestic violence referrals and a 77-percent increase in domestic violence reports in May, June, and July 2019 [735]. Higher rates of gender-based violence have also been reported after flood events in B.C., along with increased shelter rates and higher levels and intensity of violence in the community [56,509].

"We noticed...that need for shelters just skyrocketed...being displaced because of the floods...[and] domestic violence increasing."

—Risk to Resilience Project focus group participant

Across B.C., many women's transition houses have reported unique security and safety concerns for women at risk of violence, whose confidentiality may be compromised when accessing emergency/ evacuation centres and support during wildfires and flooding ^[56]. In addition, there are impacts on the facilities themselves and their ability to maintain service continuity. To address these concerns, a pilot project with women's transition houses is underway to increase preparedness for climate hazards.

Adaptation in action: BC Society of Transition Houses [752]

Over recent years, wildfires, flooding, and extreme heat have impacted the ability of transition houses across B.C. to provide services to those at risk of gender-based violence during and after disasters. As a result, the BC Society of Transition Houses (BCSTH), a member-based provincial organization, has undertaken a one-year project to support its members in preventing, mitigating, preparing for, responding to, and recovering from emergencies due to extreme weather events, in partnership with the Canadian Red Cross Society. Five BCSTH member programs in wildfire/flood-impacted communities across B.C. will serve as pilot sites to develop accessible risk assessment tools and Service Continuity Planning templates. These sites will help guide the development of a comprehensive Service Continuity Planning Strategy to assist members in maintaining functional levels of service when experiencing disruptions from climate hazards.



Climate anxiety

Climate anxiety, or "ecoanxiety," encapsulates the emotional and psychological distress individuals experience in response to environmental concerns and the escalating threats posed by climate change. The growing awareness of the urgency, scale, and complexity of climate change is leading to growing climate anxiety, with feelings of helplessness, grief, and fear in response to environmental concerns and escalating climate-related threats [548,728,753]. While some literature describes climate anxiety as a potentially adaptive, motivating, and healthy response to the environmental changes being experienced [754,755], other studies link climate anxiety to poorer mental health [756].

Two recent surveys demonstrate growing climate anxiety in B.C. One online survey of 439 people in B.C. aged 16 years and older reported experiencing notably higher climate change anxiety following the 2021 heat dome event [728]. A majority of the respondents reported being more worried about climate change due to the heat dome. They also reported concerns that climate change will affect their employment industry, and fears that the region in which they live will be devastated by climate change events, such as floods or forest fires [728]. In addition, a 2020 survey of 11th grade students (age 16–17) from two B.C. school districts (N=2306) found that 49.7 percent "agreed a lot" that they are worried about the consequences of climate change [757].

There is growing evidence that climate emotions are also connected to climate action and resilience, and therefore should be considered in preparedness, response, and adaptation strategies [753]. Addressing climate anxiety requires a holistic approach that includes raising awareness and understanding of the mental health impacts of climate change, improving mental health literacy and training, and providing culturally relevant mental health services to support people in need [548].

9.2 Disproportionate mental health impacts

Mental health impacts on Indigenous populations/communities

First Nations people living on reserve in Canada are 18 times more likely to be evacuated due to environmental disasters than people living off-reserve [758]. According to Indigenous Services Canada, between April 2013 and March 2022, there were 8,802 people evacuated from First Nations communities in B.C., with roughly one in 10 people evacuated for more than three months—the highest proportion of long-term evacuees among Canadian provinces [555].

The <u>2019 First Nations Leadership Council Climate Leadership Survey</u> found that stress/anxiety are one of the top two most common health concerns related to climate change identified by respondents (the other was respiratory challenges) [61].

Métis Nation B.C. has identified mental health impacts of climate change as impacting their citizens and, as a result, held a Climate Change and Mental Health Forum in February 2020 ^[759], as well as discussions on climate change and mental health at their February 2022 Métis Climate Resilience Gathering.

Indigenous Peoples (First Nations, Inuit, and Métis), often find themselves at the forefront of climate-related emergencies in B.C. because their communities are frequently situated in remote and rural areas, which can be more exposed to environmental hazards such as wildfires and floods. This is a historical outcome influenced by the colonial placement of reserve lands that were more marginal in nature [75,548]. As a result, they face disproportionate mental health risks from climate-related events. In addition, there are significant compounding factors that influence how climate change impacts the mental health and well-being of Indigenous Peoples, such as:

- **Historic and compounding trauma:** In addition to the impacts of a changing climate, the enduring, ongoing, and compounding trauma arising from the loss of ancestral lands and traditional territories, the erosion of language and culture, racism, and the painful legacy of residential schools and Indian hospitals, has led to the intergenerational transfer of trauma [34,500,548].
- **Triggering of past traumas during emergencies:** Inter-generational trauma can be triggered or exacerbated by an emergency event and how it is handled. The institutionalized approach to emergency responses, including evacuation procedures, might evoke memories of the disempowering experiences faced by First Nations and Métis people during residential school and other colonial processes. Upon returning to their home communities, the process of healing for Indigenous Peoples extends beyond addressing the immediate emergency; it may also entail addressing the resurgence of past traumas [75,760].

"The way that the fire department came in to evacuate was very reminiscent of when they were taken away to residential school."

—Risk to Resilience Project Indigenous sharing circle participant



- **Disruption of cultural and land-based practices**: Climate-related events disrupt the ability of Indigenous Peoples to practice ceremony and land-based cultural activities, such as hunting, fishing, and gathering of food and medicine, that are essential to their cultural, spiritual, and mental health and well-being ^[500]. In B.C., nearly 50 percent of the First Nations Leadership Council Climate Emergency Survey participants identified impacts to sacred and cultural sites, due to either disappearance, damage, or loss of access due to climate-related events ^[61].
- Compounding psychosocial impacts from evacuations: During evacuations, Indigenous Peoples have reported inadequate consideration of mental health and cultural safety during emergency responses. Factors such as communication breakdowns across jurisdictions, limited cultural support systems, and insufficient spaces for cultural healing practices such as traditional food provision can further compound these challenges [75,77,244]. In addition, Indigenous evacuees have reported exacerbated mental health issues through experiences of increased racism, family violence, substance use and misuse, and suicide among displaced First Nation youth [34,500]. For example, in recent wildfire events in B.C., some people did not return to their home communities after evacuation, leading to increased homelessness in urban centres.

"In our community, everyone had to leave for Prince George... And many people say now, there are so many people on the streets here in Prince George, because...many of them stayed in Prince George and some became addicted to drugs and alcohol."

—Risk to Resilience Project Indigenous sharing circle participant

Indigenous sharing circle participants spoke about land-based healing approaches that have been supportive for community members to connect to the land and engage in culturally restorative practices in response to a changing climate. They also spoke about how culture, community, and traditional foods play a role in healing from mental health impacts of climate change.

"I got clams, oyster, salmon. I got Elders and community. I love how in our villages, people come together to support each other [after 2021 heat dome and droughts]."

—Risk to Resilience Project Indigenous sharing circle participant

First Nations Health Authority (FHNA) provides culturally appropriate mental health supports during 2018 wildfires [761]

During the 2018 wildfire crisis in B.C., the First Nations Health Authority Northern regional team played a crucial role in supporting wildfire evacuees at the evacuation centre in Prince George. Their efforts included providing navigation, clinical, and mental health support to ensure Indigenous individuals and families could access culturally appropriate and holistic services. Traditional healing practices, such as smudging and the presence of traditional healers and drum groups, were made available to support evacuees' spiritual well-being. A Cultural Support tent was set up to offer traditional healing methods to address the mental, emotional, and spiritual well-being of both evacuees and frontline staff (e.g. firefighters) during times of crisis.

The First Nations Health Authority funds or administers funds to support mental health counselling, land-based healing, cultural supports, wellness, and crisis grants following climate-related disasters in B.C. First Nations communities.

Children and youth

"As an organization that's on the frontlines, I would have to say that the impact on mental health that we've seen is there's a lot more fear, there's a lot more panic within people. Children have been affected greatly."

—Risk to Resilience Project focus group participant

Climate change presents significant mental health and well-being challenges for young people. Children and youth can be particularly at risk of experiencing sadness, anger, fear, and a sense of powerlessness regarding climate change and its impacts (i.e., "climate anxiety") [726] as they consider implications for their future. Young people are more likely to experience the impacts of climate-related events in their lifetime, either directly by exposure to specific hazards, indirectly through impacts on determinants of health, or through news and media consumption about climate impacts elsewhere in the world [757]. Children and youth who experience climate-related disasters such as wildfires or floods are also at greater risk of psychosocial impacts, and are more likely to have mental health disorders (particularly anxiety) later in life [534,726]. It is important to understand the mental health impacts of climate-related events on children and youth, and to provide appropriate support to impacted families and children to mitigate future mental health problems.

"I know [after the 2021 wildfire] Lytton was especially hit [by requests for mental health support]. The youth, the amount of calls saying that the youth are having such a terrible time."

—Risk to Resilience Project focus group participant

First Nations Health Authority example of adaptation

The First Nations Health Authority has developed a public resource with helpful tips for "Recognizing and Resolving Trauma in Children During Disasters" to support families affected by disaster-related trauma.

Gender

Evidence suggests that women are experiencing anxiety and worry related to a changing climate at higher levels than men ^[753], and that women are more prone to PTSD from experiencing climate hazards ^[548]. For example, a study examining the health impacts of evacuated workers from the 2016 Fort McMurray wildfire in Alberta suggests that women who had been evacuated during the fire had higher anxiety and depression scores ^[762]. Women are also at greater risk of experiencing compassion fatigue during or after a climate-related hazard occurs, due to the role they play



as caregivers. For example, a study of the social impacts of the 2018 flood in Grand Forks found that the mental health of women, particularly women living in poverty and older women, was disproportionately affected due to the stress of supporting family and community members [509]. Overall, there is a need for targeted mental health supports for those socialized to engage in caretaking roles in families and communities (regardless of gender) to help them cope with, manage, and process emotional distress from climate-related events.

Men also experience unique mental health impacts from climate change, particularly Indigenous men who hunt to provide traditional foods for their family, and men that are farmers and ranchers [548]. In B.C., further research and data is needed to better understand the mental health impacts of climate change on Two-Spirit, lesbian, gay, bisexual, transgender, queer, questioning, intersex, and asexual (LGBTQ2S+) people and communities, reinforcing existing calls for more robust equity-informed data to be gathered provincially.

Rural and remote communities

Rural and remote communities in B.C. are often more exposed to climate-related events such as wildfires and flooding, but also may not have access to mental health care practitioners and facilities on-site. Mental health supports are often brought into the community after the event for a short period of time, however challenges remain for meeting long-term mental health care needs for impacted communities [548].

"Because the communities are smaller, there are less resources available. So, if there is some kind of disaster, the impact on the community is greater. Especially with the wildfires and some of the flooding—when it hits a small community, it's just a very significant impact. It hits everyone."

—Risk to Resilience Project focus group Participant

Farmers and ranchers

People involved in the agricultural industry are among those most affected by mental health impacts of extreme weather events because their economic livelihoods depend on environmental conditions. Coinciding heat, wildfire, flood, and drought events in B.C. have disrupted farming practices and resulted in significant stress and burnout for B.C. farmers and ranchers, due to the loss of livestock and crops [67,68]. For example, the province's Mental Health Support Line reported a 15- to 20-percent increase in calls following the November 2021 AR-flood events, with hard-hit farmers making up the bulk of those new calls [763]. Farmers and ranchers also face unique barriers to accessing mental health support. For many farmers living in rural communities, there can be a lack of access to mental health practitioners, stigma surrounding mental health, and/or the perception that farmers are self-sufficient and stoic [534,764].

AgSafe BC example of adaptation

AgSafe BC has developed mental health programs that are tailored to the unique needs and challenges that farmers and ranchers face. "In the Know," for example, is a free, four-hour mental health literacy program made for agricultural producers and their community, designed with farmers to support farmers in identifying, understanding, and coping with mental health challenges. They have also partnered members of BC Agriculture with mental health practitioners for free counselling services.

The University of the Fraser Valley has created the <u>Flood Stories Project</u> to engage farmers who were affected by the November 2021 flooding events. The project uses a narrative therapy approach to better understand how farmers have been affected by floods and what they need to thrive again.

9.3 Mental health service use and adaptations

Mental health recovery is best understood in the context of the phases of a disaster (see Figure 18), with the need for varying degrees of psychosocial support² over the weeks, months, and years following a climate-related event. For many, the road to recovery can be longer than anticipated. Community members may suffer setbacks months and even years after a climate event [75].

There has been a significant and growing need for mental health support for the public and frontline workers following climate-related events ^[27]. A <u>survey</u> of community members involved in recovery efforts from the 2021 Lytton wildfire found that more than 80 percent of respondents felt there were not enough mental health support resources to meet community needs ^[766]. Crisis Centre BC and BC Crisis Line Network report a 10- to 25-percent increase in crisis-line call volumes following disasters, such as extreme heat or wildfires, with waves of calls during the event and for weeks after ^[727]. Community wellness workers have reported an "overwhelming need for counsellors" following significant B.C. wildfire events ^[727], and *Risk to Resilience Project* focus group participants have emphasized the need for immediate, as well as longer-term, mental health support in impacted communities, given often-delayed mental health impacts.

² Psychosocial support consists of all processes and actions that promote the holistic well-being of people in their social world, including supports provided by family, friends and the wider community [765].

After a major disaster event, access to mental health practitioners and culturally relevant mental health supports and information is critical in a community's reconstruction, as the mental health of its members affects every other facet of recovery [727].

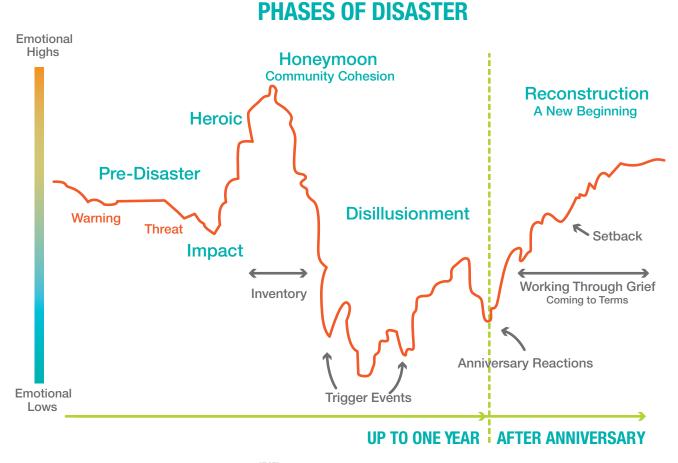


Figure 18. Disaster emotional response timeline [767]

Community psychosocial supports during and after disasters are often provided in partnership with the Provincial Health Services Authority (PHSA), regional health authorities, non-profit service providers, and community agencies who understand the needs and strengths of local populations. Recent wildfire and flooding events have demonstrated how collective efforts and partnerships across organizations and sectors can ensure mental health supports meet diverse needs.

The Province of B.C., in partnership with PHSA, the First Nations Health Authority, regional health authorities, and non-profit service providers, has developed a number of mental health programs, resources, and services to support individuals, families, and communities affected by climate-related disasters:

■ The <u>Disaster Psychological Services (DPS) program</u>, overseen by PHSA, provides a continuum of psychosocial supportive services for the public and responders affected by an emergency or disaster ^[768]. The program includes the DPS Services Volunteer Network, comprised of over 200 registered clinicians, social workers, and victim service support workers. The Provincial Mobile Response Team (MRT) may act as an extension of DPS when needed to provide support for first responders such as fire services, police, military, and non-government organization personnel ^[232].

B.C. Disaster Psychosocial Services program in response to climate-related events

The Disaster Psychosocial Services (DPS) program has provided services such as helping evacuees at reception centres, working with residents at resilience centres during disaster recovery, and helping frontline staff and community members after suicides [56]. DPS volunteers have also been embedded in several Emergency Operations Centres (EOCs), providing care through activities such as resilience-building strategies for those in impacted communities, including leaders, hotel workers, business owners, and volunteers.

Requests for the DPS program during recent wildfires and flood events were substantial, particularly for support to evacuated residents in many different settings. During recent wildfire and flood events, its volunteers, casuals, and mobile response team staff provided:



- 2017: 2,234 psychosocial field hours deployed (134 for floods and 2,200 for wildfires)
- 2018: 876 psychosocial field hours deployed (316 for floods and 876 for wildfires)
- 2021: 2,755 psychosocial field hours deployed (1,580 for the atmospheric river and 1,175 for wildfires) [769].

In 2021, the DPS program was continuously deployed in some capacity for 64 days, to support evacuees in Kamloops, Merritt, Vernon and Lytton, while maintaining a wellness support line [358].

- HEMBC created the <u>B.C. Mental Health and Wellness Recovery Toolkit</u>, informed by lessons learned from the 2017/18 flood and wildfire seasons, to help community leaders, health practitioners, and community members plan for mental health supports after a disaster ^[765]. The toolkit supports recommendations of the 2018 report, <u>Addressing the New Normal: 21st Century Disaster Management in BC</u>, led by Chief Maureen Chapman and George Abbott, to "develop stable and sustainable mental health recovery programs that acknowledge cultural linkages to the land and the compounding challenge of historical trauma." ^[75]
- Mental health practitioners can sign up for the <u>Emergency Health Provider Registry</u>, a database of volunteer health care providers willing to temporarily relocate between health authorities to alleviate health provider burnout during and after an emergency event [691].

Collaboration for mental wellness in Thompson Nicola Cariboo [770]

Following the 2017 wildfire season in the Cariboo and Thompson-Nicola Regional Districts, <u>United Way</u> B.C. developed a wildfire recovery team that successfully increased awareness of the mental health impacts of wildfire disasters, reduced silos between community organizations, fostered community through events and workshops, and integrated mental health into future emergency planning.

Community collaboration to address isolation and loneliness

Following the devasting wildfires and floods of 2021, the United Way B.C. expanded its <u>Hi Neighbour</u> initiative to seven wildfire- and flood-impacted communities across the province. The program aims to support at-risk populations who may feel alone and not know where to go for urgent help in the face of a community emergency. The program hires staff who live and work in the communities they serve, identifies community champions, and makes vital links between support services, partners and individuals in need.

9.4 Opportunities for action

Addressing the acute and long-term mental health risks of climate change will require collaboration and coordination between public health and external agencies. Importantly, it also requires supporting community leadership and centering reconciliation and Indigenous worldviews of health and well-being [56]. Opportunities for action include:

- Monitoring mental health in climate-related events: Tracking the psychosocial impacts of climate-related events [50] is challenging; there are interconnected and compounding factors that influence mental health, time lags for impacts to emerge, a lack of baseline data, underreporting and stigma related to mental health [56]. Despite these challenges, there are opportunities to increase surveillance of mental health indicators, such as tracking emergency department visits for mood or behavioural disorders after extreme weather events [548], and to integrate mental health indicators into future climate change plans and policies [728].
- **Community capacity building and ownership:** Following climate-related events, local mental health recovery plans can build on existing programs, services, and supports of impacted communities, to ensure mental health recovery is community-informed and driven. The leadership of community-led recovery committees and mental health working groups is particularly valuable in informing the recovery management process and the withdrawal of outside mental health services [765].

"When you have the community taking on mental health recovery planning, real things happen; it's got to be owned by the community."

—Risk to Resilience Project focus group participant



Grand Forks mental wellness flood recovery (2018)

The most effective approaches to recovery can be supported by mobilizing community strengths. When Grand Forks experienced a significant flood in 2018, a local mental health recovery working group was formed. In partnership with Interior Health, they developed an innovative mental health assessment process to determine what mental health and wellness supports were required by key populations [509].

• Community gatherings as a pathway to healing: After a disaster, community members can heal by gathering to share experiences and support each other [500]. Risk to Resilience Project sharing circle participants described the importance of convening friends and families through dinners, traditional healing circles, cultural events, and arts-based activities after fire and flood events. It is important to offer resources and support for these types of gatherings.

"What I lost was my sense of place, because we were displaced from our home. But because of communication, we're able to at least maintain a sense of community identity. And critical to our overall health and well-being was the ability to gather (on social media or live streams) and also to come together."

—Risk to Resilience Project Indigenous sharing circle participant

• Mental health preparedness and planning: Evidence shows that when communities are more prepared for extreme weather events, they are able to respond and mobilize more quickly to meet psychosocial and mental health needs [500]. Risk to Resilience Project focus group participants emphasized the need to include psychosocial well-being in climate adaptation planning from the outset, and for mental health practitioners to be included early on in preparedness and response planning, rather than being brought in during the recovery phase [75].

• Rapid, sustained, and targeted psychosocial supports: How psychological response to a disaster is managed may be the defining factor in how well a community recovers [771]. Interventions require rapid, culturally appropriate, and sustained mental health support that leverage strengths across public health, emergency management, and social service agencies. *Risk to Resilience Project* focus group participants emphasized the importance of early and sustained mental health interventions, including targeted/specialized interventions for those experiencing significant mental health issues (e.g., farmers/ranchers) and/or addiction issues related to the disaster.

"What matters, really, is: What kind of [mental health] resources can we get for them in that first year in particular?"

—Risk to Resilience Project focus group participant

- Explore opportunities to enhance disaster psychosocial support services: As climate disasters have become more frequent, there is growing awareness and demand for programs such as **the Disaster Psychosocial Services (DPS) program**. An analysis of the 2021 wildfire and flood events found there were not enough DPS volunteers to meet the mental health care needs of evacuees [273]. To prepare for future climate emergencies, programs such as DPS should be examined to determine capacity to support large provincial emergency events, and to identify limitations, solutions, and/or additional requirements [232].
- Culturally safe and Nation-led mental health and wellness: Special attention should be given to enhance the cultural safety of mental health and wellness supports during response and recovery periods are culturally safe⁵⁸, including connected to traditional approaches to healing. Indigenous wellness practices must be valued and supported alongside Western medicine, integrating Indigenous-led ceremony, culture, language, and land-based healing practices.

To effectively incorporate mental health and social support services into a climate-resilient health system, a coordinated, cross-governmental, and "all-of-society" approach is essential. This approach should prioritize the well-being of impacted residents and communities, and leverage the expertise and resources of the Ministry of Health, the First Nations Health Authority, PHSA, and regional health authorities, as well as non-profit service providers provincially and locally. Working together offers an opportunity to develop a comprehensive strategy that builds long-term resilience and prioritizes proactive action to understand and address mental health impacts of climate change.

⁵⁸ Cultural safety is an outcome based on respectful engagement that recognizes and strives to address power imbalances inherent in the health care system. It results in an environment free of racism and discrimination, where people feel safe when receiving health care [75]