EXAMINING THE SOCIETAL CONSEQUENCES OF THE COVID-19 PANDEMIC

Provincial Health Officer's Annual Report, 2024

BC Centre for Disease Control
Provincial Health Services Authority

British Columbia
Office of the Provincial Health Officer

Examining the Societal Consequences of the COVID-19 Pandemic: Provincial Health Officer's Annual Report, 2024

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Ministry of Health
Lekwungen Territories/Victoria, BC

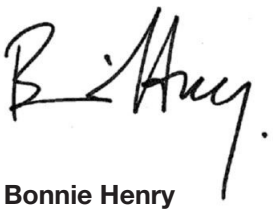
December 2024

The Honourable Josie Osborne
Minister of Health

Dear Honourable Josie Osborne:

I have the honour of submitting this Provincial Health Officer's Annual Report.

Sincerely,



Bonnie Henry
OBC, MD, MPH, FRCPC
Provincial Health Officer

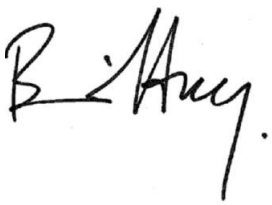
Message from BC's Provincial Health Officer and the Chief Medical Officer, BC Centre for Disease Control

In March 2020, the World Health Organization declared the outbreak of the novel coronavirus (COVID-19) a global pandemic, signaling a profound change in the lives of people everywhere. Countries and communities around the world responded in a variety of ways. In British Columbia, the Provincial Health Officer declared a public health emergency on March 17, 2020. The BC Centre for Disease Control (BCCDC)—part of the Provincial Health Services Authority—was a key leader, resource, and partner in British Columbia's response to the pandemic.

Public health response measures included vaccination, physical distancing, wearing face masks, and restrictions on gathering sizes. These measures, while intended to minimize COVID-19-related illnesses and deaths, had substantial societal consequences.

The Office of the Provincial Health Officer and the BCCDC, in partnership with the BC Ministry of Health, BC Ministry of Mental Health and Addictions, First Nations Health Authority, Métis Nation British Columbia, regional health authorities, and other collaborators, have sought to better understand the societal consequences of COVID-19 and associated response measures on individuals, families, communities, and distinct populations across BC. This has included identifying, monitoring, and reporting on health and wellness impacts in areas ranging from racism and discrimination to unemployment, mental health, and substance use. This work evolved into the ***Examining the Societal Consequences of the COVID-19 Pandemic*** project described in this report, which was developed to better support British Columbians both during the pandemic and as we continue to recover afterwards. As we strive for in all our work, this project is rooted in unwavering commitments to anti-racist approaches, upholding inherent Indigenous rights, and truth and reconciliation with Indigenous Peoples (First Nations, Métis, and Inuit).

The chapters in this volume represent some of the topics explored through the ***Examining the Societal Consequences of the COVID-19 Pandemic*** project. The Office of the Provincial Health Officer and the BCCDC will continue monitoring these topics to understand and learn from the longer-term societal effects of this pandemic. This has been a very difficult time, and we dedicate this report to all British Columbians. In particular, we would like to recognize those who provided frontline services; those who supported family members, friends, and neighbours; and those who carried a disproportionate burden of the societal consequences of the pandemic, including children, youth, and young adults.



Dr. Bonnie Henry
OBC, MD, MPH, FRCPC
Provincial Health Officer

Dr. Jason Wong
Chief Medical Officer, BC Centre for Disease Control
Deputy Provincial Health Officer

Commitment to Anti-racist Approaches, Upholding Inherent Indigenous Rights, and Truth and Reconciliation

The Office of the Provincial Health Officer (OPHO) and the BC Centre for Disease Control (BCCDC) are committed to upholding anti-racist approaches, Indigenous self-determination, and truth and reconciliation with Indigenous Peoples (First Nations, Métis, and Inuit). This commitment includes foregrounding the inherent rights and title of Indigenous Peoples in the territories now known as British Columbia: inherent rights to self-determination, land, health, and wellness that have never been ceded or surrendered. Laws and governance systems rooted in the land have upheld the sovereignty of these diverse Nations for thousands of years. This commitment also includes a process of seeking out, naming, addressing, and undoing the sometimes apparent—but more often hidden—evidence of racist policies and practices, discrimination, settler colonialism, and white supremacy in our day-to-day work. This process is challenging and often uncomfortable, but it is necessary. It requires humility and a willingness to listen to and learn from Indigenous partner organizations and other teachers. It also requires a willingness to *unlearn* the entrenched stereotypes, attitudes, and behaviours that perpetuate racist policies and practices, settler colonialism, and white supremacy—all of which confer persistent unearned advantage to non-Indigenous people (especially white people) and unwarranted disadvantage to Indigenous Peoples. Our progress in fulfilling this commitment is often slower than we wish, and we will continue to make mistakes along the way, but we are taking up this work in good faith. We therefore humbly ask for your patience and your support. We offer the following as first steps on this journey.

The Office of the Provincial Health Officer and the BC Centre for Disease Control

The OPHO is a team of more than 30 people whose primary role is to support the work of the Provincial Health Officer (PHO). The PHO is responsible for monitoring the health of the population of BC and providing independent advice on public health issues, as outlined in the *Public Health Act*. The OPHO team has expertise in areas such as research, epidemiology, data analysis, report writing, and drinking water safety. With the leadership of the Deputy Provincial Health Officer, Indigenous Health, and strong, long-term partnerships with First Nations Health Authority and Métis Nation British Columbia, the OPHO team is learning how we can better honour Indigenous Peoples and Indigenous ways of knowing in our work. The BCCDC, a program of the Provincial Health Services Authority (PHSA), is on a similar path. The BCCDC is a team of almost 400 staff who work to promote and protect the health of people in BC. The BCCDC's work includes disease prevention, detection, monitoring, and treatment; advising on policies and programs; harm reduction and overdose response; environmental health; health promotion; and policy and program development and evaluation. The BCCDC is dedicated to embedding a culture of reconciliation with Indigenous Peoples, anti-racism, and quality and safety throughout the organization.

Both the OPHO and the BCCDC understand that some systems of oppression are harder to recognize due to lack of representation within our organizations. Developing team-wide capacity in areas such as anti-racist approaches, anti-colonialism, and sex and gender equity is a priority for both organizations. The OPHO operates within the Government of British Columbia, a hierarchical institution deeply rooted in patriarchal, Euro-colonial norms, values, and ways of being. In addition, the OPHO has identified, and is working to address, an important gap in terms of the specific lack of Two-Spirit perspectives and wisdom to inform its work.[a] The BCCDC is also attempting to redress the past and present harms caused by settler colonialism. Both organizations are working to overcome these limitations in several ways: by increasing and honouring the diversity that exists within our own teams; by building and strengthening our relationships with partners and communities representing diverse perspectives and lived experiences; and by working collectively to increase our awareness of and ability to enact anti-racist approaches and principles such as **two-eyed seeing** (see text box), social justice, and health equity.

[a] The Two-Spirit Dry Lab (https://twospiritdrylab.ca/) is a research group creating new knowledge(s) in this area.

Two-eyed seeing, coined by Mi'kmaq Elders Murdena Marshall and Albert Marshall, refers to seeing from one eye with the strengths of Indigenous ways of knowing and from the other eye with the strengths of "Western" or mainstream ways of knowing, and using both of these eyes together to gain a more comprehensive understanding.[1,2(p.152)] In the OPHO, we also expand this concept to "multiple-eyed seeing" to recognize that there are many diverse Indigenous Nations and that each Nation has distinct, unique, and sacred ways of knowing.

Anti-racist Approaches

We acknowledge that settler-colonial institutions in BC have been built on foundations of white supremacy. Thus, we recognize that all policies and processes that have not undergone an explicit anti-racist review perpetuate the status quo of racist policies and processes. For example, an independent investigation initiated in 2020 identified addressing Indigenous-specific racism in BC's health system as a high priority.[3] We use the framework of "mopping up institutional racism" to help us identify and address areas where institutional racism often occurs.[4]

The *Societal Consequences of the COVID-19 Pandemic* ("Societal Consequences") project work documented in this report is explicitly equity-focused and grounded in anti-racist approaches, decolonization, sex and gender parity, and social determinants of health. This orientation is reflected throughout the report, especially in the detailed Chapter 2 examination of the profound impacts of racism, stigma, and discrimination in BC, both before and during the COVID-19 pandemic, and in the report themes and findings presented in Chapter 15.

Inherent Indigenous Rights and Truth and Reconciliation

Provincial, federal, and international laws set out the obligations of governments and systems to uphold the inherent rights of Indigenous Peoples. These rights are natural and innate, and are reflected in treaties, Section 35 of the Canadian Constitution, court rulings, and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).[5] They are also reflected in related provincial and federal laws and initiatives such as BC's *Declaration on the Rights of Indigenous Peoples Act* (DRIPA) and the DRIPA Action Plan,[6] and Canada's *United Nations Declaration on the Rights of Indigenous Peoples Act* and action plan.[7] UNDRIP provides a framework for reconciliation, while Indigenous Peoples have provided additional detailed instructions on how to move forward with this work—for example, through the Truth and Reconciliation Commission of Canada's Calls to Action,[8] the National Inquiry into Missing and Murdered Indigenous Women and Girls Calls for Justice (which includes a focus on gender diverse and 2SLGBTQQIA+ people),[9] and the recommendations made in the report *In Plain Sight: Addressing Indigenous-specific Racism and Discrimination in B.C. Health Care*.[3] It is our responsibility to uphold these foundational obligations in every aspect of our work.

The Societal Consequences project recognizes the ongoing negative impacts of settler colonialism. The project aims to uphold inherent Indigenous rights, including the right to self-determination; to support and contribute to the work of reconciliation; and to follow the lead of Indigenous partner organizations in terms of approaches to Indigenous health and wellness, Indigenous data governance, and the need to create space for First Nations and Métis Peoples to tell their own stories about their experiences of the pandemic (see Chapter 1 for further details).[b] The Societal Consequences project also highlights the need for governance protocols for Inuit data in BC as well as further work to build relationships between Inuit organizations, the BCCDC, and the OPHO.

[b] The project partners are not currently able to provide Inuit-specific data or analyses.

Acknowledgements

We acknowledge with respect the inherent rights of the First Nations whose ancestral territories cover every inch of the province now known as British Columbia, including their unextinguished land rights and rights to self-determination, health, and wellness within these territories. We are indebted to the peoples on whose unceded traditional territories much of the work leading to this report took place, including the Esquimalt and Songhees Nations (lək̓ʷəŋən or Lekwungen) and W̱SÁNEĆ (Saanich) Peoples in Victoria, BC, and the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səlilwətaɬ (Tsleil-Waututh) Peoples in Vancouver, BC.

We also recognize that many Indigenous Peoples (First Nations, Métis, and Inuit) from elsewhere in what is now known as Canada also call the lands and waters of this province home, and they too have rights to self-determination, health, and wellness. This includes Métis Nation British Columbia and its Chartered Communities across BC.

Executive Oversight

Dr. Bonnie Henry, BC Provincial Health Officer
Office of the Provincial Health Officer, BC Ministry of Health
Clinical Associate Professor, UBC School of Population and Public Health
Project Executive Sponsor

Fifth generation Canadian settler, Scottish Highland and Welsh ancestry. Born and raised on Mi'kmaq territory, PEI and NB.

Dr. Jason Wong, Chief Medical Officer, BC Centre for Disease Control
Deputy Provincial Health Officer
Clinical Assistant Professor, UBC School of Population and Public Health
Project Executive Sponsor and Co-chair

Chinese ancestry, born and raised on Treaty 6 territory, a traditional meeting ground and home for many Indigenous Peoples, including the nêhiyawak (Cree), Anishinaabe (Saulteaux), Niitsitapi (Blackfoot), Métis, Dene, and Nakota Sioux Peoples.

Dr. Brian Emerson, (former) Deputy Provincial Health Officer
Office of the Provincial Health Officer, BC Ministry of Health
Project Co-chair

French and Irish heritage, born and raised on Treaty 7 territory, which includes the Siksika Nation, Piikani Nation, Kainai Nation, the Îethka Stoney Nakoda, Nah-koh-duh Nation—consisting of the Chiniki Bearspaw and Good Stoney Bands, the people of the Tsuut'ina Nation, and the people of the Métis Nation of Alberta, Region 3 within the historical Northwest Métis homeland.

Dr. Réka Gustafson, Vice President, Population and Public Health, and Chief Medical Health Officer, Island Health
Clinical Associate Professor, UBC School of Population and Public Health
(former) Vice President, Public Health and Wellness, Provincial Health Services Authority,
(former) Deputy Provincial Health Officer, BC Ministry of Health
(former) Project Executive Sponsor

Born and raised in Hungary, and settled in the traditional unceded lands of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səlilwətaɬ (Tsleil-Waututh) Nations.

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Clinical Assistant Professor, UBC School of Population and Public Health

Canadian settler, British ancestry with Newfoundland roots. Raised on the traditional territory of the Anishinaabe and Métis people in Northwestern Ontario.

Dr. Geoffrey McKee, Medical Director, Population and Public Health, BC Centre for Disease Control
Clinical Instructor, UBC School of Population and Public Health

Canadian settler of mixed European and Métis ancestry born and raised on unceded Coast Salish lands.

Dr. Danièle Behn Smith, Deputy Provincial Health Officer, Indigenous Health, Office of the Provincial Health Officer, BC Ministry of Health

Eh Cho Dene, Fort Nelson First Nation. Métis/French Canadian, Red River Valley, MB. Born in Fort Nelson, BC, on her paternal Eh Cho Dene territory. Raised on Treaty 1 territory of the Cree, Anishnaabe, Dene, Dakota, and Anisininew Nations and her maternal Métis homelands in Winnipeg, MB.

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For the development of Chapter 6: Métis Food (In)security and Food as Medicine, we acknowledge the contributions from Métis Nation British Columbia (Tanya Davoren, Stephen Thomson, Leona Shaw, Sophia Huang, Merrhea Teixeira, Monique Courcelles, Sheila Lewis, and Seanna Johnston).

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For the data analysis in Chapter 7: Missed or Delayed Routine Childhood Immunizations, we acknowledge the contributions from the BCCDC Immunization Programs and Vaccine Preventable Diseases Service (Monika Naus, Samara David, Kate Twohig). **For the data analysis in Chapter 8: Emergency Department Use**, we acknowledge the contributions from the BC Observatory for Population & Public Health at BCCDC (Braeden Klaver, Angela Yao, Kate Smolina). **For the data analysis in Chapter 14: Increased Overdose Harms and Deaths**, we acknowledge the contributions from the BCCDC Public Health Response/Substance Use and Harm Reduction Services (Christopher Mill, Margot Kuo, Chloé Xavier) and the Overdose Emergency Response Centre in the BC Ministry of Mental Health and Addictions (Connie Carter, Carolyn Davison).

Working Group Members

The chapters in this volume were developed through a partnership between the BCCDC and the OPHO. However, this work was accomplished through far-reaching collaboration, and we are grateful to the leadership and staff of the following organizations for their commitment and contributions as members of the project working group:

Métis Nation British Columbia

First Nations Health Authority

BC Association of Aboriginal Friendship Centres

BC Ministry of Health

BC Ministry of Mental Health and Addictions

Government of Yukon

Regional BC health authorities:

- Fraser Health
- Interior Health
- Island Health
- Northern Health
- Vancouver Coastal Health

The project team and working group members are also indebted to the many additional individuals and organizations, including academic and community-based researchers, who provided their time, insights, and subject-matter expertise to this project. Thank you.

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Executive Summary

In March 2020, the World Health Organization declared COVID-19 a global pandemic. Responses to the pandemic resulted in massive societal shifts in virtually every jurisdiction in the world.

In BC, the Provincial Health Officer (PHO) declared a public health emergency and implemented a series of public health orders and guidelines (e.g., physical distancing, wearing masks, limits on gathering sizes). These orders and guidelines—also known as "response measures"—were intended to reduce the spread of COVID-19; minimize related illness, hospitalization, and death; and ensure that sufficient health-care resources remained available to those in need of urgent and life-saving care. However, COVID-19 response measures also had substantial societal impacts, both positive and negative, on individuals and communities across the province and around the globe.

The Office of the Provincial Health Officer (OPHO) and the BC Centre for Disease Control (BCCDC) led efforts to understand how COVID-19 response measures in BC were affecting the population through a project titled ***Examining the Societal Consequences of the COVID-19 Pandemic*** ("Societal Consequences" project). The aim of this work was to identify and monitor the effects of COVID-19 response measures early in the pandemic and use that information to better support people in BC through the pandemic and during recovery afterwards, while also protecting public health. Partners and advisors included the First Nations Health Authority (FNHA), Métis Nation British Columbia (MNBC), and the BC Association of Aboriginal Friendship Centres (BCAAFC), as well as regional health authorities, the Provincial Health Services Authority, and BC government ministries and organizations. A key principle in this work was recognizing and working to uphold the inherent rights of Indigenous Peoples (First Nations, Métis, and Inuit).

The Societal Consequences project has included the development of short issue reports on topics that have been impacted by COVID-19 and related response measures. These topics were selected and prioritized based on urgency and the expected severity of related impacts. Each issue report summarizes the data used to monitor population health and guide public health decision-making on that topic during the pandemic. Issue reports published to date appear as individual chapters (Chapters 2 through 14) in this larger report. In addition to informing the response to COVID-19, these findings will help shape responses to future public health emergencies.

Summary of Key Findings

The issues explored in Chapters 2 through 14 of this report range from overall population health and wellness to health-care service utilization. Because population mental health and wellness emerged as a critical area of concern during the pandemic, many chapter topics focus on, or are linked to, mental health and substance use.

Chapter 2: Anti-Asian Racism, Stigma, and Discrimination

- Targeted anti-Asian racism and discriminatory acts increased in frequency and severity throughout communities in BC and across Canada during COVID-19.

Chapter 3: Gender-based Violence

- The COVID-19 pandemic and response measures to limit the spread of COVID-19 increased the risk, and likely also the prevalence and severity, of gender-based violence (GBV) in BC, while reducing access to related support services.
- The number of calls to the Battered Women's Support Services crisis line in Vancouver significantly increased during the first month of COVID-19.
- Data gaps make it difficult to accurately understand the prevalence of GBV in the BC population, how often it occurs, and the associated short- and long-term impacts on mental, emotional, physical, and spiritual health and wellness.
- GBV disproportionately affects some populations, including gender diverse and non-binary people, those who identify as 2SLGBTQQIA+,[a] immigrants and refugees, people of colour, Indigenous women and girls, individuals living with disabilities, people in rural and remote areas, sex workers, children and youth (especially girls), pregnant people, and new parents.
- The report *Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls* confirmed that due to structural racism and impacts of colonization, Indigenous women, girls, and 2SLGBTQQIA+ people are at higher risk of violence. The National Inquiry into Missing and Murdered Indigenous Women and Girls issued 231 Calls for Justice that have yet to be fully addressed by either the Government of Canada or the Government of British Columbia.

Chapter 4: Unemployment and Underemployment

- BC's unemployment rate increased from 5.2% in February 2020 to 13.1% in May 2020, largely because of COVID-19 response measures. Unemployment declined between June and November 2020 with the partial lifting of these measures, but was still higher compared to the same months in 2019.
- Unemployment and underemployment can harm physical and mental health. As well, parental unemployment and underemployment are linked to lower levels of children's educational attainment and well-being.
- Women, temporary workers, informal economy, and non-white racialized workers have been disproportionately affected by COVID-19-related unemployment.

Chapter 5: Food Insecurity

- The COVID-19 pandemic and associated response measures impacted various dimensions of food security, including the availability, accessibility, and affordability of food in BC. Increased unemployment and reduced income during the pandemic substantially contributed to household food insecurity.

[a] The acronym 2SLGBTQQIA+ refers to Indigenous people who identify as Two-Spirit and all people who identify as lesbian, gay, bisexual, transgender, queer, questioning, intersex, and/or asexual, as well as those with non-heterosexual/non-binary sex and gender identities who do not see themselves reflected in this acronym.

- In the early months of the pandemic, 14.6% of people age 18 and older in BC reported worrying that food would run out before they could get money to buy more. This proportion was highest in the Northern Health region (18.5%).
- In BC, as a result of discrimination and deeply entrenched societal inequities, food insecurity during the COVID-19 pandemic disproportionately affected people age 18–29, people with an annual household income of less than $20,000, people without a high school diploma, people with at least one disability, Indigenous Peoples (First Nations, Métis, and Inuit), and people who are racialized.

Chapter 6: Métis Food (In)security and Food as Medicine

Photo © Métis Nation British Columbia

- Due to settler colonialism and other complex socio-economic factors, many Métis people experience food insecurity, which in some cases was made worse by the COVID-19 pandemic and associated response measures such as physical distancing and group size limitations.
- Métis people and communities developed diverse and creative ways to stay connected and provide access to food during the pandemic.
- As a result of multiple intersecting forms of oppression, food insecurity affects certain populations disproportionately, including Indigenous Peoples, women, children, Elders, lone-parent families, 2SLGBTQQIA+ people, people with lower incomes, people with diverse abilities, and those living in rural, remote, isolated, and/or northern communities.
- Métis identity is a source of strength and resilience. Increased risk to Métis people's food security is deeply rooted in historic and ongoing legacies of racism and settler colonialism found across practices, policies, systems, institutions, and norms.
- Upholding Métis people's inherent rights to health and wellness, including food as medicine, must be a key component of any strategy to support Métis food security.

Chapter 7: Missed or Delayed Routine Childhood Immunizations

- Lower percentages of infants and toddlers received their immunizations on time in March 2020, compared to March 2019, in most health regions.
- The percentages of infants and toddlers who received their routine immunizations on time improved between March and July 2020; however, percentages in July 2020 were still lower than July 2019 for most regions.

Chapter 8: Emergency Department Use

- There was a decrease in the number of emergency department visits from March to April 2020, compared to the same period in 2019. The number of emergency department visits returned to close to pre-pandemic numbers by June 2021.
- Among those who accessed emergency department services, the proportion of visits requiring the most urgent level of care increased in 2020, compared to previous years, while the proportion requiring less urgent care decreased.

Chapter 9: Selected Communicable Diseases Other Than COVID-19

- Response measures introduced to reduce transmission of COVID-19 and changes in individuals' behaviour may have also led to the decline in cases of several reportable communicable diseases compared to previous years.
- Decreases in communicable diseases during 2020 may be due to reduced social contacts, travel restrictions, more frequent cleaning (i.e., surfaces and hands), and increased use of personal protective equipment. Decreases in testing may have also contributed to the decline in cases identified.

Chapter 10: Mental Health

- The COVID-19 pandemic and related response measures negatively impacted mental health and may lead to lasting poor mental health and mental illness for some people.
- In a survey conducted by Statistics Canada, over half of respondents age 15+ in BC reported experiencing "somewhat worse" or "much worse" mental health due to COVID-19 and related measures. Females and individuals age 15–24 and 25–44 were more likely to report worsened mental health.
- Experiences of greater stress and worsened mental health were reported more among individuals living with disabilities, people with a pre-existing mental health issue, gender diverse individuals, recent immigrants, and individuals earning lower levels of income. This reflects multiple deeply entrenched and intersecting forms of discrimination, oppression, and inequity throughout society.

Chapter 11: Social Isolation of Residents in Long-term Care and Assisted Living

- Residents of care homes, including long-term care and assisted living residences, are at higher risk of serious illness, complications, and death due to COVID-19.
- Infection prevention measures in long-term care and assisted living residences included restrictions on visitors, social gatherings, and activities. These measures led to increased social isolation and decreased physical health, mental health, and quality of life for residents.
- When limited visits were allowed to resume, 61% of family members reported that their loved ones in care homes seemed worse than when they had last seen them, in terms of reduced cognitive function (58%), mood and emotional well-being (58%), and/or physical function (46%).

Chapter 12: Self-harm and Suicide

- COVID-19 response measures increased social isolation and stress and made it harder to access mental health care. These factors may have exacerbated existing mental illness and contributed to heightened risk of self-harm and suicide.
- Self-harm occurs most frequently among young females and non-binary individuals, while the suicide rate is highest among middle-aged males. Populations who have been subject to marginalization, such as trans and non-binary individuals, people with low income, and people with mental illness are disproportionately affected by both. As a result of cultural genocide, intergenerational trauma, and structural racism, Indigenous Peoples are also disproportionately affected by both self-harm and suicide. These patterns applied both before and during the pandemic.
- Self-harm hospitalization and suicide rates in BC both decreased slightly during the initial months of the pandemic, then increased to levels similar to those seen prior to the pandemic. These findings should be interpreted with caution, however, given data limitations and delays in reporting.

Chapter 13: Problematic Alcohol Use

- Population survey and alcohol sales suggest that the COVID-19 pandemic led to increased alcohol consumption among youth and adults in BC.
- After the start of the pandemic, self-reported consumption and alcohol sales across BC increased, but support systems and treatment programs for alcohol use disorders became more difficult to access during COVID-19 due to public health measures to prevent transmission.
- The BC COVID-19 Survey on Population Experiences, Action, and Knowledge (SPEAK) showed alcohol consumption during COVID-19 in BC was much higher than what had been reported nationally. The increase in alcohol consumption in BC showed high rates among those age 18 to 49 and those with higher levels of education and household income.

Chapter 14: Increased Overdose Harms and Deaths

- The COVID-19 pandemic and response measures compounded the pre-existing overdose public health emergency and increased the risk of overdose, illness, and death for people who use drugs. Since late March 2020, fatal and non-fatal overdoses increased in BC and both reached all-time highs during the pandemic.

Project Themes

The chapters in this report explore several societal consequences of the COVID-19 pandemic and public health response measures introduced to reduce the spread and impact of COVID-19 in BC. Lessons learned—including the critical role of health equity and the importance of ongoing work to uphold anti-racist approaches—are discussed in Chapter 15 of this report and reflected in the following three key themes that were highlighted during the course of the Societal Consequences project:

1. The need to uphold inherent Indigenous rights, self-determination, and truth and reconciliation;
2. The profound impacts of racism and discrimination; and
3. The amplification of pre-existing inequities during the pandemic.

These three themes helped inform the development of the following recommendations to better prepare and serve the population of BC now and in the event of future public health emergencies.

Recommendations

1. **Advance Indigenous population health data sovereignty as an important component of self-determination**

   a. Make substantial investments in advancing First Nations, Métis, and Inuit population health data sovereignty, including but not limited to adequate resourcing that enables Indigenous governing bodies to provide services and undertake real-time population health surveillance.

   b. Work to advance Indigenous population health data sovereignty by engaging in meaningful partnership with Indigenous governing bodies and organizations to uphold the inherent rights and title of BC First Nations, and the inherent rights of all Indigenous Peoples (First Nations, Métis, and Inuit) in BC through effective co-governance models.

2. **Advance population and public health surveillance and assessment capacity, collaboration, and coordination**

   Make substantial investments in local, regional, provincial, and Indigenous population and public health surveillance and health assessment capacity to monitor population health status and equity, track burden and trends of diseases and injuries, and identify potential and emerging public health risks. In particular, expand surveillance capacity for determinants of health and non-communicable diseases with a focus on enhancing collaboration and coordination across sectors.

3. **Clarify and communicate the population and public health surveillance and assessment mandate of the BC Centre for Disease Control (BCCDC) and its commitment to Indigenous population health data sovereignty**

   Clarify and raise awareness of BCCDC's mandate as the provincial body for BC population and public health surveillance and assessment, including the determinants of health, communicable and non-communicable diseases, and environmental health. At the same time, reaffirm BCCDC's ongoing commitment to collaborate with Indigenous governing organizations and to honour Indigenous data governance standards in this work.

Chapter 1

The Pandemic Response

> "We cannot say this loudly enough, or clearly enough, or often enough: all countries can still change the course of this pandemic. If countries detect, test, treat, isolate, trace, and mobilize their people in the response, those with a handful of cases can prevent those cases becoming clusters, and those clusters becoming community transmission."
>
> Dr. Tedros Adhanom Ghebreyesus
> Director-General, World Health Organization
> March 11, 2020[1]

Note to Reader: This report is retrospective in nature, in that it focuses on the earlier days of the COVID-19 pandemic (2020 and 2021), when COVID-19 and related response measures were having a considerable impact on the daily lives of most BC residents, and before the advent of COVID-19 vaccines.

On March 11, 2020, after monitoring the spread of COVID-19[a] since the first cases were reported in December 2019, the World Health Organization (WHO) declared COVID-19 a global pandemic. In his remarks on that day, the WHO's Director-General noted the alarming increase in cases worldwide, which at that point had reached more than 118,000 cases in 114 countries.[1] The WHO's declaration sparked responses from governments everywhere, creating massive shifts in the everyday lives of people around the world. Strategies to minimize the health-related impacts of the COVID-19 pandemic included both voluntary and mandatory response measures such as self-isolation, quarantine, curfews, checkpoints, business closures, and travel restrictions.

> "We've taken a number of unprecedented measures in the last few days and this declaration of an emergency enables me to be faster, more streamlined, and nimble in the things that we need to do right now."
>
> Dr. Bonnie Henry
> BC Provincial Health Officer
> March 17, 2020[2]

On March 17, 2020, in response to the threat posed by COVID-19, BC's Provincial Health Officer (PHO) declared a public health emergency under the province's *Public Health Act*.[b] The following day, the Province of BC declared a state of emergency under the *Emergency Program Act*.[c] At the same time, and continuing for more than two years, the PHO and other officials introduced a series of response measures to protect the

[a] For more information on COVID-19, please see the **COVID-19 (Coronavirus disease)** text box in this chapter or visit http://www.bccdc.ca/health-info/diseases-conditions/covid-19.

[b] The *Public Health Act* provides public health and other officials with important tools and powers, including the ability to put orders and measures in place to respond to public health emergencies. For more information, visit https://www2.gov.bc.ca/gov/content/health/about-bc-s-health-care-system/legislation/public-health-act.

[c] *The Emergency Program Act* has since been replaced by the *Emergency and Disaster Management Act*. This legislation supports the provincial government's ability to manage emergencies such as global pandemics, security threats, and weather events linked to climate change. For more information, visit https://www2.gov.bc.ca/gov/content/safety/emergency-management/emergency-management/legislation-and-regulations.

COVID-19 and the Public Health Response

COVID-19 (Coronavirus disease) is an infectious disease caused by the SARS-CoV-2 virus. Most people who get COVID-19 have no symptoms or have mild to moderate respiratory illness. However, some people—especially those who are older, have chronic medical conditions, or have compromised immune systems—may become very ill and need medical attention, possibly including hospitalization and intensive care support. Serious illness, post-COVID syndrome (i.e., long COVID), and death from COVID-19 also occur most often among these populations, although severe outcomes can affect people of any age.[25] In addition to impacting the health of people who contracted COVID-19, the rapid spread of this virus strained the capacity of BC hospitals.[26]

The COVID-19 virus spreads by way of respiratory droplets and aerosols (smaller droplets) that enter the air from an infected person's mouth or nose when they breathe, talk, sing, shout, cough, or sneeze.[27,28] In the early days of the COVID-19 pandemic, before vaccines became available, the simplest and best ways to protect oneself and others from infection were to reduce interpersonal contact (e.g., maintain physical distance, stay home and self-isolate when feeling unwell), wash and sanitize hands frequently, and wear a properly fitted face mask when in public.[d,25]

In BC, COVID-19 response measures in the early part of the pandemic included the following:

- Physical distancing
- Wearing masks
- Restricting in-person gatherings
- First Nations community border closures and checkpoints
- Avoiding non-essential travel
- A shift to working from home
- Temporary suspension of in-class learning in kindergarten to grade 12 and post-secondary schools
- Postponing or deferring non-urgent surgeries
- Temporarily restricting or closing certain businesses, especially those in which people gathered for social purposes (e.g., restaurants, pubs, bars, and nightclubs)
- Limiting visitation in hospitals, long-term care, assisted living, and other residential care settings
- Setting up alternate care sites to increase hospital capacity and other responses within the health system to safely care for COVID-19 patients
- Rapid expansion of virtual health-care options overall (e.g., medical appointments via phone, email, videoconferencing)
- Temporary suspension of routine cancer screening and other non-urgent screening and diagnostic services
- Discharging patients from hospitals where it was safe to do so in order to free up hospital capacity

[d] Once COVID-19 vaccines became available, being vaccinated was added to this list. However, this volume focuses principally on the earlier days of the pandemic when vaccines were still not available.

health of BC residents by slowing the spread of COVID-19. These response measures included limiting gathering sizes, physical distancing, wearing masks, temporarily closing businesses, and suspending in-class learning in schools. First Nations leaders in BC undertook similar and sometimes additional measures (e.g., closing community borders and instituting checkpoints) to safeguard the health of their communities.[3] Métis Nation British Columbia (MNBC) began mobilizing resources to support Métis citizens in BC.

In the early days of the pandemic, SARS-CoV-2 (the virus that causes COVID-19) was an unknown pathogen that spread rapidly and posed a substantial risk to human health. Vaccines and pharmaceutical treatments were not yet available, and public health response measures that focused on modifying public behaviours were therefore the most effective way to address the risk. These public health response measures were implemented to reduce the spread of COVID-19 and related serious outcomes (severe illness, hospitalization, and death), while attempting to minimize social disruption as much as possible.[4,5] The response measures were also meant to ensure that the health-care system had the capacity (i.e., enough staff, beds, medications, and equipment) to treat people in need of urgent and life-saving care—whether related to COVID-19 or other ailments. However, as discussed in this report, the pandemic and associated response measures also contributed to many barriers to health-care access in BC (e.g., reduced availability of in-person services, including mental health and substance use services; longer wait times; supply chain issues).[6,7] These barriers were even greater for many Indigenous Peoples (First Nations, Métis, and Inuit), including the ongoing burden of extensive Indigenous-specific racism in the BC health-care system.[8,9]

© Métis Nation British Columbia

> "We have a very brief opportunity to prevent the spread and the devastating consequences of this disease in our communities. Any gathering where close contact occurs can cause transmission and none of us are immune. I am especially worried about our Elders, young children and those with underlying health issues."
>
> Shannon McDonald
> (former) Chief Medical Officer
> First Nations Health Authority
> March 22, 2020

BC's overall COVID-19 response has often been characterized as effective.[10,11,12,13] For example, one study credited "gaining public trust" as a contributor to BC's "largely successful pandemic response."[14(p.10)] Despite the successes, the effects have been inequitable. This is evidenced by the disproportionate impacts on First Nations[3,15] and other populations in BC.[16,17] Similarly, at the national level, one comparison found that "Canada's record thus far in responding to the COVID-19 pandemic compares favourably to most comparator nations for broad health outcomes, *although adverse economic and social impacts are also apparent*"[18(p.E876)] (emphasis added; for more information, see the text box on **the Oxford COVID-19 Government Response Stringency Index**).

The pandemic and associated response measures have taken a toll on the population, impacting people's physical, mental, emotional, and spiritual health and wellness, the health-care system, the environment, and the economy. In BC, families, communities, and individuals experienced anxiety, tragedy, loss, alienation, racism, and increased violence and substance use during the pandemic.[20,21,22,23,24] While there have been positive impacts—for example, pandemic control measures reportedly contributed to decreases in motor vehicle crashes and influenza-related deaths[20]—many of the response measures that helped prevent the spread of COVID-19 also disrupted the day-to-day lives of people across the province. The following statements from the First Nations Health Authority (FNHA) and MNBC

explore the societal consequences of COVID-19 and associated response measures on the health and wellness of First Nations and Métis people and communities in BC. These statements discuss inequitable impacts experienced during the pandemic as well as how culture and community provided strength and supported health and wellness during this time.

The Oxford COVID-19 Government Response Stringency Index is based on the Oxford COVID-19 Government Response Tracker, which was designed to monitor policy responses to the COVID-19 pandemic. The Stringency Index measured and compared the severity of COVID-19 response measures implemented by governments around the world.

According to an analysis of Canada's COVID-19 response compared to 10 other countries,[e] Canada had lower cumulative per-capita case rates and COVID-19-related death rates than all comparator countries except Japan.[18] At close to 80% in February 2022,[19] Canada also had the highest proportion of people in the total population who had been fully vaccinated.[f,18] However, in terms of the restrictions put in place, Canada was relatively severe compared to its peers. The Stringency Index found that Canada had "among the most sustained stringent policies regarding restrictions on internal movement, cancellation of public events, restrictions on public gatherings, workplace closures, and international travel controls."[18(pp.E871,E873)]

For more information, visit https://www.bsg.ox.ac.uk/research/research-projects/oxford-covid-19-government-response-tracker.

[e] This comparison is based on G10 countries (of which there are 11), which are considered broadly comparable to Canada in terms of economic and political models, per-capita income levels, and population size.

[f] Detailed information on vaccine coverage in Canada, including by age, is available from https://health-infobase.canada.ca/covid-19/vaccination-coverage/.

The First Nations Health Authority's Statement on the Societal Consequences of BC's COVID-19 Response

COVID-19 and the public health measures taken to respond to it have reinforced existing inequities and discrimination present in BC's health and wellness system. First Nations people in BC have been disproportionately affected by COVID-19. Data show that First Nations people in BC have tested positive for COVID-19 at a higher rate than other residents, have had lower median ages of hospitalization, and have higher rates of admission to intensive care units and death from the virus. The impact of COVID-19 on social determinants such as housing, food security, education, and geography has had ripple effects on the health and wellness of First Nations in BC. This is evident in the significant increase in toxic drug deaths during the pandemic and the elevated rates of anxiety, depression, and grief experienced by many First Nations people, which is further layered with intergenerational trauma and loss from past pandemics. Despite these challenges, First Nations people in BC have responded to the pandemic with strength and resilience that is grounded in culture and community. Families have found new ways to connect, support their communities and keep each other well. The First Nations Health Authority (FNHA) has worked quickly to expand virtual services, and proudly served as a partner to First Nations communities in BC to advance community priorities and ensure support and services have been available throughout the pandemic. The FNHA's full statement on the societal consequences of BC's COVID-19 response is attached to this report as Supplement A, and can also be found online at: www.fnha.ca/Documents/FNHA-COVID-19-Statement.pdf.

Métis Nation British Columbia's Statement on the Consequences of COVID-19

The effects of COVID-19 and the public measures to stifle its spread have impacted the lives of many. Métis people have suffered from these impacts disproportionately when compared to the general population. Existing health and wellness disparities and systemic barriers to care have been exacerbated by the closure of schools and businesses, lockdowns, and lack of accessible resources.

Financial stressors and socioeconomic burdens during COVID-19 played a significant role in amplifying the pre-existing inequities that Métis people face. Pre-existing inequities from colonial capitalism, like food insecurity,[g] chronic illness, and the impacts of systemic violence, continued to create lasting effects on the health and wellbeing of Métis people. During the pandemic, many necessities such as food, medication, healthcare, personal protective equipment (PPE), utilities, and housing were unavailable or inaccessible. Reduced access to medical, emotional, and cultural supports also worsened mental wellness and increased isolation in our communities—especially for Métis women, youth, 2SLGBTQQIA+ people, and people living with disabilities. Our Elders and seniors also experienced a marked increase in social isolation as they reduced contact and stayed home in an attempt to keep safe from COVID-19.

Métis culture is built on relationships, connection, and Kaa-wiichihitoyaahk—"we take care of each other." To assist in alleviating the negative consequences of COVID-19, Métis Nation British Columbia (MNBC) supported Communities by piloting various assistance programs such as Elder and senior medical supports, mental health supports, rental and utility subsidies, food security programs, and other financial aid supports. According to the 2021 MNBC annual report, Métis Chartered Community volunteers have been on the front lines of assisting our communities with their immediate needs—including PPE, food and groceries, medicine, providing transportation for community members, technology support, emotional support, mental health first aid, and other financial assistance.

In addition to COVID-19, Métis families and communities were met with the realities of climate change, and the ongoing toxic drug supply crisis. Moreover, the uncovering of unmarked graves further solidified the stories shared by survivors in the Truth and Reconciliation report in 2015, of Indigenous children who never returned home from Residential schools. This uncovering of unmarked graves has further impacted the spiritual, emotional, physical, and mental wellbeing of Indigenous communities—including Métis Chartered Communities throughout COVID-19. The pandemic has compounded already existing issues experienced by the Métis Nation and has given urgency to the prioritization of the wellbeing and healing of our Nation which has been neglected for too long.

"Returning to strength and community is the root that connects us to our ancestors past and present. It is the pathway to our future."

– Louis De Jaeger, Former MNBC Minister of Health and Economic Development, 2022

[g] See also Chapter 6: Métis Food (In)security and Food as Medicine.

This report explores several key societal consequences of the COVID-19 pandemic and related response measures intended to protect public health. Chapters 2 through 14 of this report each summarize a topic identified as a high priority for monitoring population health and guiding public health decision-making during the pandemic.[h] The purpose of this report is to share some of what has been learned so far, to support residents during BC's ongoing recovery from the pandemic, and to inform the response to any future public health emergency.

[h] Each of these chapters initially appeared on the Societal Consequences Project website as a short individual "issue report."

FIGURE 1.1

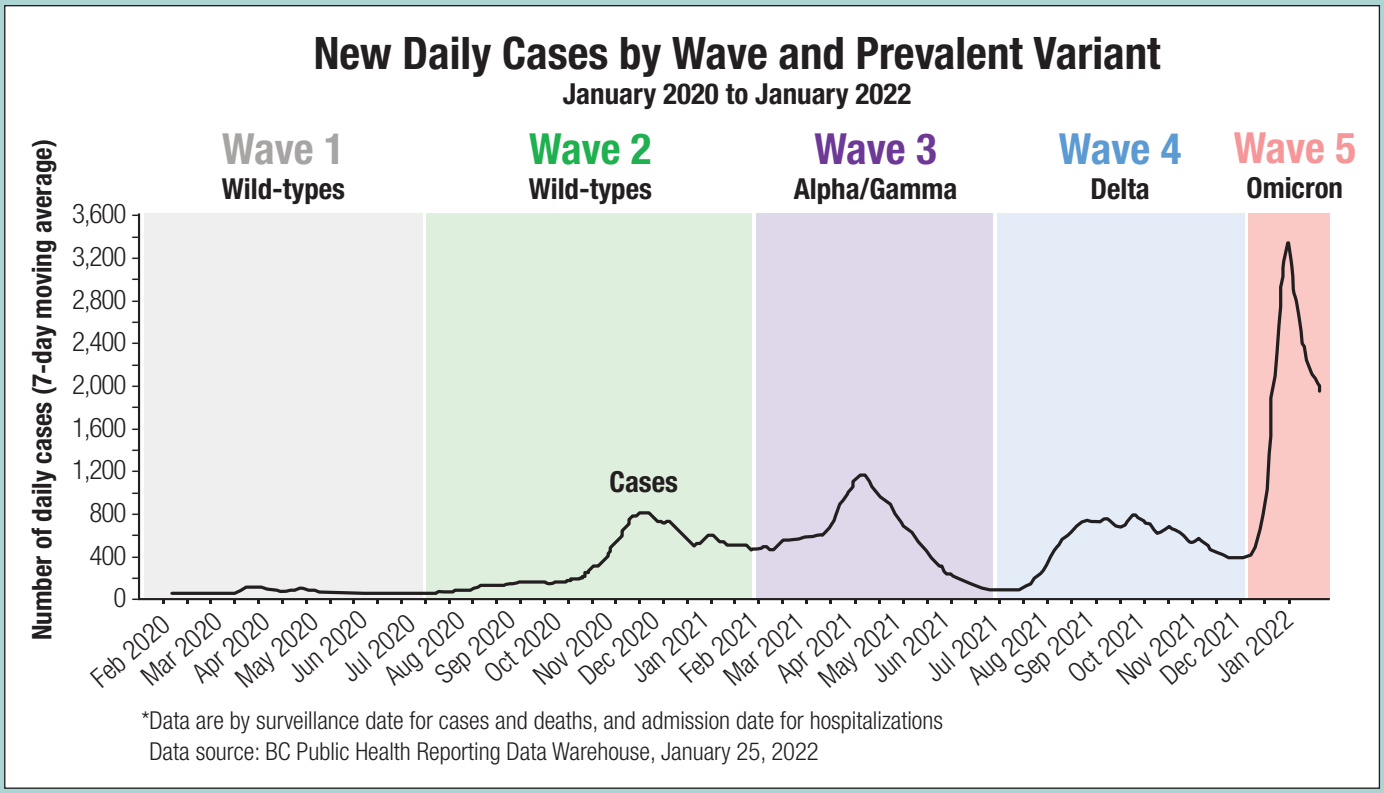


Figure 1.1 shows the number of COVID-19 cases in BC reported each day from January 2020 to January 2022. BC experienced five waves during this period, where each wave represented a substantial increase in COVID-19 cases. Generally, each of these waves was associated with one or more variants of the COVID-19 virus.

Examining the Societal Consequences of the COVID-19 Pandemic

The Office of the Provincial Health Officer (OPHO) and the BC Centre for Disease Control (BCCDC) were leaders in BC in terms of monitoring, responding to, and providing guidance about the COVID-19 pandemic. Similarly, First Nations and Métis leaders in BC worked in partnership with provincial leaders and took action to control the spread of COVID-19 and associated negative impacts in their communities.

The Provincial Health Officer and Public Health Emergencies in BC

The PHO is the senior public health official for BC. Under section 66 of BC's *Public Health Act*, the PHO is required to monitor and report annually on the health status of the population and to provide independent advice on public health issues and the need for related legislation, policies, and practices.

Part 5 of the *Public Health Act* grants the PHO certain emergency powers. These include the power to declare a public health emergency where there is "an immediate and significant risk to public health."[30] Declaring a public health emergency gives the PHO the additional power to make orders to protect public health in BC, including "order[ing] individuals to take preventive measures."[31]

FIGURE 1.2 **Timeline of COVID-19-related Events and Response Measures in BC, January 2020 to January 2022**

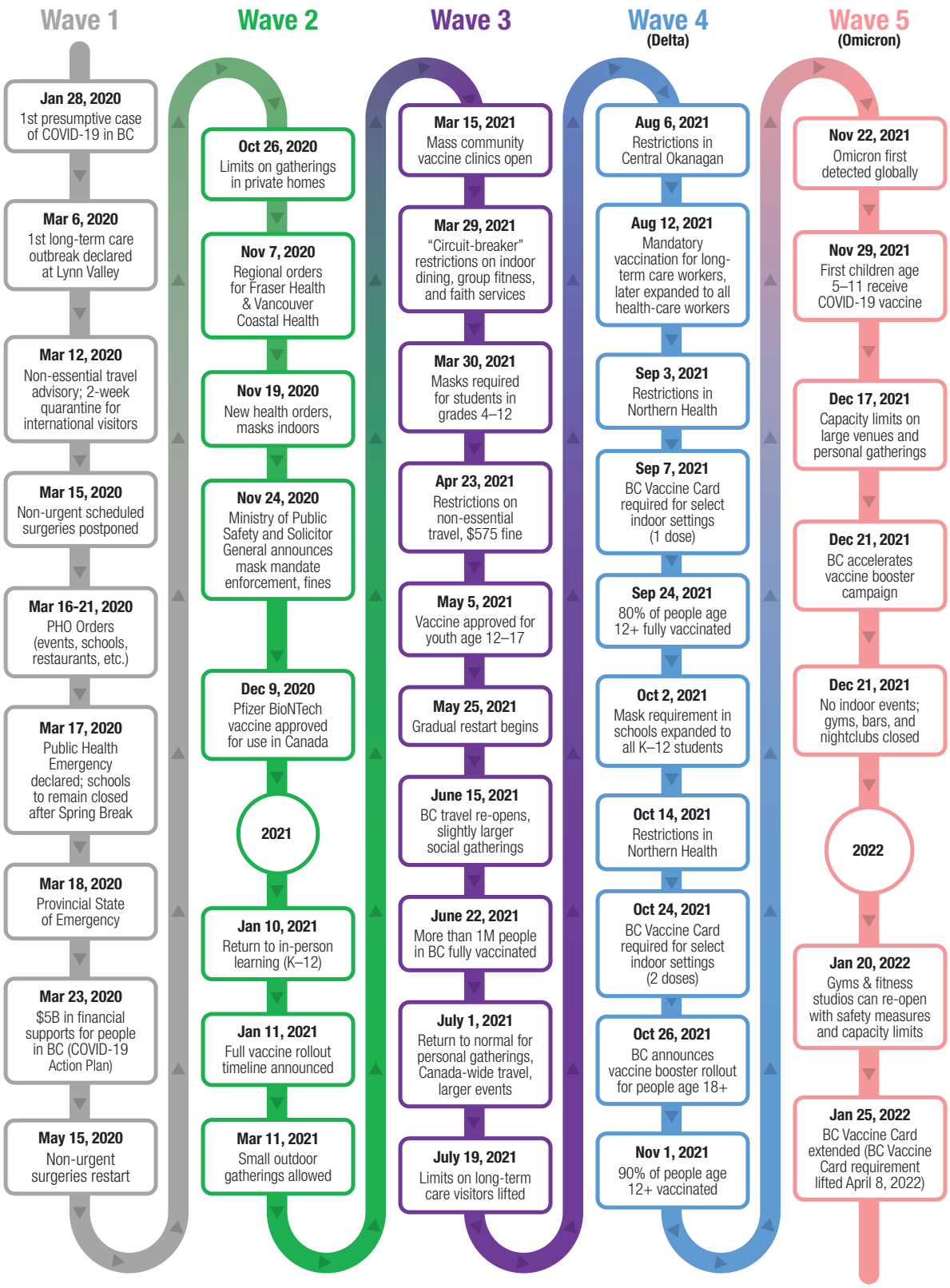


Figure 1.2 shows a timeline of key COVID-19-related public health events and response measures instituted from January 2020 to January 2022, during the same five waves of the pandemic shown in Figure 1.1.

Adapted from: BC Office of the Provincial Health Officer. COVID-19 Update: Two Years of Working Together. Victoria, BC: BC Ministry of Health; 2022 Jan 28.[29] For more information, see https://news.gov.bc.ca/files/1-28-22_COVID-19_Update.pdf.

The BC Centre for Disease Control

The BCCDC, a program of the Provincial Health Services Authority, is the BC public health service providing provincial and national leadership in disease surveillance, detection, prevention, treatment, policy development, and programming to promote and protect the health of the population. BCCDC's Population and Public Health Surveillance Program collects, analyzes, interprets, and shares data about demography, socio-economic status, health status, and chronic diseases, as well as about protective and risk factors among people in BC. BCCDC is committed to integrating anti-racism, quality and safety, and truth and reconciliation with Indigenous Peoples into all aspects of its work.[32]

BCCDC is also the provincial reporting centre for reportable diseases, including COVID-19, and works closely with the OPHO to understand and respond to public health issues.[32] BCCDC's public health monitoring work has included administering the BC COVID-19 Survey on Population Experiences, Action, and Knowledge (SPEAK), which generated much of the data in the following chapters of this report.[i]

In May 2020, recognizing the importance of gaining a better understanding of how the COVID-19 pandemic and related response measures were affecting the health and wellness of individuals and communities across BC, the OPHO and the BCCDC convened a project team and working group to begin exploring these impacts. That work evolved into the *Examining the Societal Consequences of the COVID-19 Pandemic* ("Societal Consequences") project, which is described later in this chapter.

Inherent Rights of Indigenous Peoples

Both the OPHO and BCCDC have obligations and responsibilities to uphold the self-determination and inherent rights of Indigenous Peoples in BC, and have committed to doing so, as outlined in the first pages of this report. This includes a commitment to upholding anti-racist approaches and truth and reconciliation with Indigenous Peoples, as well as foregrounding the inherent rights and title of BC First Nations and the inherent rights of all Indigenous Peoples in the territories now known as British Columbia. For more information, see the text box **Indigenous Peoples: Truth and Reconciliation**.

Commemorating Blueberry River First Nations' initial agreement with the Province of BC, October 7, 2021
Photo © Government of BC

[i] For more information about BC COVID-19 SPEAK, please visit http://www.bccdc.ca/health-info/diseases-conditions/covid-19/covid-19-survey.

Indigenous Peoples: Truth and Reconciliation

Section 35 of the *Constitution Act, 1982*, recognizes and affirms the existing Aboriginal and treaty rights of three distinct Indigenous Peoples in Canada: **First Nations**, **Métis**, and **Inuit**. This and other provincial, federal, and international laws, agreements, treaties, and court rulings set out the obligations of governments and systems to uphold the rights of Indigenous Peoples. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)[33] creates a framework for action, and Indigenous Peoples have provided detailed instructions through many of the instruments listed below. In response, the Province of British Columbia has made several foundational commitments to reconciliation and relationship-building with Indigenous Peoples in BC, including the following:[j]

- Adopting the Truth and Reconciliation Commission of Canada's 94 Calls to Action (2015): https://www2.gov.bc.ca/gov/content/governments/indigenous-people/new-relationship/truth-and-reconciliation-commission-calls-to-action
- Abiding by the 10 *Draft Principles that Guide the Province of British Columbia's Relationship with Indigenous Peoples* (2018): https://news.gov.bc.ca/files/6118_Reconciliation_Ten_Principles_Final_Draft.pdf
- Responding to the National Inquiry into Missing and Murdered Indigenous Women and Girls' 231 Calls for Justice, which include a focus on gender diverse and 2SLGBTQQIA+ people (2019): https://www2.gov.bc.ca/gov/content/safety/crime-prevention/community-crime-prevention/taking-action-mmiwg
- Acting on the 24 recommendations in *In Plain Sight: Addressing Indigenous-specific Racism and Discrimination in BC Health Care* (2020): https://engage.gov.bc.ca/addressingracism/
- Implementing the new BC Cultural Safety and Humility Standard (2022): https://healthstandards.org/standard/cultural-safety-and-humility-standard/
- Implementing the BC *Declaration on the Rights of Indigenous Peoples Act* (DRIPA, 2019) and the 89 actions outlined in the DRIPA Action Plan (2022–2027): https://declaration.gov.bc.ca/
- Maintaining a distinctions-based approach, recognizing that First Nations, Métis, and Inuit are distinct peoples with distinct histories, rights, priorities, interests, and circumstances.

These instruments and instructions outline a clear path forward for all people in BC and Canada to help build a more just and equitable society—one that promotes truth and reconciliation and honours and respects the inherent rights of Indigenous Peoples. It is our collective responsibility to uphold these foundational obligations in every aspect of our work.

[j] For more information on the Province of British Columbia's approach to reconciliation, please visit https://www2.gov.bc.ca/gov/content/governments/indigenous-people.

The Societal Consequences Project

The purpose of the Societal Consequences project has been to identify and monitor the effects of COVID-19 and related public health response measures on society in BC. This project has engaged with individuals and organizations with expertise in many domains of public health, including mental health and wellness. FNHA, MNBC, and the BC Association of Aboriginal Friendship Centres (BCAAFC) have supported the project by highlighting and integrating the perspectives, experiences, and priorities of Indigenous Peoples in BC.[k] Regional health authorities have assisted in identifying and responding to instances where health and wellness outcomes have been affected by factors such as geography, access to transportation, and other rural/urban differences. The contributions of many other educational, governmental, and community-based researchers and organizations have also been invaluable. Initially, the project's findings were used to understand when and where BC needed to adjust its pandemic response. The findings are now principally used to monitor the ongoing societal impacts of COVID-19 and related response measures, and to adjust and enhance pandemic preparedness plans. While some jurisdictions have taken up similar work, BC is the only province in Canada to have conducted this type of in-depth cross-sectoral examination of societal impacts both during the pandemic and beyond.

The project partners began by identifying the areas of society most likely to be impacted by COVID-19 and related response measures: population health and wellness, mental health and substance use, health-care services, community support systems and the economy, environmental health, and Indigenous health and wellness. The partners then developed a framework for prioritizing report topics in each of these areas, grounded in a population and public health approach and based on the urgency and severity of anticipated consequences in each area. This Priority-setting Framework (attached as Supplement B) was used to determine the order in which these topics were explored.

[k] The project partners are not currently able to provide Inuit-specific data or analyses due to a lack of formal relationships with Inuit living in BC and an absence of BC Inuit data governance protocols. Inuit-focused information and resources are available from Inuit Tapiriit Kanatami (https://www.itk.ca/) and Pauktuutit Inuit Women of Canada (https://pauktuutit.ca/).

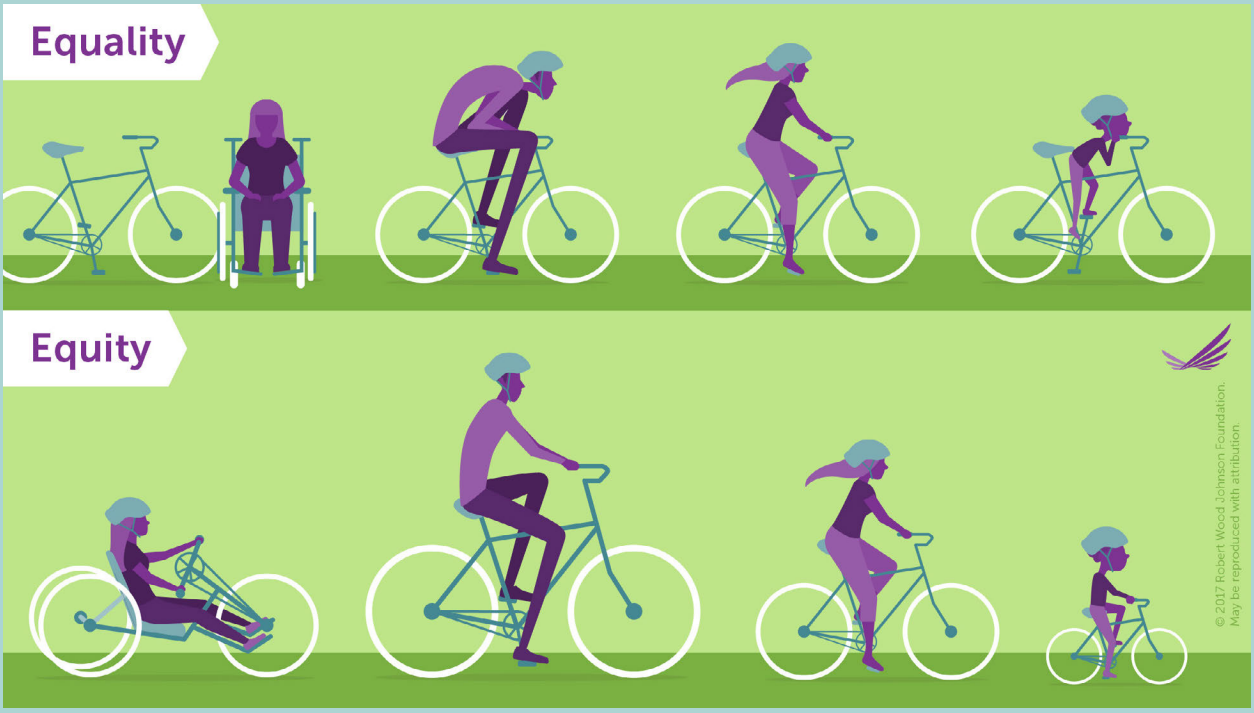
Health Equity and the Social Determinants of Health

COVID-19 has had substantial and widespread impacts on BC residents, and not everyone has experienced these in the same way. The many societal changes arising from the pandemic and associated response measures have affected critical support systems in our communities. As this report demonstrates, during the pandemic there was increased demand for community services and reduced capacity to provide them.

The chapters in this volume use a **health equity** framework, which means looking at how different groups of people in BC have been affected by COVID-19 response measures in different ways (see text box for a description and Figure 1.3 for a visual representation of health equity). Even before the COVID-19 pandemic, it was clear that some people in BC had unearned advantages, while others faced inequitable disadvantages and had less access to services, resources, and opportunities due to factors such as historical and present-day colonialism, stigma, discrimination, and systemic racism. Using a health equity framework helps illuminate how some groups may experience greater impacts than others as a result of the pandemic and related response measures.

The chapters in this report also focus on **determinants of health** (see text box and Figure 1.4 for an overview of adverse impacts of COVID-19 on the social determinants of health). For a population to be healthy and well, people must be able to fulfill basic personal needs, such as adequate income, food, and housing; a strong social network; access to health services; being safe in their homes and communities; and living with a stable global climate.[38,39,40] Self-determination, identity, cultural continuity, and

FIGURE 1.3 **Visualizing Health Equity: One Size Does Not Fit All**



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© 2017 Robert Wood Johnson Foundation[37]

Health equity exists when all people have equitable access to the opportunities, resources, and supports needed to achieve and maintain health and wellness. Everyone is therefore able to reach their full health potential, and no one is "disadvantaged from attaining it because of their race, ethnicity, religion, gender, age, social class, socio-economic status, or other socially determined circumstance."[36(p.1)]

Conversely, health *inequities* are "health differences between population groups—defined in social, economic, demographic or geographic terms—that are [inherently] unfair and avoidable."[36(p.1)] Although health inequities are systemic and therefore may not be avoidable at the individual level, inequities *can* be addressed at systems and societal levels.

For more information on health equity, please visit http://www.bccdc.ca/health-info/prevention-public-health/health-equity and https://nccdh.ca/learn/lets-talk/.

connection to the land are additional determinants of great significance to many Indigenous Peoples.[41,42,43] These and other determinants of health are foundational in the ways they shape health and wellness, both directly and indirectly. As a result, they are frequently characterized as "upstream"—meaning that they influence everything that happens "downstream," where the immediate health needs of a population can be seen (e.g., serious health events and illnesses, visits to the hospital emergency room).[I,44] Determinants of health are structural and deeply ingrained in society;[44] therefore, addressing them requires broad societal commitment and action. Many are beyond the scope of the health system or require coordination between public health and other sectors.[45]

[I] The upstream/downstream concept of health is based on the story of a bystander who sees someone caught in a river current. After helping the person out of the river, the bystander notices more people struggling in the current, and helps each one out. Finally, the bystander goes upstream to see why people keep falling in the river and to try to stop it from happening. "Upstream" therefore represents public health's focus on prevention and health promotion—the important work of keeping people from falling in the river in the first place.

Determinants of health are factors and influences that shape health and wellness across the lifespan. These include the physical environment, personal characteristics and behaviours, and cultural, environmental, social, and economic factors. One subset of determinants of health, the "social determinants," accounts for as much as half of what makes us healthy and well. Social determinants of health are non-medical factors such as income, education, literacy, employment and working conditions, social environments, housing, food security, social inclusion, connections to culture and language, Indigenous self-determination, freedom from violence and oppression (e.g., due to forces such as settler colonialism, racism, sexism, and ableism), and non-discrimination (i.e., not being discriminated against based on attributes like gender and sexual identity or expression, affectional orientation, race, or place of origin). Individual social determinants of health may support or detract from health and wellness.

For more information about determinants of health, see *Taking the Pulse of the Population: An Update on the Health of British Columbians* (2019) at www.health.gov.bc.ca/pho/reports/annual.

The Societal Consequences project's focus on social justice, health equity, and the social determinants of health is reflected in its attentiveness to markers of identity such as sex, gender, race, and Indigeneity. For example, this project has used tools such as Gender-based Analysis Plus (GBA+)[m] and the "Grandmother Perspective" framework espoused by the Office of the BC Human Rights Commissioner for the collection of disaggregated race-based data.[n] These tools promote a better understanding of how COVID-19 response measures have been experienced differently based on factors such as age, sex and gender identity, socio-economic status, population density (rural/urban), immigration status, race/racialization, and Indigenous identity.

For many Indigenous Peoples, public health restrictions during COVID-19 added to existing stresses and inequities such as intergenerational and colonial trauma, social exclusion, ongoing racism and discrimination, and lack of access to culturally safe health care.[o] In addition, settler-colonial governments and racist policies undermined Indigenous communities' rights to self-determination in responding to COVID-19.[47,48,49] This project recognizes the ongoing impacts of settler colonialism, racism, and discrimination in the health-care system[8] and throughout society, and strives to make progress toward upholding Indigenous self-determination and truth and reconciliation. FNHA, MNBC, and BCAAFC helped guide the development of surveys and reports linked to this project, ensuring that the project was grounded in a strengths-based approach to Indigenous health and wellness and upheld Indigenous data governance standards.[p] Indigenous and non-Indigenous project partners worked together with an intention to disrupt the status quo of population health reporting and support Indigenous self-determination by creating space for First Nations and Métis partners to share their experiences of the pandemic.

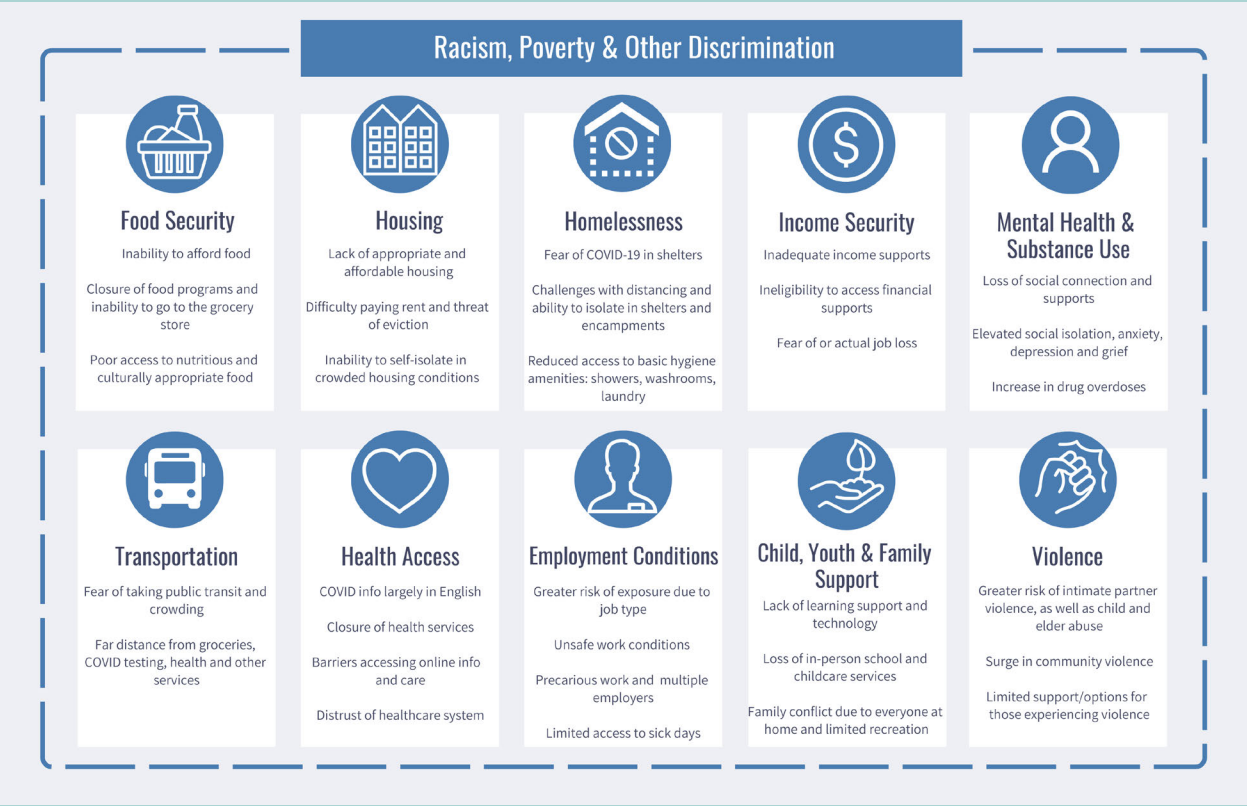
[m] For more information on GBA+, please visit https://women-gender-equality.canada.ca/en/gender-based-analysis-plus/what-gender-based-analysis-plus.html.

[n] For more information on the Grandmother Perspective, please visit https://bchumanrights.ca/publications/datacollection/.

[o] Note that "access" has multiple dimensions, including the existence of a program or service; its availability in terms of location, open hours, and adequate staffing; supports that facilitate access (e.g., transportation, child care); and cultural safety (the degree to which an environment is free of racism and discrimination, where people feel safe when receiving health care).

[p] Indigenous data governance standards include the First Nations principles of OCAP® (ownership, control, access, and possession) and the principles of OCAS (ownership, control, access, and stewardship) embraced by Métis Nation British Columbia. For more information, see the First Nations Information Governance Centre (https://fnigc.ca) and the *Framework for Research Engagement with First Nation, Metis, and Inuit Peoples* from the University of Manitoba Faculty of Health Sciences (https://umanitoba.ca/health-sciences/sites/health-sciences/files/2021-01/framework-research-report-fnmip.pdf).

FIGURE 1.4 **Adverse Impacts of COVID-19 and Related Response Measures on Determinants of Health**



Shared with the permission of Toronto Public Health.[46(p.5)]
For more information, see https://www.toronto.ca/legdocs/mmis/2020/hl/bgrd/backgroundfile-157257.pdf.

Kitsumkalum First Nation, June 2020.
Tara Lynn111/Shutterstock.com

In addition to the FNHA and MNBC statements that appear earlier in this chapter, this has included collaborating on the prioritization of report topics and the creation of Chapter 6 of this report: Métis Food (In)security and Food as Medicine.

Despite collaboration throughout the Societal Consequences project, inequitable resourcing and the need for FNHA, MNBC, and BCAAFC to focus on supporting Indigenous people and communities throughout the pandemic prevented their equal and full participation. These organizations faced a very high burden of pandemic response, as the pandemic layered on to the heavy weight of colonial harms and pre-existing socio-economic and health inequities. The BC PHO and BCCDC leadership therefore raise their hands to these organizations in appreciation of the added hard work they took on throughout the pandemic to support the health and wellness of Indigenous people and communities across BC. Lessons learned from this project have informed internal processes at the OPHO and the BCCDC that support unlearning and undoing systemic white supremacy and Indigenous-specific racism. Continuing this work facilitates anti-racist approaches and can improve future collaboration with Indigenous organizations.

Organization of this Report

Chapters 2 through 14 of this report each explore a particular aspect of the societal consequences of COVID-19 and related response measures in BC. The final chapter discusses key themes and challenges that emerged and makes recommendations for moving forward.

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Chapter 2

Anti-Asian Racism, Stigma, and Discrimination

(Reported July 2021)

Key Findings:

- Targeted anti-Asian racism and discriminatory acts have increased in frequency and severity throughout communities in BC and across Canada during COVID-19.

Situation

There has been an increase in racism and intolerance in BC during the COVID-19 pandemic, directed against Chinese populations and people perceived to be of Asian descent.

Background

Anti-Asian racism and biases are not new in the BC and Canadian context. Past instances include explicit historical federal policies discriminating against Chinese communities (e.g., Chinese Head Tax (1885), Chinese Exclusion Act (1923-1947));[1] historical denial of voting rights for those of Asian descent (1885, 1920);[2] targeted attacks on Japanese and Chinese communities organized by the Asiatic Exclusion League during the Vancouver Anti-Asian Riots (1907);[3,29,30] racialization of drug laws in Canada specifically targeting Chinese individuals (1920s);[4,5] and incarcerating Japanese Canadians during the Second World War (1942).[2] More recently, this includes racialized discrimination targeting Chinese and Asian communities during the SARS outbreak in 2003.[3,6]

While interpersonal and systemic racism persists in BC overall, specific drivers of racism towards Chinese and Asian populations during the COVID-19 pandemic have included:

- The origins/first documentation of the virus in the city of Wuhan, China;
- Stigmatizing and incorrect language used when speaking about COVID-19;[7] and
- Initial international travel restrictions by several countries limiting travel specifically from China.[8]

Numerous reports and publications have identified a need to reduce barriers to accessing culturally safe and appropriate care during COVID-19, including safe spaces, respectful interactions and access to translated materials.[18,19,20,21]

Truth and Reconciliation: Indigenous-specific Racism and Discrimination

While this chapter specifically focuses on the racism and discrimination faced by Asian people during COVID-19, the impact of structural and interpersonal racism, ongoing discrimination and related stigma on Indigenous Peoples (First Nations, Métis, and Inuit) during COVID-19 is also a serious issue. The pervasiveness of Indigenous-specific racism and discrimination in BC's health-care system are well described in the *In Plain Sight* report (https://engage.gov.bc.ca/addressingracism/). The report also details concrete actions that are required to arrest racism and its associated harms.

Findings

Evidence from BC and Canada clearly demonstrates that COVID-19 has generated and/or worsened targeted racism towards Asian Canadians. It is reflected in a number of ways, including racist graffiti/social media messaging, being called names or insulted, and being threatened, intimidated and assaulted.

See Table 2.1: Perceived and reported anti-Asian racism and discrimination in BC and Canada during COVID-19 for select summary of findings related to increased racism and hate crimes being reported across BC and Canada against Asian community members.

Table 2.1 Perceived and Reported Anti-Asian Racism and Discrimination in BC and Canada During COVID-19

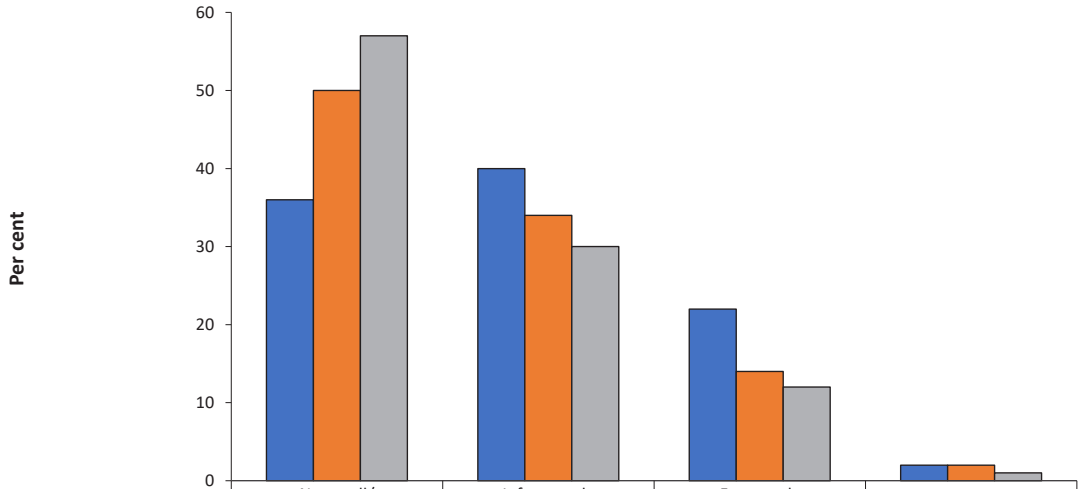
Source	Source Notes	Findings
Vancouver Police Department	• Public reporting via VPD Hate Crime phone line and online forms (including Chinese-translated) • Scope: regional (Vancouver-only)	• 155 hate-related police reports have been filed, including those targeting Asian communities (up from 69 in the same time period in 2019).[9] • Anti-Asian racism complaints (ranging from mischief [e.g., graffiti] to physical assaults) have spiked from 7 in 2019 to 66 in the first six months of 2020.[10]
Angus Reid Institute Survey[11] (see also: Figure 2.1)	• Online survey • Collection date: June 15–18, 2020 • N=516 (representative randomized sample of Canadian adults self-identifying as ethnically Chinese) • Scope: national	As a direct result of COVID: • 50% reported being called names or insulted; • 43% have been threatened or intimidated; • 30% report being exposed to racist graffiti or social media messaging; • 29% report being made to feel as though they posed a threat to the health and safety of others; • 61% have altered daily practices to avoid negative social encounters; and • 64% believe negative media portrayal led to negative views of Chinese ethnicity in North America.
Statistics Canada[12] (see also: Figure 2.2)	• Crowdsourcing online survey on the impacts of COVID-19 on Canadians' perceptions of safety • Collection date: May 12–25, 2020 • N=>43,000 Canadians • Scope: national	• 30% of those identifying as Chinese reported having perceived an "increase in harassment or attacks on the basis of race, ethnicity, or skin colour" in their neighbourhood since the start of the pandemic. • Visible minority[a] respondents were three times more likely to believe discriminatory attacks have increased since the pandemic began than those who did not report being visible minorities.

[a] See Appendix 2-A for definition of visible minority.

Source	Source Notes	Findings
Statistics Canada	• Canadian Perspectives Survey Series: third wave • Collection date: June 15–21, 2020 • N=> 4,000 respondents • Scope: all 10 provinces	• 20.6% of those identifying as a visible minority reported fear of targeted stigmatization due to racial identity where this was significantly higher among immigrants (41.7%) than Canadian-born respondents (8.6%).[13]
Chinese Canadian National Council for Social Justice[14,15]	• Automated phone interview • Collection date: April 24, 2020 • N=1,130 (18 years or older) • Scope: regional (limited to Vancouver, Toronto, Montreal)	• 4% reported having concerns that all Chinese or Asian people carry COVID-19. • 13% reported being aware of a neighbourhood contact who had experienced racial bias due to COVID-19.
Project 1907 (in partnership with Chinese Canadian National Council Toronto Chapter, Chinese Canadian National Council for Social Justice, and Vancouver Asian Film Festival)[16]	Online COVID-19 Racism Incident Reporting form Collection date: April 23–May 18, 2020 with updated information in September 2020 N=619 respondents Scope: national	Overview of anti-Asian incidents: • Sites: public spaces (e.g., sidewalk, park) (45%); grocery store (14%); public transit (8%). • 30% included targeted coughing, spitting, physical violence. • 65% included verbal harassment (e.g., name calling, racial slurs, threats, swearing). • 60% were reported by female survey respondents nationally, and 70% were reported by female survey respondents in BC. • 83% were targeted at individuals from East Asian backgrounds.

FIGURE 2.1

Chinese Canadians' Experience of Racism in the Past Three Months, Canada, June 2020



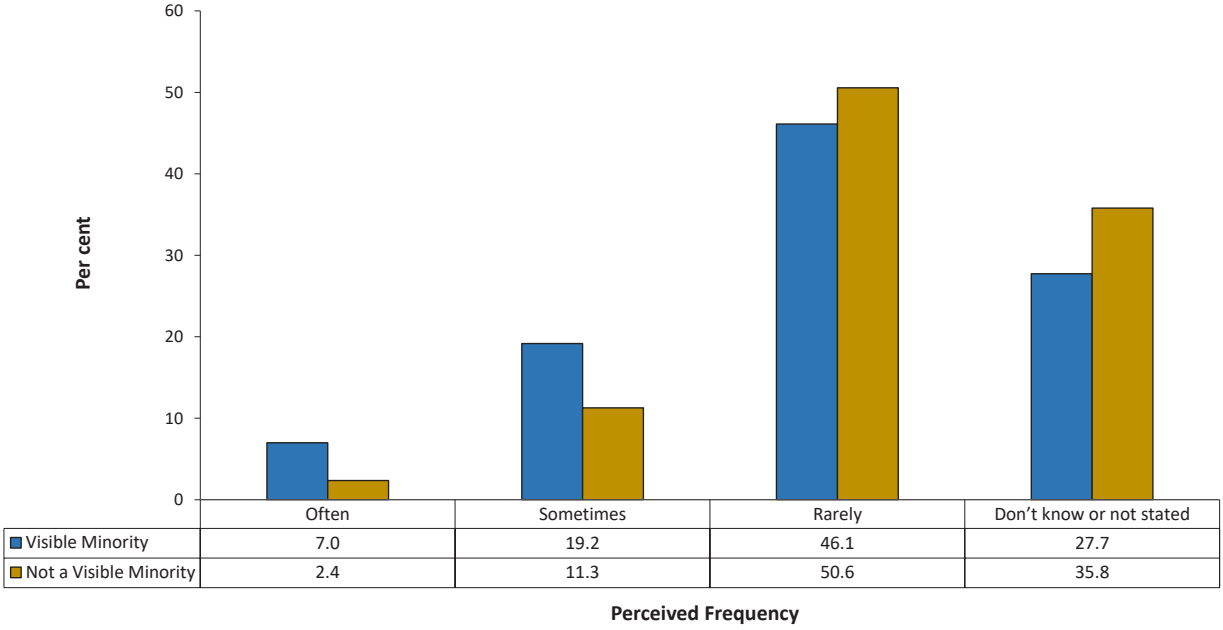
	Not at all/ Never (1)	Infrequently (2-3)	Frequently (4-5)	Always (6)
Treated With Less Respect Than Other People	36	40	22	2
Called Names or Insulted	50	34	14	2
Personally Threatened or Intimidated	57	30	12	1

Response

Notes: These are in response to the question "Because of my ethnicity, during COVID-19 I have been...", on a six-point scale with 1 being "Never" and 6 being "Always." Survey respondents are a randomized sample of Canadian adults who self-identify as ethnically Chinese and are members of Angus Reid Forum or Inclusive Insights (N = 516). The survey was conducted June 15-18, 2020.
Source: Angus Reid Institute, COVID-19 in Canada survey. http://angusreid.org/covid-19-in-canada - accessed October 30, 2020. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, November 2020.

Additional data analyses were completed for the Angus Reid Institute survey summarized above (see Table 2.1: Perceived and Reported Anti-Asian Racism and Discrimination in BC and Canada during COVID-19). As shown in Figure 2.1, in a national survey, 22% of Chinese Canadian respondents reported they were “frequently” treated with less respect than other people due to their ethnicity, since mid-March, 2020, and 2% believed this was “always” the case. Additionally, 16% were “frequently” or “always” called names or insulted, and 13% have “frequently” or “always” been personally threatened or intimidated based on their ethnicity from March to June 2020.

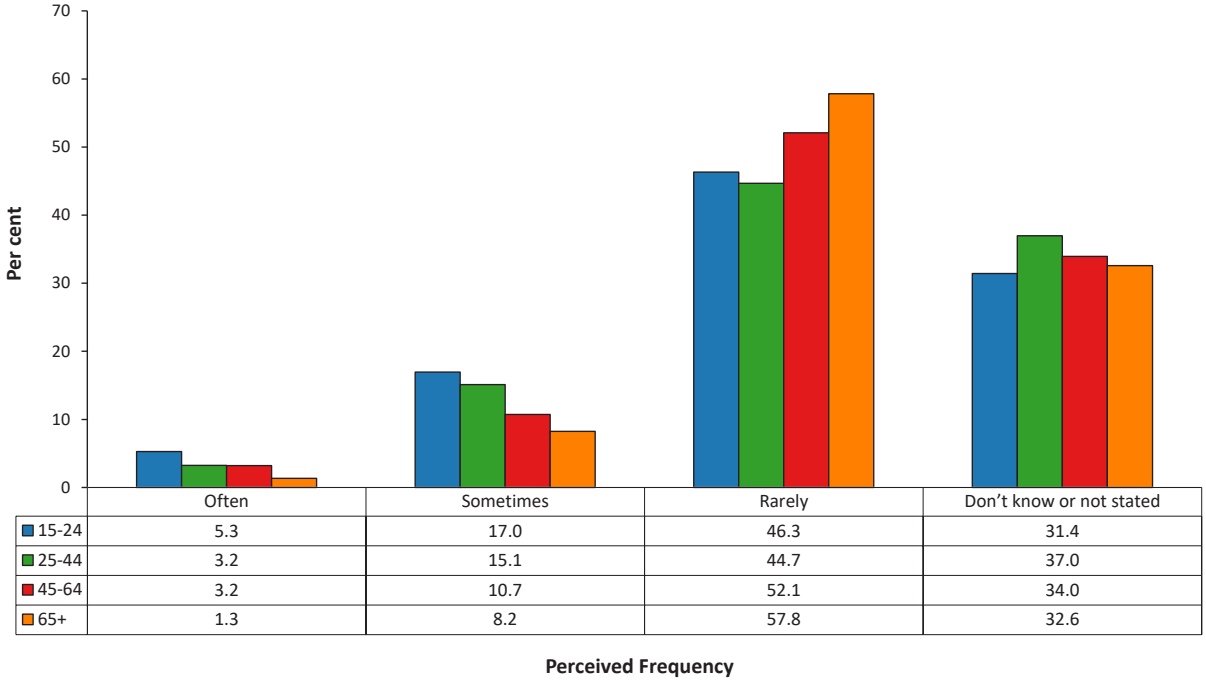
FIGURE 2.2



Notes: This survey is based on crowdsourcing data (N = 4,870). This report recognizes that the United Nations Committee on the Elimination of Racial Discrimination called on Canada to "reflect further" on the use of the term "visible minorities." Due to data limitations, we included "visible minority" groups in this report to show inequitable outcomes between racialized groups and non-racialized groups, that result from many factors, including historic and current systemic discrimination and racism.
Source: Statistics Canada, Impacts of COVID-19 on Canadians: Data Collection Series, Perceptions of Safety, Public Use Microdata File. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, July 2020.

Figure 2.2 shows the results of a Statistics Canada survey about COVID-19 (*Impacts of COVID-19 on Canadians Data Collection Series, Perception of Safety*). The survey asked about the perceived frequency that visible minority people were attacked based on their race, ethnicity, or skin colour, during COVID-19 in May 2020. Among respondents who self-identify as a visible minority, 26.2% perceived that racialized attacks occurred "often" or "sometimes." Additionally, respondents who do not identify as a visible minority were more likely to report that attacks were based on race, ethnicity, or skin colour "rarely."

FIGURE 2.3



	Often	Sometimes	Rarely	Don't know or not stated
15-24	5.3	17.0	46.3	31.4
25-44	3.2	15.1	44.7	37.0
45-64	3.2	10.7	52.1	34.0
65+	1.3	8.2	57.8	32.6

Notes: This survey is based on crowdsourcing data (N = 4,925).
Source: Statistics Canada, Impacts of COVID-19 on Canadians: Data Collection Series, Perceptions of Safety, Public Use Microdata File. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, November 2020.

Figure 2.3 shows results from the same Statistics Canada survey described above (see Figure 2.2) about perceived frequency of attacks based on race, ethnicity, or skin colour, by age. Younger people were more likely to report perceived frequency of racialized attacks as "often" or "sometimes," with perceived frequency decreasing with respondent age.

Equity Considerations

It is important to understand that the experiences of interpersonal racism take place within pre-existing systemic and institutional racism in BC; it creates additional layers of unequal impacts and potential harms for racialized citizens. In addition to the explicit experiences of racism and discrimination, results from BC's COVID-19 SPEAK Survey (see Appendix 2-A for further details) demonstrate how Asian groups have differently experienced the impacts of COVID-19 and related response measures.[17] Findings include:

- Respondents who were most likely to report having difficulty accessing health care were those who identified as Japanese/Korean (30.3%), multiple or other ethnicities (26.7%), or South Asian (26.5%).
- The highest proportion of respondents who reported their children experienced impaired learning during the pandemic identified as Chinese (81%) or Japanese/Korean (78.2%).
- 60.8% of individuals who identified as Japanese or Korean reported more stress on their child as a result of school closures (see Appendix 2-A for further information).

Increased racialized attacks during COVID-19 have multiple layers of inequities, shown in preliminary data:

- Gendered differences have been reported, whereby Asian women are disproportionately attacked, and are also more likely than Asian men to report fear of stigmatization because of the attack.[13,16]
- A higher proportion of Canadians living in urban areas reported fears of being stigmatized than those in rural areas (21% and 12% respectively), which may in part reflect the higher proportion of visible minority populations in urban areas.[13]

Actions Initiated or Planned to Address Unintended Consequence

This list provides examples of actions taken or initiated and is not a comprehensive list. Readers are encouraged to visit the websites of ministries involved in this work to find the latest information.

- In May 2020, the Victoria Immigrant and Refugee Centre Society (VIRCS) was selected as the new Resilience BC Hub to connect communities with information, training and resources throughout the province and address systemic, institutionalized racism.[22]
- The Resilience BC Anti-Racism Network is working to address systemic and institutionalized racism, and is offering new resources, such as a new online tool for reporting incidents of racism and hate, and sharing multi-lingual videos.[23,24]
- In June 2020, the BC Ministry of Public Safety and Solicitor General announced the creation of an all-party committee to engage with communities and experts on modernizing the 45-year-old *Police Act* to reflect today's challenges and opportunities for delivering police services with a specific focus on systemic racism.[25]
- In June 2020, Premier Horgan requested the Office of the Human Rights Commissioner and the Office of the Information and Privacy Commissioner to research and present recommendations to the province on the collection of race and ethnicity-based data, to better understand how the pandemic is affecting racialized communities differently to ensure equitable, fair planning for BC's recovery.[26]
- In July 2020, the Ministry of Education announced the first official meeting of the new Community Roundtable on Anti-Racism, which functions to ensure development of an ant-racism action plan and to strengthen the K–12 curriculum, honouring the diversity, cultures, and beliefs of all students and staff.[27]

- In 2021, across Canada, May 10 was marked the Day of Action Against Anti-Asian Racism. Similarly, the Government of British Columbia announced that May 23-29, 2021 will be recognized as Anti-Racism Awareness Week, with many new initiatives, including the launch of a new racist incident hot line, new legislation for race-based data collection, and the introduction of the first anti-racism act in BC.[28]
- BC will be introducing anti-racism data legislation in the spring of 2022 based on recommendations by the Office of the Human Rights Commissioner and the Office of the Information and Privacy Commissioner. [31]
- The Province will be creating a racist incident hotline in response to an increase in racist activities throughout BC. This is intended to be a multilingual service, not delivered by police, for British Columbians to report racist incidents and receive needed supports.[32]
- Research related to this topic includes the following:
  - *COVID-19 and Mental Health Resources for Asians in Canada*, led by Fred Chou (University of Victoria; funded by the Faculty of Education COVID-19 Emergency Research Fund); and
  - *Mediating Contagion: International Students Negotiating Media, Policy and Institutional Responses for COVID-19*, led by John Paul C Catungal (University of British Columbia; funded by Social Sciences and Humanities Research Council of Canada (SSHRC)).

Considerations for Further Action

This section provides considerations for action based on the findings of this chapter. These are not formal recommendations, but rather ideas to consider when shaping recommendations and actions related to this topic.

1. Actively address racist, discriminatory acts, including creating effective strategies for non-visible minorities to be allies to those impacted.
2. Ensure easily accessible, understandable, and culturally relevant supports including translated materials are widely distributed. This is especially important to address concerns (e.g., vaccine hesitancy, safety) and misinformation.
3. Increase availability of culturally safe, relevant, and appropriate health services. This includes appropriate and safe treatment in all health settings, and increased mental health support to assist those affected by racism and discrimination.
4. Enhance anti-discriminatory and intolerance-related content in educational curriculum at all levels of schooling, including secondary and post-secondary settings.

Appendix 2-A: Data Methodology Notes

1. Charts provided by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer.

For questions contact: HLTH.PHSE@gov.bc.ca.

2. Statistics Canada Survey on the Impacts of COVID-19 on Canadians

The Statistics Canada surveys on the Impacts of COVID-19 on Canadians are designed to assess the quality and viability of a more timely collection model using willing participants (voluntary) and web-only collection. In the context of this product, the term *crowdsourcing* refers to the process of collecting information via an online questionnaire. The crowdsourcing data was collected through a completely non-probabilistic approach which does not involve a random selection of respondents like other traditional Statistics Canada surveys. Consequently, results pertain only to the participants and cannot be used to draw conclusions about the larger population of Canadians. Standardized benchmarking factors have been applied to compensate for the over/underrepresentation of the participants resulting from the use of crowdsourcing data.

3. Use of the term "visible minority" in Statistics Canada surveys

Statistics Canada uses the term "visible minority" according to the definitions in the *Employment Equity Act*. The same terminology is still being used in order to maintain historical comparability with survey data that have been collected over many years. The categories refer to 'persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.' The visible minority variable includes the following classifications: South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean, Japanese, Visible minority, n.i.e. (n.i.e. meaning 'not included elsewhere'), Multiple visible minorities and Not a visible minority.

4. BC COVID-19 SPEAK Survey

Survey administration: The BC COVID-19 SPEAK Survey was primarily an online survey administered from May 12, 2020 to May 31, 2020 across British Columbia. A call centre was also created to support individuals who wished to take the survey with assistance. The survey was available in English and Simplified Chinese, with language guides in downloadable electronic format available for 9 other languages (Arabic, American Sign Language, Farsi, French, Korean, Punjabi, Spanish, Traditional Chinese and Vietnamese). All other languages were available through the call centre from PHSA Provincial Language Services. The BC COVID-19 SPEAK Survey was funded by the BCCDC Foundation for Public Health.

Sampling: The target population for the survey was residents of British Columbia who were 18 years of age or older. In order to achieve a large and representative sample, a response target of 2% of the urban population and 4% for rural/remote communities were set as determined by the Community Health Service Area (CHSA) density designation. Targets were also established for age, gender, income, education and ethnicity by each geographic area. Progress towards these targets was monitored daily and purposeful promotion and stakeholder outreach was done in order to better reach certain geographies and population demographics. Population targets were surpassed for each Regional Health Authority. However, not all sub-regions or demographic groups by geography did reach their target. Specifically, rural communities, populations with lower education, lower incomes, and some visible minorities were less reached and were prioritized for outreach. The final analytical dataset, which only included surveys where a Health Service Delivery Area geography, age, and gender were assigned and where the respondent must have completed at least 33% of the survey, contained 394,382 responses.

Weighting: Statistical weighting is often used in large surveys to ensure that the sample of collected responses reflects the overall target population. This type of weighting compensates for the fact that certain demographics are less likely to respond to a survey. By establishing detailed socio-demographic targets at the outset for each geographic area of interest within the survey area, it allowed for more focused participant recruitment with the ultimate benefit of applying smaller weights. The final BC COVID-19 SPEAK Survey sample was weighted using 2016 Canadian Census data by demographic and geographic variables, as appropriate (e.g., age, sex, ethnicity, education level, local health area), to account for residual differences in sample demographics and to ensure that the sample is as representative as possible of the overall geographic population that is being reported on.

Data limitations: BC COVID-19 SPEAK Survey is a non-randomized voluntary survey subject to self selection bias among those who choose to respond to the survey. To adjust the sample to the population and enhance representativeness, quota-based sampling by geography and post collection weighting are used. Correction for unknown population characteristics is not possible. This limitation is not unique to non-randomized surveys as self selection bias is apparent in voluntary randomized surveys as well where a significant proportion of those offered to take a survey choose not to participate. Despite attempts for outreach to underrepresented communities and statistical weighting and the creation of multiple points of access, this survey may be limited in its ability to fully reflect the experiences of members of communities unable to complete the survey due to language or access barriers.

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Chapter 3

Gender-based Violence

(Reported November 2022)

Key Findings:

- The COVID-19 pandemic and response measures to limit the spread of COVID-19 increased the risk, and likely also the prevalence and severity, of gender-based violence (GBV) in BC, while reducing access to related support services.[1,2,3]
- The number of calls to the Battered Women's Support Services crisis line in Vancouver significantly increased during the first month of COVID-19.[4]
- Data gaps make it difficult to accurately understand the prevalence of GBV in the BC population, how often it occurs, and the associated short- and long-term impacts on mental, emotional, physical, and spiritual health and wellness.
- GBV disproportionately affects some populations including gender diverse and non-binary people, those who identify as 2SLGBTQQIA+,[a,5,6] immigrants and refugees, people of colour, Indigenous women and girls,[2,7] individuals living with disabilities, people in rural and remote areas, sex workers, children (especially girls) and youth, pregnant people, and new parents.[8]
- The report *Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls*[9,10] confirmed that due to structural racism and impacts of colonization, Indigenous women, girls, and 2SLGBTQQIA+ people are at higher risk of violence. The National Inquiry into Missing and Murdered Indigenous Women and Girls issued 231 Calls for Justice that have yet to be fully addressed by either the Government of Canada or the Government of British Columbia.[11]

[a] 2SLGBTQQIA+ stands for Two-Spirit, lesbian, gay, bisexual, transgender, queer, questioning, intersex, and asexual. The plus sign acknowledges the many sexual and gender minority people who do not otherwise see themselves reflected in this acronym.

Situation

The COVID-19 pandemic and measures put in place to protect British Columbians from the spread of COVID-19—specifically those encouraging isolation or sheltering in place early in the pandemic—may have increased overall life stressors (e.g., financial strain, lost jobs, suspension of in-school learning) for some people. In some cases, these measures also put people experiencing, or at risk of, violence into closer and more sustained contact with abusers. The cumulative impacts of these factors likely contributed to increased risk of gender-based violence (GBV) and substantial increases in both the prevalence and the severity of GBV in BC during the pandemic. GBV has become known, in Canada and around the world, as the "shadow pandemic."[1,2,3]

If you fear for your immediate safety, have been injured, or are thinking about harming yourself:

- Call 9-1-1 (if available in your community) or call your local police station.
- Go to a hospital emergency unit.
- Call or text VictimLinkBC: 1-800-563-0808 toll-free, any time, day or night—for crisis support and information for victims of family violence, sexual violence, and all other crimes.
- Call the Crisis Centre of BC: 1-800-**SUICIDE (1-800-784-2433)** toll-free, any time, day or night—for immediate, non-judgmental support. Find additional resources online at https://crisiscentre.bc.ca/get-help/.
- Contact the 24/7 crisis line of Battered Women's Support Services at **1-855-687-1868**, or text **604-652-1867**.
- The Hope for Wellness Help Line is available for Indigenous people across Canada, 24/7 at **1-855-242-3310** or via online chat at www.hopeforwellness.ca.
- The Indian Residential School Survivor Society crisis line for First Nations people in BC is available 24 hours a day for anyone experiencing pain or distress as a result of their Residential School experience. If you need assistance, please call **1-800-721-0066**.

Find Anti-violence Services, Transition Houses, and Safe Homes in BC

- Ending Violence Association of BC: https://endingviolence.org/need-help/services/.
- BC Society of Transition Houses: https://bcsth.ca/get-help-now/.

Background

What is Gender-based Violence?

Gender-based violence (GBV) is violence committed against someone based on their sex or gender identity, gender expression, or perceived gender. It can be physical, emotional, psychological, or sexual in nature, and can include any word, action, or attempt to degrade, control, humiliate, intimidate, coerce, deprive, threaten, or harm another person.[8] GBV is an umbrella term that includes, but is not limited to, sexual assault, intimate partner violence, criminal harassment (stalking), and violence against women and girls.[8,12,13]

Intimate partner violence (IPV) describes violence, abuse, or aggression inflicted by one partner against another in a romantic or intimate relationship (i.e., between dating, married, or common-law partners, or spouses). IPV can occur between current or former partners.[2,14] As with GBV, it includes any form of interpersonal violence (e.g., physical, sexual, emotional, financial, psychological, verbal).[15] IPV may also be referred to as *domestic violence*[15] or *spousal violence*.[16]

Violence against women and girls (VAWG) is a subset of GBV. It is important to highlight VAWG because the vast majority of GBV is perpetrated against women and girls.[17] VAWG[b] is a human rights violation,[3] in many cases a crime,[18,19] that can lead to significant short- and long-term effects for survivors and those who are exposed to or witness it. Impacts are varied, but include physical,[14,20,21] emotional,[22] and social harms,[20] as well as economic costs (e.g., labour market withdrawal, costs to the health and justice systems), and may be fatal. In Canada in 2009, the personal and systemic cost of GBV (e.g., costs to the justice system, health-care system, and individuals) was estimated at $7.4 billion.[25,26]

[b] Provincial datasets typically collect sex data (e.g., intersex/female/male) but not gender data (e.g., non-binary/woman/girl/man/boy). In many cases, however, the collection of sex data is conflated with gender by both the data collectors and the residents of BC who submit their data. While this document focuses on gender throughout, the intent is not to further conflate sex and gender.

Truth and Reconciliation: Violence against Indigenous Women, Girls, and 2SLGBTQQIA+ People

As the original Peoples of what is now known as Canada, First Nations, Métis, and Inuit have pre-existing rights (commonly referred to as Indigenous or Aboriginal Rights) that are recognized and affirmed by Section 35 of the *Constitution Act*, 1982. First Nations, Métis, and Inuit are distinct Peoples, and each have their own customs, practices, and traditions.

As outlined in *Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls* (https://www.mmiwg-ffada.ca/final-report/), Indigenous women, girls, and 2SLGBTQQIA+ people face lasting and deliberate human and Indigenous rights violations and abuses. This has been especially true since the pandemic began, as evidenced by data from the Native Women's Association of Canada (https://nwac.ca/media/2020/05/violence-against-indigenous-women-during-covid-19-sparks-calls-for-mmiwg-plan), which found that Indigenous (First Nations, Métis, and Inuit) women were more concerned about increased gender-based violence than COVID-19. Despite these serious challenges, Indigenous women, girls, and 2SLGBTQQIA+ people remain strong and resilient in the face of adversity, with support from community, family, and dedicated service providers. It remains clear that efforts to address ongoing violence must include Indigenous leadership to determine, plan, and implement the most effective, culturally safe, community or Nation-driven care for Indigenous Peoples.

Witnessing or experiencing violence in the home, including witnessing GBV and VAWG, is an *adverse childhood experience* (ACE)[23] that can have lasting effects across generations. ACEs have been shown to activate children's physical stress response, cause long-term changes in their immune system, change brain development, increase risk factors for chronic disease in later years, negatively affect mental and emotional health, and increase risk of problematic substance use.[23,24]

VAWG is a longstanding concern in BC and is highlighted as a priority in five of the seven goals[c] in *Promote, Protect, Prevent: Our Health Begins Here—BC's Guiding Framework for Public Health*.[27] It is also included as an area of focus in numerous strategic planning and policy documents across many ministries in BC.[28,29] In 2018, 3.8 million women in Canada (about one in four women age 15 and older) reported facing unwanted sexual behaviours (e.g., unwanted sexual attention, lewd comments) in the preceding 12 months.[30]

How have the COVID-19 pandemic and related response measures affected gender-based violence?

The COVID-19 pandemic and response measures introduced to limit the spread of COVID-19 early in the pandemic changed people's day-to-day lives and resulted in changes to services and programs that may have worsened GBV, either directly or indirectly, in the following ways by:

- Increasing the risk of GBV for survivors who were distancing or self-isolating at home while living with a perpetrator, and may have been unable to flee, safely seek help, or get consent from the perpetrator to leave the home;[2,31,32]
- Reducing capacity at health and social services that could otherwise help a survivor to report, seek help, escape from, and manage outcomes of GBV;[31,33]
- Exacerbating difficulties for people living in rural and remote communities where fewer services are available, who must travel a greater distance to access these services;[34]
- Increasing the stress and related triggers of GBV perpetrators (e.g., financial impacts, unstable housing, food insecurity, lost wages, employment) in addition to potentially increasing their substance use;[31,33,35]

[c] The five relevant goals from the *Guiding Framework for Public Health* are as follows: Healthy Living and Healthy Communities (Goal 1); Maternal, Child, and Family Health (Goal 2); Positive Mental Health and Prevention of Substance Harms (Goal 3); Communicable Disease Prevention (Goal 4); and Injury Prevention (Goal 5).

- Decreasing access to community interventions and personal supports for survivors (e.g., family, friends, school, place of worship, workplace, community, transition houses, personal or public transportation, insurance, gas money);[2,31]
- Reducing the ability to safely use virtual health services in the home (e.g., due to not having Internet access or a cell phone, living with a perpetrator who restricts or monitors one's access to services, lack of privacy);[2,32]
- Continuing and increasing experiences of technology-facilitated sexualized violence (e.g., illegally accessing personal information with hateful intent, stalking, malicious distribution of personal materials);[36,37,38,39]
- Increasing reluctance to seek health services because of fear of stigma and discrimination, including fear of child apprehension when disclosing family violence;[2]
- Increasing reluctance to seek support services (e.g., transition houses) due to fears of contracting COVID-19;[32] and
- Increasing reluctance to seek help due to the public messaging to avoid non-urgent visits to emergency departments or other health centres to prevent undue strain on the health system during COVID-19.[40,41]

Equity Considerations

GBV affects BC's diverse population in different ways, resulting in additional risks, related harms, and further marginalization for some groups. Some people are at higher risk of GBV due to various forms of oppression such as sexism, racism, colonialism, homophobia, transphobia, and ableism.[8] GBV is committed disproportionately against women, girls, and 2SLGBTQQIA+ peoples, particularly those who are Indigenous (First Nations, Métis, or Inuit), Black, newcomers to Canada, living in rural and remote communities, and living with disabilities.[8,12] It is important to note that these inequities are unlikely to result from a single, distinct factor.[42] Instead, they are more likely to be the outcome of intersections of different social locations, power relations, and experiences.[42] For example, for Black women, the identities of "Black" and "woman" do not exist independently of each other; people develop and connect these social categorizations to create a complex convergence of discrimination or disadvantage towards Black women.

- **Women:** In Canada, women and girls are more likely to experience IPV than men. In 2018, 44% of women reported having experienced some form of IPV in their lifetime (since age 15).[8]
- **2SLGBTQQIA+ community:** The 2014 General Social Survey on Canadians' Safety (Victimization) showed that individuals identifying as lesbian or gay (142 per 1,000 population) and bisexual (267 per 1,000 population) were much more likely to report being victims of violent crime than heterosexual respondents (69 per 1,000 population).[43] Lesbian, gay, and bisexual individuals face challenges when looking for supports, as many supports are not tailored to their unique needs;[43,44,45] these challenges were even greater when services and supports were limited during the pandemic. In Canada, 59% of transgender and gender diverse people reported having been physically or sexually assaulted at least once since age 15—significantly higher than the 37% of cisgender people who reported the same.[8]
- **Indigenous women, girls, and 2SLGBTQQIA+ people:** Indigenous women, girls, and 2SLGBTQQIA+ people experience higher rates of violence than non-Indigenous women, girls, and 2SLGBTQQIA+ people.[7,9] The final report of the National Inquiry Into Missing and Murdered Indigenous Women and Girls ("the National Inquiry"), *Reclaiming Power and Place*, confirmed that due to structural racism and impacts of colonization, Indigenous women, girls, and Two-Spirit people are at higher risk of violence.[9] The National Inquiry issued 231 Calls for Justice that have yet to be fully addressed by either the Government of Canada or the Government of British Columbia.[11] The report *The Road to Safety: Indigenous Survivors in BC Speak Out Against Intimate Partner Violence During the COVID-19 Pandemic* presents findings from an online survey of Indigenous women and 2SLGBTQQIA+ people conducted in 2021 and 2022, findings from interviews with Indigenous women and gender diverse

people who experienced IPV, as well as support workers providing services to this population.[2] Most survey respondents (85%) reported the onset of IPV during the pandemic, and 77% reported an increase in IPV.[2] Support workers shared that the violence experienced by Indigenous survivors had escalated in severity, intensity, and that they observed a shift in the forms of abuse and control perpetrated during the pandemic (e.g., from mental to physical abuse).[2] Furthermore, there were several challenges that prevented Indigenous survivors from seeking services, including housing affordability, lack of services, lack of transportation, racism, discrimination, lack of cultural safety upon receiving help, risk of social services involvement (e.g., child protection services, police, court), family separation, having a disability, and navigating underlying mental health conditions and addictions.[2]

- **People of colour:** Racialized communities already bear a disproportionate burden of stress, illness, and health inequities rooted in the structural racism that often negatively impacts the social determinants of health (e.g., safe housing, income, education, access to health care).[46,47] The existing inequities, impacts of the pandemic, and associated response measures have acted together to increase the risk of violence for racialized peoples, and exacerbated already existing barriers to culturally safe health and social services needed by survivors.[48]
- **Women, girls, and 2SLGBTQQIA+ people in rural and remote communities:** Statistics Canada reported that, in 2019, women living in rural areas across Canadian provinces reported IPV at almost twice the rate of women living in urban areas (860 versus 467 victims per 100,000 population).[8] Similarly, police-reported data from 2017 showed that rates of sexual assault perpetrated against women age 25–89 were twice as high across Northern Canada (provinces and territories) compared to the South (131 versus 57 victims per 100,000 population).[8]
- **Young women and girls:** 2019 police-reported data showed that the rate of family violence against children and youth was significantly higher among girls compared to boys (379 versus 239 victims per 100,000), and more than four times higher for rates of sexual offences perpetrated by a family member (170 versus 37 victims per 100,000 population).[8] Self-reported data from across Canada in 2018 showed that young women age 15–24 were five times more likely than women 25 and older to have been sexually assaulted in the previous 12 months (5% versus 1%), three times more likely to have been physically assaulted in the previous 12 months (6% versus 2%), and nearly three times more likely to have been emotionally, financially, or psychologically abused in the previous 12 months (28% versus 10%).[8]
- **Transgender youth:** The Canadian Trans Youth Health Survey was launched in October 2013 across all 10 provinces and one territory. It is the first national survey asking transgender youth about experiences influencing their health. This survey showed that 23% of transgender youth (among both the national sample and BC respondents) reported being forced into unwanted sexual encounters.[49] Transgender youth face significant barriers to accessing physical and mental health care; many face rejection, discrimination, and violence at home, at school, in their communities, as well as in the health-care system.[49] Furthermore, 2020 data from the Trans PULSE Canada COVID Survey showed that 5.8% of respondents reported an increase in IPV and, due to the pandemic, 7.0% had to live with someone who was unsupportive of their gender.[50]
- **Immigrants and refugees:** Among this population, fears of being reported to immigration authorities, possible deportation, and lack of understanding of their rights in Canada are often reported as key barriers to seeking supports.[51] Immigrants and refugees were especially impacted by travel restrictions during the pandemic, experiencing delays in their immigration process or that of their family members, as well as in citizenship processes.[52,53] Delays by Immigration, Refugee, and Citizenship Canada in processing immigration documentation created a backlog of immigration applications, including immigration document renewal.[54] Expired immigration documents increased fears of deportation and decreased the ability to seek

support.[55,56,57] Due to language barriers and differences in cultural norms, immigrants and refugees also faced barriers to finding or using community supports and health services during the COVID-19 pandemic.[58,59,60]

- **People with disabilities:** In Canada in 2014, rates of violence against both women and men with a sensory or physical disability were twice as high as rates of violence against those without disabilities.[61] Rates of violence targeting women and men with a cognitive or mental health-related disability were four times higher than rates for those without a disability.[61] Women with a disability were also nearly twice as likely as women without a disability to report having been sexually assaulted and/or having experienced violent victimization more than once in the preceding year.[61]
- **Sex workers:** This population is already marginalized and stigmatized for their work, which often forces them to work in unsafe conditions and at increased risk of violence. Lack of access to COVID-19 income supports (i.e., Canada Emergency Response Benefit) may have made sex workers more likely to work in unsafe or violent conditions during the pandemic.[62]
- **Pregnant people and new parents:** Pregnant people are more likely to experience IPV, which can be associated with heightened harmful impacts to physical health, mental health, access to care, and ability to access social support networks, for both parent and child.[63,64,65]

Gender-based Violence Data Challenges

There are challenges and gaps in data to accurately describe and monitor GBV, largely because it tends to occur in private settings and frequently goes unreported. Examples of the challenges in collecting accurate data include:

- Survivors' fear of shame or other consequences (e.g., involving Child Protection Services, breaking apart a family[60]) from reporting an incident;[66]
- Survivors' fear of retaliation from their abuser, which could result in further violence or fatal outcomes, the greatest risk for homicide being when a survivor decides to leave their abuser;[16,67]
- Data collected often only include physical violence and not the impact of emotional or financial abuse;[30,68,d]
- Administrative data systems (e.g., health data, police data) are not set up to collect relevant, complete, or timely information on GBV;[69]
- The occurrence of formal charges and meaningful consequences for perpetrators is extremely low: Statistics Canada reports that from 2009–2014, 93,501 incidents of sexual assault were reported to police, of which 43% (40,490 incidents) resulted in charges being laid.[70] Of these charged cases, only half (49%, or 19,806 cases) proceeded to the justice system.[70] Once cases were completed in court, only 8,742 resulted in guilty verdicts,[70] creating fear that the risks of reporting may outweigh the benefits;[30] and
- Those responding to GBV calls (e.g., first responders) are limited to dealing with a specific form of violence (e.g., IPV), and are unable to document the holistic mental, emotional, and physical health needs of victims with the specialized interdisciplinary care they might require.[60]

[d] In 2019, Statistics Canada pursued data on emotional and financial abuse experienced by Canadians; however, this appears to have been the first instance.

Findings

Increased GBV during COVID-19 has been reported globally.[71] The United Nations has suggested that the pandemic reduced violence prevention and protection efforts, as well as access to social services and care for women and girls.[71] This undermined progress made across the world to end GBV, especially where many women were living with their abusers, unable to leave or access normal support services.[71] In April 2020, the United Nations Development Programme reported that worldwide 243 million women and girls age 15–49 experienced IPV in the previous 12 months.[72] The United Nations Population Fund estimated that if stay-at-home measures continued for six months, an additional 31 million cases of GBV would result.[73]

GBV is known to be substantially underreported.[74] Formal quantitative and qualitative data sources, as well as adequate data collection, management, and reporting, are lacking in BC and in Canada;[74] there is no central, coordinated system to monitor and report on GBV, nor are there standard definitions or measures for reporting. The data referred in this section are understood as representing only a small fraction of GBV experienced in BC and other jurisdictions. While the available data likely underreport GBV, trends over time do provide an indication of whether rates of GBV are increasing or decreasing.

While the COVID-19 pandemic has been a novel public health emergency, the gendered impact and inequitable outcomes are not new. Inequitable outcomes have been observed during previous pandemics, among other emergencies.[75,76,77] At the onset of the pandemic, many research studies were undertaken to better understand these impacts. For further information, please visit https://healthresearchbc.ca/news_article/msfhr-funds-covid-19-research-mitigate-effects-bcs-vulnerable-populations/.

The experiences highlighted in this section likely disproportionately reflect those of heterosexual, cisgender women and girls, and not those of gender diverse and non-binary individuals. The intersectional nature of GBV puts youth, individuals experiencing unstable housing, and people who identify as 2SLGBTQQIA+ at higher risk of being targeted for violence.[78] Also of considerable concern are the direct short- and long-term impacts of violence on children and youth (survivors of violence themselves, as well as those who witness violence against a parent or other household member), which include a range of emotional, behavioural, and developmental issues, as well as the possibility of post-traumatic stress disorder and intergenerational cycles of abuse.[79] These impacts, although significant, are beyond the scope of this report.

Direct Impacts of the Pandemic and Response Measures on Gender-based Violence and Intimate Partner Violence as Experienced by Survivors and Witnesses

The frequency,[80] prevalence, and severity of abuse appear to have worsened, while the reporting of abuse and the availability of support services decreased.[32] Across North America, risk factors for increased GBV and IPV due to the pandemic and response measures included financial stress, sheltering-in-place, difficulty maintaining social ties (particularly among Canadian women), and symptoms of COVID-19.[81] One study found that stress related to COVID-19 was associated with greater likelihood of sexual coercion among those who lived with a romantic partner.[82] Many have reported that physical distancing and shelter-in-place measures facilitated and reinforced perpetrators' control and abuse,[83] and made it challenging to access services and personal supports. Online supports may not always be accessible due to perpetrators' surveillance of social media accounts.[83] Furthermore, some reported greater reluctance to seek help during the initial months of the pandemic due to concerns of being exposed to COVID-19 at shelters.[32]

Two Statistics Canada studies show the impact of physical distancing measures. The first study dated March 29 to April 3, 2020, found that 33.4% of Canadians reported being "very" or "extremely" concerned about family stress from confinement.[84] 9.9% of female respondents were "very" or "extremely" concerned about violence in the home, compared to only 6.0% of men.[84] The second study dated April 3 to 9, 2020, showed that, overall and across each age category, women were more likely than men to

be "very" or "extremely" anxious about violence in the home during early phases of the COVID-19 pandemic; young women age 15–24 (12%) were significantly more likely to report this level of concern compared to men (8%).[85] Several other sources report survivors experiencing moderate to severe depressive symptoms, as well as self-harm, suicidal ideation, post-traumatic stress disorder, eating disorders, anxiety, and substance use during the pandemic.[81,86,87]

Survivors have been more likely to stay longer with an abuser due to uncertainty experienced through the pandemic (e.g., difficulty with planning ahead, concern about losing housing if they were to leave their abuser).[32,88] These effects may continue well past the pandemic. For example, research in Canada and the United States found that GBV survivors reported continued long-term impacts following a crisis (e.g., Hurricane Katrina), ranging from six months to two years after the event.[89,90,91,92]

In Canada, women and girls are killed by violence every 2.5 days.[93] During the first year of the pandemic, there was a 9.6% increase in the number of women and girls killed, from 146 in 2019 to 160 in 2020, with the highest monthly counts in March (17), April (26), and July (23); of these killings, 80% were committed by men and 22.5% by known intimate partners.[94] Women age 25–34, 35–44, 45–54, and 55–64 were over-represented as victims of femicide compared to the general population in 2020; in 2019, only women age 55–64 were over-represented.[94] Among the victims killed in incidents involving a male perpetrator, 68 were known to have left behind children; it is estimated that at least 157 children in Canada have lost a mother in 2020 due to femicide.[94]

Femicide is defined as the intentional killing of a girl or woman because of their sex or gender, often rooted in an explicit hatred toward women and girls.[94] Importantly, the statistics above are likely to be an underestimate given known challenges with documenting femicide: accessibility, availability of data (especially in cases with ongoing criminal investigations), timeliness of data (i.e., counts increasing years after the actual time of death as investigations, court verdicts, and other information sources are made public), publicly available data not identifying whether an act was specifically gender-based or a form of femicide, deaths not being countable as femicides if not formally deemed homicides, and lack of concerted measures to collect information on femicide prevention initiatives.[94] Many of the data used to report these values come from media coverage and publicly available court documents, making it difficult to obtain an accurate count or work towards meaningful prevention efforts.

British Columbians had the opportunity to share their experiences of how the pandemic and response measures impacted them through the BC COVID-19 Survey on Population Experiences, Action and Knowledge. The second iteration of the survey, conducted from April–May 2021, assessed whether household conflict had increased since the pandemic. The findings are as follows:[95]

- Overall, 43.9% of respondents reported an increase in household conflict.
- Of those who reported an increase in household conflict, 59.4% lived with children in the household, as compared to 37.8% who lived in households without children.
- Increased household conflict was reported among younger respondents: 51.5% among individuals age 18–29, 50.3% among individuals age 30–39, and 52.5% among individuals age 40–49.
- Increased household conflict was reported more frequently among respondents who identified as West Asian/Arab (52.1%), South Asian (49.6%), and Latin American/Hispanic (48.3%).

Demand for Health, Policing, and Social Services

Use of Crisis Lines

In the first year of the pandemic, there was a significant increase in both the frequency and severity of calls for help reported in BC and across Canada.[32] The crisis line of the Vancouver-based Battered Women's Support Services typically receives 18,000 calls annually;[4] in the early months of the pandemic, there was a 300% increase in calls, including over 32,000 requests for support.[96] Similarly, Canada's Assaulted Women's Helpline received 51,299 calls from April 1 to

September 30, 2020, compared to 24,010 calls during the same period in 2019.[97] An additional 20,334 calls were received between October 1 and December 31, 2020, compared to 12,352 over the same period in the previous year.[97] Information was not available on whether services were able to meet this increased demand.

Access and Use of Shelters and Transition Homes

To better understand the impact of the pandemic on survivors of violence, Women's Shelters Canada published findings from a special iteration of a national survey, Shelter Voices 2020,[32] which surveyed 266 shelters and 251 shelter and transition home organizations across Canada[e] during two time periods: Phase 1 (March–May 2020), when restrictions were most strict, and Phase 2 (June–October 2020), when restrictions were initially relaxed.[f] Their findings include:

- **Frequency of calls**: 59% of respondents reported a decrease in calls during Phase 1, while 61% reported an increase during Phase 2.
- **Requests for admittance to shelters**: 65% of respondents reported a decrease in requests during Phase 1, while 54% reported an increase during Phase 2.
- **Difficulty seeking support:** Survivors may have faced difficulties in seeking support or fleeing their environments during the early months of the pandemic. Many of the narratives captured in the survey reflect what is already known: inability to make calls due to perpetrators controlling phones, devices, and movements; fear of potential homelessness; and fear of outbreaks in shelters.
- **Reduced capacity**: 71% of respondents' sites had to reduce capacity to meet public health recommendations (e.g., due to need for isolation unit on-site, limiting shared rooms and bathrooms, limiting use of communal areas). The impact of this reduced capacity on the services' ability to meet demand is not known.
- **Change in severity of violence experienced by survivors coming into the shelter**: 52% of respondents reported either "much more" or "somewhat more" severe violence, compared to 48% reporting "about the same." Respondents also reported admitting women with worse outcomes on danger risk assessments, showing higher indicators of lethality.
- **Use of pandemic as a means of control by abusers**: There was an increase of coercive control used by perpetrators, such as threats to intentionally transmit COVID-19 to survivors and children, delaying of court dates, and violations of child custody arrangements.
- **Ability to provide services**: 28% of respondents indicated that the pandemic "greatly" impacted their ability to provide services, and 39% reported being "moderately" impacted.

It should be noted that access to, and availability of, transition homes and similar safe houses was already limited prior to the pandemic. In November 2019, an average of 620 women and children were turned away from shelters for survivors of domestic violence across Canada per day, with over 80% being turned away because the shelter was full.[98] This is noteworthy as November typically sees lower numbers than other months due to reluctance to flee in advance of the winter holiday season.[98] From 2014 to 2018, the average number of women and children being turned away from shelters each day has increased 69%, from 539 (2014) to 911 (2018).[98]

Emergency Department Visits

Emergency Department (ED) visits for sexual and physical assault reflect the more extreme incidents that require immediate emergency care, and only represent cases where GBV was clearly specified as the cause. Therefore, less severe but ongoing violence, or violence where the cause is not disclosed, is not reflected in data on ED visits. Published ED data for sexual assault during the pandemic are also very limited, although one study from Ottawa reported a 54.55% reduction

[e] The response rate was 52%, and there was representation from every province and territory, as well as urban and rural areas, and Indigenous shelters/transition homes.

[f] The report does not specify the pre-pandemic time period that survey respondents were asked to compare with when answering questions, so while the results below indicate changes over time, the time period being examined is not clear.

in the weekly counts of assault victims presenting at the ED-based Sexual Assault and Domestic Violence Program from March 4 to May 5, 2020, with a decrease of 53.49% in sexual assault cases and a 48.45% reduction in physical assault cases weekly.[99] In BC, there was a reduction of approximately 40% in age-standardized rates for all causes of ED visits from March to April 2020,[100] as well as a 50% reduction nationally.[101] Further investigation is needed to understand how ED visits for sexual assault and other forms of violence may have fluctuated in comparison to pre-pandemic times across BC. Acknowledging the significant increased frequency in calls to crisis lines and requests for safe housing, the decrease in ED visits is likely linked to an inability or reluctance to access health-care services during the early months of the pandemic, and not reflective of a reduction in the need for those services.

Police-reported Sexual Assaults

Finally, Statistics Canada reported a 26.6% decline in total police-reported[g] sexual assaults and an 11.4% decline in total police-reported assaults from March to June 2020, as compared to the same period in 2019 across Canada. In contrast, domestic disturbances increased by 11.6% during this same period.[102] Similarly, 54% of Canadian victim services providers reported an increase in the number of victims served from mid-March to early July 2020.[103]

Obtaining and understanding the reporting statistics for Indigenous women is much more complicated due to systemic racism, which creates barriers that can prevent Indigenous women from seeking help following violent or traumatic experiences. Examples of these barriers include inaccessibility of supports and services, as well as mistrust in the police, criminal justice system, health system, and institutions intended to protect people from harm.[34] Specifically, many Indigenous women have reported that they are afraid to contact the police.[104] There are both historic and contemporary reasons for this, including instances of police violence against Indigenous people, and the role police play in perpetuating colonial violence in their interactions with Indigenous IPV survivors.[2] For example, some Indigenous IPV survivors report that police have frequently dealt with situations of violence inappropriately, favouring male perpetrators of violence and reporting to Child Protection Services for the purposes of child apprehension.[2] Both law enforcement and the justice system often retraumatize Indigenous IPV survivors seeking help.[2]

Increased Need for Resources to Better Address Intimate Partner Violence

The stories of survivors and service providers clearly indicate an increased need for resources through the pandemic and long after it wanes. The physical distancing and shelter-in-place measures required a considerable shift in how services are organized and provided in BC and elsewhere:

- Existing transition houses and other safe spaces underwent physical renovations to ensure the safety and well-being of clients and adhere to public health orders.[32]
- In March 2020, Battered Women's Support Services pivoted to provide 24/7 support adding texting services, email options, and callouts for more volunteers to support the increased demand.[96]
- Many service providers implemented virtual services and new technologies (e.g., PROMiSE, an IPV safety planning tool developed for use during public health emergencies and launched in December 2020 throughout the Greater Toronto Area[105]) to continue providing services when in-person services were not an option (e.g., video/phone conferencing, online chat, email, text messaging).[103]
- Many service providers implemented innovative new ways for survivors to report violence (e.g., "Signal of Help," a simple hand gesture a survivor can make to convey a need for help without leaving any indication that help was sought),[106] or relay important messages to survivors (e.g., "Bruised Fruit" campaign providing a call-in number for support),[107] in common community settings that survivors might still have had access to during the pandemic (e.g., pharmacies, grocery stores).

[g] The survey responses included voluntarily reported data from 17 police services across Canada, which together serve approximately 59% of the overall Canadian population. The survey responses from the Royal Canadian Mounted Police were limited and only captured experiences of those serving 32% of the Canadian population.

- Additional training was initiated to support health-care professionals (e.g., physicians,[108] nurses,[109] midwives[110]) to ask about potential violence, to understand longer term patterns in patients presenting repeatedly with symptoms of violence, and to strengthen the ability to develop safety plans with clients.
- Many service providers had to hire and train more staff to meet the growing needs of survivors and their affected families.[96]

In addition to the items above, more ways to recognize and respond to coercive control—which often precedes violence—are needed. On October 5, 2020, BC Member of Parliament Randall Garrison introduced a private member's bill, Bill C-247, an *Act to amend the Criminal Code (controlling or coercive conduct)*, that, if it became law, would create an offence of engaging in "controlling or coercive conduct," i.e., conduct resulting in significant impact on the targeted individual(s), as evidenced by a fear of violence, a decline in physical or mental health, or substantial adverse effects on their daily activities.[111] This proposed legislation was intended to criminalize the behaviour patterns and worsening conduct of abusers, and create the legal framework for police to be able to act on abusive, threatening, or controlling behaviour in the absence of physical violence. However, this bill did not become law.[112,113] Coercive control is one of several considerations for making a protection order listed in BC's *Family Law Act*.[114]

Considerations for Further Action

While GBV is difficult to address due to the complexities and sensitivities involved, actions can be taken to help prevent it from happening, to better monitor frequency and severity when it happens, and to better respond to it in BC. This section provides considerations for action based on the findings of this report. These are not formal recommendations, but rather ideas to consider when shaping recommendations and actions related to this topic.

1. Implement province-wide violence prevention initiatives that increase awareness and understanding of GBV as an issue, with particular focus on equity-seeking groups disproportionately impacted by GBV (e.g., 2SLGBTQQIA+), and highlight attention to perpetrator prevention (e.g., targeted early education involving boys and youth on the role of gender in violence and the root causes of violence, involving men and boys in initiatives to prevent GBV)[115,116] and broader structural prevention efforts (e.g., gender equity, female empowerment, stable housing and income)[117] rather than victim prevention approaches that put the onus on potential victims to avoid violence.
2. Integrate efforts to assess and respond to GBV in BC across all government ministries and other partners to ensure a comprehensive understanding of the issue, focusing on improved data collection and analysis methods, and the most coordinated, efficient, and effective response, with optimal outcomes for survivors and their families.
3. Improve measurement and understanding of GBV while upholding victims' confidentiality and safety. Until better data are available on GBV in BC, all other response efforts will be limited in their ability to understand, assess, and respond effectively and strategically to GBV. Better data could also be used to evaluate efforts to prevent and respond to GBV.
4. Increase communication and awareness of GBV and its impacts across all ministries and all pandemic-related activities, and actively work to implement a Gender-based Analysis Plus[h,118] and trauma- and violence-informed care[i,119,120] lens broadly across any emergency response.[121,122]

[h] Gender-based Analysis Plus (GBA+) is an analytical tool used to understand and evaluate how diverse groups of women, men, and gender diverse people may experience policies, programs, and initiatives. The "+" acknowledges that analyses go beyond biological (sex) and socio-cultural (gender) differences.

[i] Trauma- and violence-informed care is a strengths-based framework grounded in acknowledgement of, and response to, the impact of traumatic life events (historic and persistent). It can reduce barriers to accessing health and social services, and promote more caring, compassionate, person-centred, and non-judgmental care.

5. Support interdisciplinary programs that focus on the impacts of GBV on children (e.g., the Adverse Childhood Experiences (ACEs) Working Group of the Child and Youth Mental Health and Substance Use Community of Practice).[23,123,124]
6. Support efforts to strengthen health professionals' clinical skills in recognizing and asking clients about GBV and its direct and indirect impacts, in addition to knowing the appropriate next steps.

Appendix 3-A: Data Methodology Notes

1. **BC COVID-19 Survey on Population Experiences, Action and Knowledge (SPEAK) Data:** The BC COVID-19 SPEAK from which data in this report were derived, was funded by the BCCDC Foundation for Public Health. SPEAK data are publicly accessible here: http://www.bccdc.ca/health-professionals/data-reports/bc-covid-19-speak-dashboard.

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Chapter 4

Unemployment and Underemployment

(Reported June 2021)

Key Findings:

- BC's unemployment rate increased from 5.2% in February 2020 to 13.1% in May 2020, largely because of COVID-19 response measures. Unemployment declined between June and November 2020 with the partial lifting of these measures; but was still higher compared to the same months in 2019.
- Unemployment and underemployment can harm physical and mental health. As well, parental unemployment and underemployment are linked to lower levels of children's educational attainment and well-being.
- Women, temporary workers, informal economy, and non-white racialized workers have been disproportionately affected by COVID-19-related unemployment.

Situation

Response measures to the COVID-19 pandemic[1] included the temporary closure of non-essential services and restrictions on certain industries (e.g. dine-in services at pubs, bars and restaurants; travel/tourism restrictions)[2] that could not meet physical distancing and other safety requirements.[1] Essential services, such as grocery stores, were encouraged to stay open, and required to modify physical spaces to ensure that customers and staff interact safely.[3,4] Many businesses were challenged by the changes required, and/or struggled to make enough revenue,[5] and as a result, some businesses closed temporarily and some closed permanently.[6,7]

Background

Unemployment rate is used to understand the health of economies.[13] It measures the share of workers in the labour force who do not currently have a job and are actively looking for work.[14] It does not include individuals who are retired, on a scheduled leave, or not looking for work. *Underemployment rate* is used to understand labour markets.[15] It measures the share of part-time workers who would prefer to be working full-time.[16]

Prior to 2020, the highest unemployment rate recorded in Canada[a,9,10] was 12% in 1983.[10] Between March and September 2020, the number of Canadians who experienced long-term unemployment (unemployment for 6 months or more) increased by 107%.[8] In 2020, the Canadian unemployment rate reached a high of 13.7%[11] in May, and declined to 8.8% in December 2020.[12]

[a] Canada began to regularly collect unemployment data through the labour force survey in 1945.

Employment can improve people's physical and mental well-being, while being unemployed can have negative impacts on mental and physical health.[17] Unemployed people have an elevated risk of: cancer, circulatory diseases, respiratory diseases, alcohol related diseases, accidents, and violence, compared to people who are employed.[18] Unemployed people are also more likely than employed people to experience mental illness (e.g. depression, psychological distress),[19] stress, boredom, high level of uncertainty, and less satisfaction with life.[20] Similarly, unemployment has consequences for people's physical and mental health.[21,22,23,24] Parental unemployment[25,26,27,28] and underemployment[29] have effects on their children and youth as well. When compared to children of employed parents, children and youth with unemployed parents have lower self-esteem, higher school dropout rates, lower academic expectations, poorer health, and higher household food insecurity.

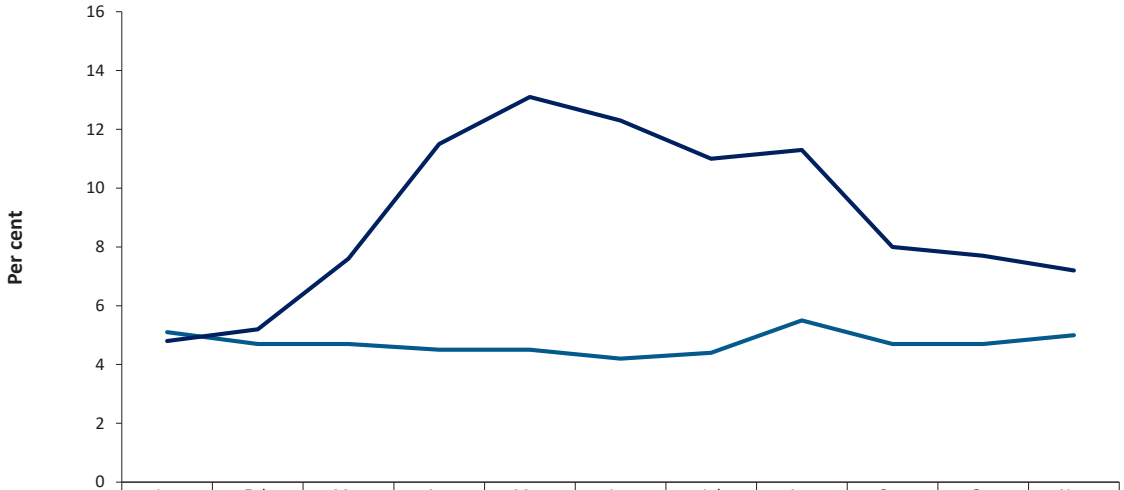
Many factors affect unemployment and under-employment rates, including: availability of jobs;[30] automation;[31] quality of jobs (e.g. temporary, contract and term employment);[32,33] level of education and training;[34] health;[35] and systemic discrimination and racism.[36,37,38] COVID-19 response measures have impacted many of these factors. The temporary closure of non-essential services has reduced the number of jobs available,[39] as well as reduced hours and/or wages.[40] The replacement of workers with technology (automation) has accelerated during COVID-19 measures, with increased reliance on technology to perform services,[41] especially in low-wage occupations.[42,43,44] The impacts of response measures on reduced access to post-secondary education[45,46] and skills training programs[47] meant delayed or cancelled training for entering or moving within the workforce.

Forecasts for global economic recovery vary.[48,49,50] Within Canada, the Conference Board forecasted that BC will have the best economic performance in the 2020/21 fiscal year compared with other provinces, due to the continuation of major energy projects and fiscal stimulus programs.[51] However, travel restrictions will continue to impact the tourism and hospitality industry in BC. Systemic discrimination and racism,[52] and women's disproportionate responsibility for childcare[53,54] will affect the economic recovery of certain groups of people more than others (see Equity Considerations below, for further discussion of disproportionately impacted populations).

Findings

This section provides an overview of the unemployment and underemployment rates for BC before and after the declaration of a public health emergency in March 2020. Analyses of Statistics Canada's Labour Force Survey (LFS) shows differences in rates according to sex, age, and educational attainment. Analyses of BC's 2020 COVID-19 SPEAK Survey data indicate that the pandemic has affected racialized groups' unemployment experiences differently. SPEAK Survey analyses by sex and gender are forthcoming and will be included in future reports.

FIGURE 4.1



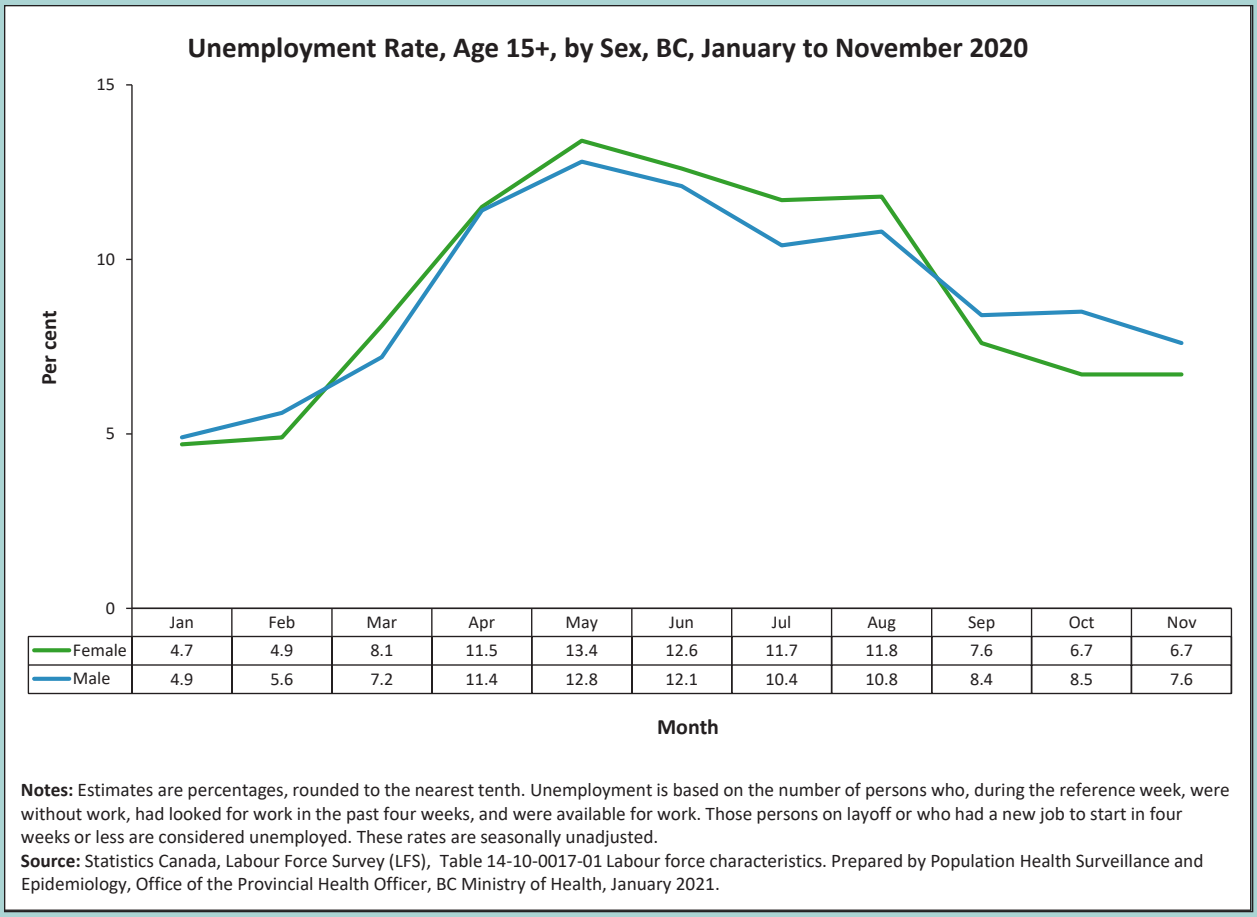
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2019 - Rate	5.1	4.7	4.7	4.5	4.5	4.2	4.4	5.5	4.7	4.7	5.0
2020 - Rate	4.8	5.2	7.6	11.5	13.1	12.3	11.0	11.3	8.0	7.7	7.2
2019 - Unemployed	135,700	124,700	123,900	121,000	120,700	114,700	118,200	150,800	125,000	125,700	134,900
2020 - Unemployed	126,000	139,100	196,000	275,900	331,200	329,300	296,700	306,700	213,600	206,100	193,400

Month

Notes: Estimates are percentages, rounded to the nearest tenth. Unemployment is based on the number of persons who, during the reference week, were without work, had looked for work in the past four weeks, and were available for work. Those persons on layoff or who had a new job to start in four weeks or less are considered unemployed. These rates are seasonally unadjusted.
Source: Statistics Canada, Labour Force Survey (LFS), Table 14-10-0287-02 Labour force characteristics. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, January 2021.

Figure 4.1 shows that the unemployment rate in BC for people 15 years and older increased from 5.2% in February to 13.1% in May 2020. It decreased to 7.2% in November as a result of the partial lifting of public health measures. Overall, the unemployment rate was higher between February and November 2020, compared to the same months for 2019.

FIGURE 4.2

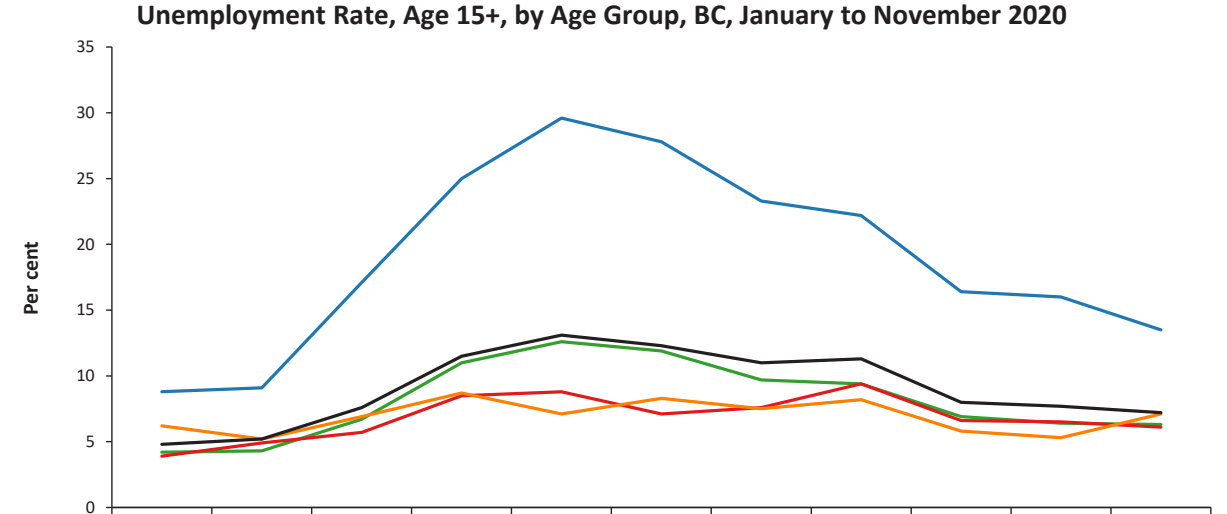


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Female	4.7	4.9	8.1	11.5	13.4	12.6	11.7	11.8	7.6	6.7	6.7
Male	4.9	5.6	7.2	11.4	12.8	12.1	10.4	10.8	8.4	8.5	7.6

Notes: Estimates are percentages, rounded to the nearest tenth. Unemployment is based on the number of persons who, during the reference week, were without work, had looked for work in the past four weeks, and were available for work. Those persons on layoff or who had a new job to start in four weeks or less are considered unemployed. These rates are seasonally unadjusted.
Source: Statistics Canada, Labour Force Survey (LFS), Table 14-10-0017-01 Labour force characteristics. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, January 2021.

Figure 4.2 shows the unemployment rates in BC by sex from January to November 2020. Although the unemployment rates between males and females remained close during this time-period, the rate for females exceeded that of males' between March and August 2020. By September 2020 however, the unemployment rate for women returned to being lower than the unemployment rate for men.

FIGURE 4.3



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
15-24	8.8	9.1	17.1	25.0	29.6	27.8	23.3	22.2	16.4	16.0	13.5
25-44	4.2	4.3	6.7	11.0	12.6	11.9	9.7	9.4	6.9	6.4	6.3
45-64	3.9	4.9	5.7	8.5	8.8	7.1	7.6	9.4	6.6	6.5	6.1
65+	6.2	5.2	6.9	8.7	7.1	8.3	7.5	8.2	5.8	5.3	7.1
All Ages	4.8	5.2	7.6	11.5	13.1	12.3	11.0	11.3	8.0	7.7	7.2

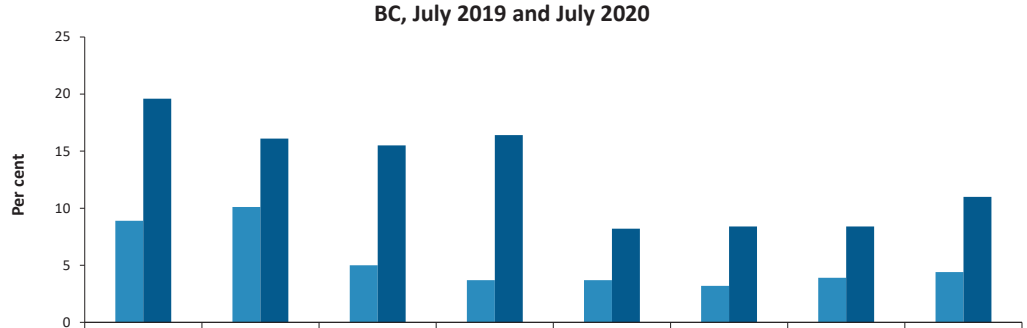
Month

Notes: Estimates are percentages, rounded to the nearest tenth. Unemployment is based on the number of persons who, during the reference week, were without work, had looked for work in the past four weeks, and were available for work. Those persons on layoff or who had a new job to start in four weeks or less are considered unemployed. These rates are seasonally unadjusted.
Source: Statistics Canada, Labour Force Survey (LFS), Table 14-10-0017-01 Labour force characteristics. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, January 2021.

Figure 4.3 shows the unemployment rates in BC from January to November 2020, by age group. Between February and May 2020, the unemployment rate of young adults (age 15-24) more than tripled (from 9.1% to 29.6%). During the same time-period, it almost tripled for individuals aged 25-44 (from 4.3% to 12.6%). Although unemployment rates decreased for all age groups between May 2020 and November 2020, they were still higher in November 2020 than they were in the two months leading up to the pandemic.

Figure 4.4 and Figure 4.5 show the unemployment rates in BC, by educational attainment, in July 2019 and 2020, and December 2019 and 2020, respectively. Overall, these figures showed similar patterns in July and December, in which unemployment rates were higher in 2020 than in 2019. In July (Figure 4.4), the increase in the unemployment rate from July 2019 to 2020 was largest among individuals whose highest educational attainment was high school and some postsecondary education.

FIGURE 4.4

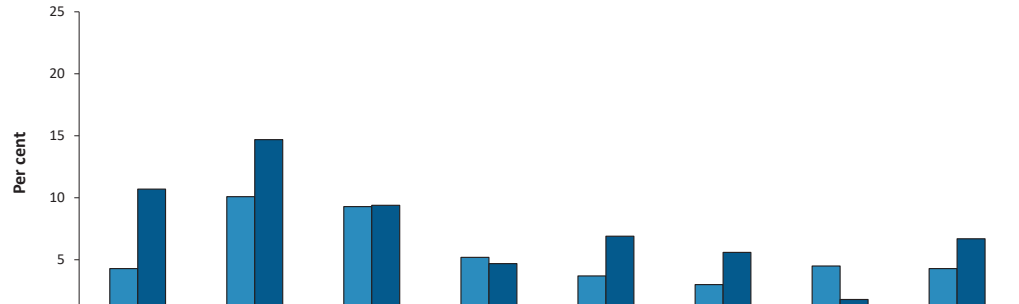


	Grade 8 or lower	Some high school	High school graduate	Some postsecondary	Postsecondary certificate or diploma	Bachelor's degree	Above bachelor's degree	Total, all education levels
July 2019	8.9	10.1	5.0	3.7	3.7	3.2	3.9	4.4
July 2020	19.6	16.1	15.5	16.4	8.2	8.4	8.4	11.0

Educational Attainment

Notes: The category of "Postsecondary certificate or diploma" identifies those who completed any certificate or diploma from an educational institution beyond the secondary level but below a Bachelor's degree obtained at a university. The category of "Some postsecondary" includes those who worked towards a postsecondary certificate or diploma. Unemployment is based on the number of persons who were without work, had looked for work in the past four weeks, and were available for work. Those persons on layoff or who had a new job to start in four weeks or less are considered unemployed. These rates are seasonally unadjusted. The rates are not additive since they represent unemployment rates calculated independently for those who are unemployed with the reported level of educational attainment.
Source: Statistics Canada, Labour Force Survey (LFS), Table 14-10-0019-01 Labour force characteristics by educational attainment. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2020.

FIGURE 4.5



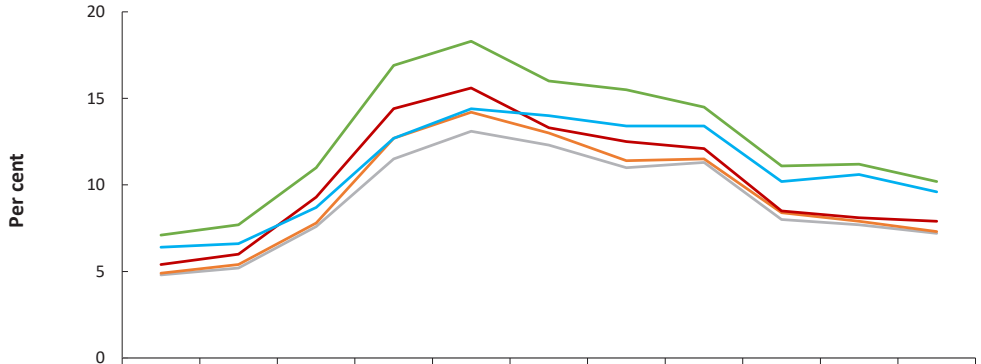
	Grade 8 or lower	Some high school	High school graduate	Some postsecondary	Postsecondary certificate or diploma	Bachelor's degree	Above bachelor's degree	Total, all education levels
2019	4.3	10.1	9.3	5.2	3.7	3.0	4.5	4.3
2020	10.7	14.7	9.4	4.7	6.9	5.6	1.8	6.7

Educational Attainment

Notes: The category of "Postsecondary certificate or diploma" identifies those who completed any certificate or diploma from an educational institution beyond the secondary level but below a Bachelor's degree obtained at a university. The category of "Some postsecondary" includes those who worked towards a postsecondary certificate or diploma. Unemployment is based on the number of persons who were without work, had looked for work in the past four weeks, and were available for work. Those persons on layoff or who had a new job to start in four weeks or less are considered unemployed. These rates are seasonally unadjusted. The rates are not additive since they represent unemployment rates calculated independently for those who are unemployed with the reported level of educational attainment. The 2019 rate in the category of "Grade 8 or lower" was suppressed to meet the confidentiality requirements of the Statistics Act.
Source: Statistics Canada, Labour Force Survey (LFS), Table 14-10-0019-01 Labour force characteristics by educational attainment. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, January 2021.

FIGURE 4.6

Supplemental Unemployment Rates Showing Underemployment, Age 15+, BC, January to November 2020



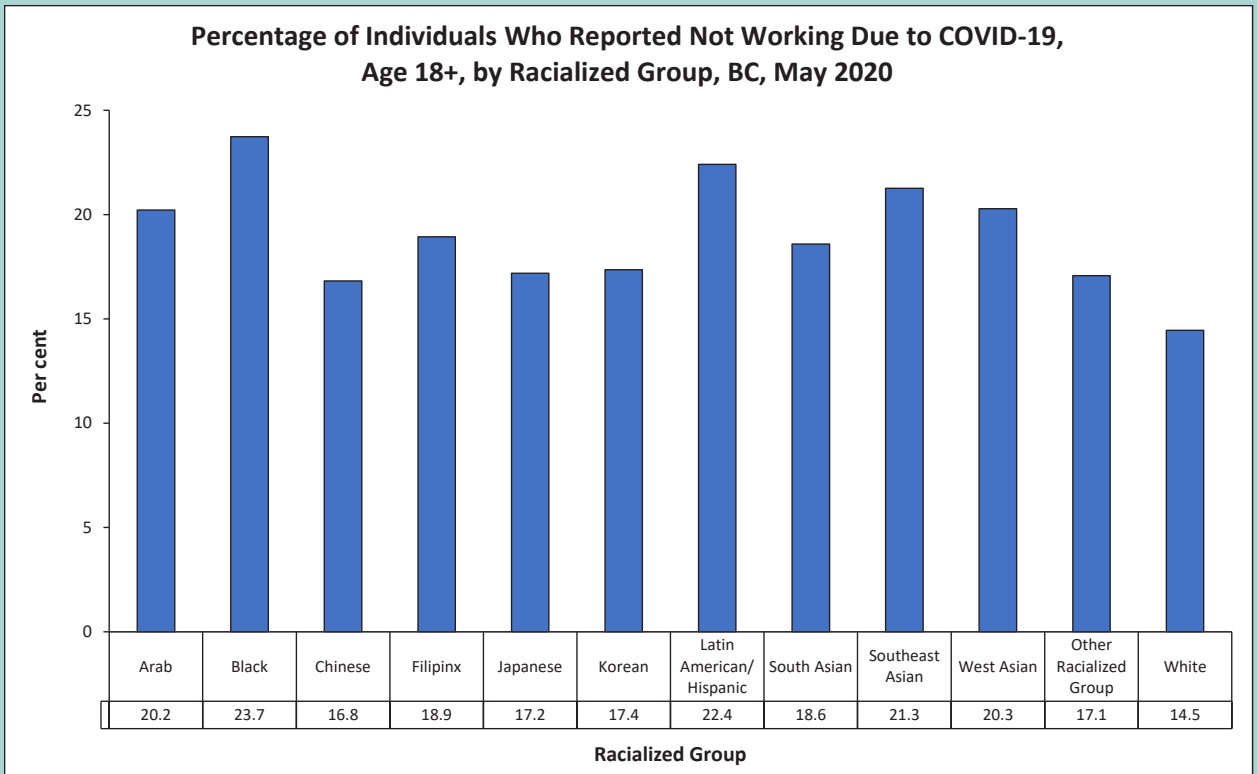
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
R4: Official unemployment rate	4.8	5.2	7.6	11.5	13.1	12.3	11.0	11.3	8.0	7.7	7.2
R5: R4 + Discouraged searchers	4.9	5.4	7.8	12.7	14.2	13.0	11.4	11.5	8.4	7.9	7.3
R6: R4 + Waiting group	5.4	6.0	9.3	14.4	15.6	13.3	12.5	12.1	8.5	8.1	7.9
R7: R4 + Involuntary part-timers	6.4	6.6	8.7	12.7	14.4	14.0	13.4	13.4	10.2	10.6	9.6
R8: Unemployment + Underemployment	7.1	7.7	11.0	16.9	18.3	16.0	15.5	14.5	11.1	11.2	10.2

Month

Notes: R5 to R8 are supplemental unemployment rates, meant to be compared to the official employment rate (R4). Discouraged searchers are people who wanted and were available to take work but who did not look for a job because they believed none was available. Waiting group includes those who are not searching for work but are waiting for employment (e.g. waiting to be recalled from a previous employer, have applied for a job and are waiting for replies, or have lined up a job to start in five weeks or more). Involuntary part-time workers do not include those who work full-time hours between two jobs nor part-timers who are only partially utilized in the labour market. Rate R8 provides a single measure of labour underutilization, including all of the groups in the preceding three rates (R5-R7).
Source: Statistics Canada. Table 14-10-0077-01 Supplementary unemployment rates, monthly, unadjusted for seasonality. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, January 2021.

Figure 4.6 shows the unemployment, as well as combined unemployment and underemployment rates in BC, from January to November 2020. Between February and May 2020, the combined underemployment and unemployment rate increased from 11.0% in March 2020 to a high of 18.3% in May 2020. Although the underemployment and unemployment rates declined between June and November 2020, they remained higher in November 2020 than they were in the two months leading up to the pandemic.

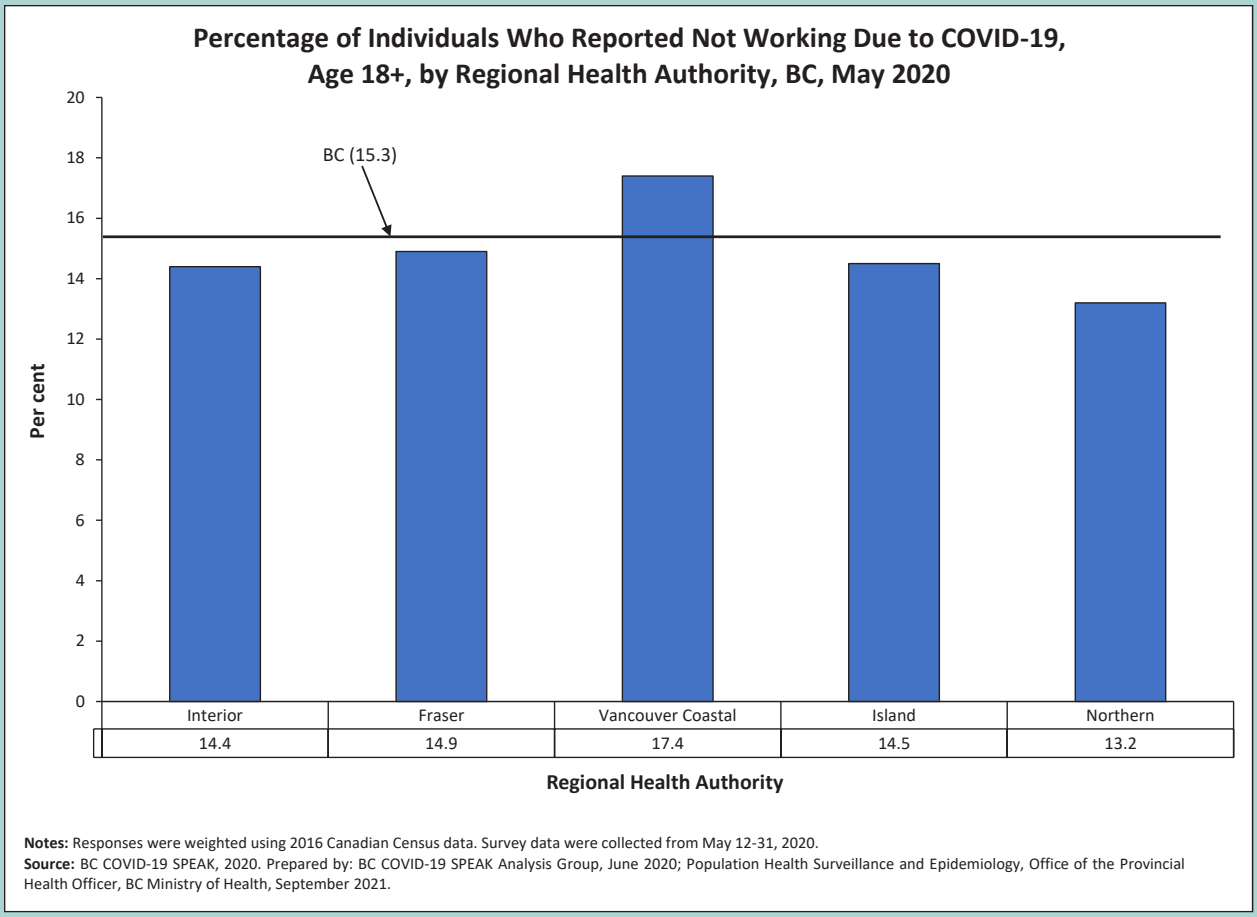
FIGURE 4.7



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020. The project team reports on race-based disaggregated demographic data to reveal inequitable outcomes between racialized groups that result from many factors, including historic and current systemic discrimination and racism. Respondents who selected more than one group were counted in each selected group, so percentages do not add up to 100%. Data from respondents who self-identified as Indigenous (First Nations, Métis, or Inuit) have been removed from this chart at the request of Indigenous partner organizations.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, June 2023.

Figure 4.7 shows the percentage of respondents to the 2020 BC COVID-19 SPEAK Survey who reported that they are not currently working due to COVID-19, by racialized group. At the time of survey completion in May 2020, higher proportions of non-white racialized respondents reported that they are not currently working due to COVID-19, than white (European descent) respondents. The difference between non-white racialized groups and the white group was largest among British Columbians who reported being Black (23.7%), Latin American/Hispanic (22.4%), Southeast Asian (21.3%), West Asian (20.3%), and Arab (20.2%).

FIGURE 4.8



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, September 2021.

Figure 4.8 shows the percentage of respondents to the 2020 BC COVID-19 SPEAK Survey who reported that they are not currently working due to COVID-19, by health region. At the time of survey completion (May 2020), 15.3% of respondents reported that they are not currently working due to COVID-19. While 17.4% of respondents from the Vancouver Coastal health region reported not working due to COVID-19, 13.2% of respondents from the Northern health region reported not working due to COVID-19.

Equity Considerations

Unemployment disproportionately affects health and wellness based on gender, age, education level, type of employment, and race.

During COVID-19, some groups of people have been disproportionately impacted by job loss.

Systemic discrimination has been defined as "practices or attitudes that have, whether by design or impact, the effect of limiting an individual's or a group's right to the opportunities generally available because of attributed rather than actual characteristics."[79]

Indications that systemic discrimination may be happening in employment, include inequitable employment outcomes and/or different experiences between groups of people; non-inclusive policies, practices, and decision-making processes; and non-inclusive organizational cultures.[80]

Women: COVID-19 response measures have disproportionately impacted women's employment,[39,40,55,56,57] and economists have described this phenomenon as a "she-cession."[58,59] A national survey in Canada found that more women (11%) reported losing their job as a result of COVID-19 response measures than men (6%).[56] It also found that one-third of women respondents considered quitting their jobs to take care of home responsibilities, including child care, compared to 20% of men.[56] Some women with children also stopped looking for work or withdrew from the workforce, because they were not the higher household income earner.[60] Similarly, some women reduced their hours to look after their children,[55,57] because their partner earns more.[61] This widening of the gender gap among parents[55,57] has raised concerns about the long-term impacts on gender equality in employment, and drawn attention to the importance of an equitable recovery.[53,54,61]

Young adults: COVID-19 response measures have also disproportionately impacted youth employment.[62] The unemployment rate in Canada for non-student youth reached 25.1% in May 2020, compared to 9.8% in May 2019.[62] Similarly, the unemployment rate in Canada for student youth (looking for summer employment) was 40.3% in May 2020, compared to 13.8% in May 2019.[62]

Workers in less secure jobs: Unemployment due to COVID-19 response measures has had a greater impact on workers in less secure jobs and lower quality jobs in Canada. The number of employees in temporary jobs decreased by 14.5% (274,900 jobs) in March 2020. This decrease was observed across all types of temporary work, with the greatest decrease in casual employment (decrease of 23.5% or 136,000 jobs). Individuals employed in accommodation and food services; information, culture and recreation; and some education services, were more likely to lose their jobs than individuals employed in other industries.[63]

Informal economy workers: Globally, the COVID-19 pandemic is presenting significant impacts in terms of unemployment and underemployment for informal workers.[b,64,65,66] In Canada, informal economy workers are not captured in the Labour Force Survey, but they are likely to have experienced significant declines in the availability of work and income as a result of COVID-19 response measures.[53,67] In 2007, a study found that only 32% of unemployed women are eligible for Employment Insurance compared to 40% of men because women are more likely than men to be employed in part-time or non-standard work due to child care demands.[54,68]

[b] Informal employment includes paid work that is "not registered, regulated, or protected by existing legal or regulatory frameworks" as well as unpaid work. Informal workers do not have secure employment contracts, workers' benefits, social protection or workers' representation. Examples include domestic workers, sex workers, undocumented workers, panhandlers, waste-pickers ("binners"), and casual (day) labourers.

Visible Minorities[c]: In July 2020, the national unemployment rates for South Asian, Arab, and Black respondents were 17.8%, 17.3%, and 16.8% respectively, compared to 9.3% for whites/ Caucasian respondents.[69]

Visible minority women: In July 2020, the national unemployment rate for south Asian women (20.4%) was significantly higher than the unemployment rate for South Asian men (15.4%).[69] Black women were also more likely to be unemployed than Black men (18.6% vs 15.1%).[69] As shown in Figure 4.7, in May 2020, in BC, higher proportions of non-white racialized respondents reported that they are not currently working due to COVID-19, than white (European descent) respondents.

Truth and Reconciliation: Equity in Employment

For many Indigenous (First Nations, Métis, and Inuit) individuals and communities, the challenges of public health restrictions added a layer to the cumulative barriers and stresses faced every day as a result of settler colonialism, intergenerational trauma, manufactured poverty, and pervasive discrimination. Governments and employment sectors must work in meaningful partnership with Indigenous Peoples to arrest structural racism and white supremacy to ensure equitable economic recovery after the pandemic.

Actions Initiated or Planned to Address Unintended Consequence

This list provides examples of actions taken or initiated and is not a comprehensive list. Readers are encouraged to visit the websites of ministries involved in this work to find the latest information.

To mitigate the consequences of unemployment the Province of BC continued and/or implemented business supports and financial aid packages. These included (but are not limited to):

- The Emergency Benefit for Workers (a $1,000 tax-free, one time benefit available to BC residents).[70]
- The BC Temporary Rental Supplement (BC-TRS) Program (provides up to $500 a month to help renters and landlords during COVID-19 for low- and moderate-income renters).[71]
- The BC Rental Assistance Program (RAP) (assistance with monthly rent payments for eligible low-income working families).[72]
- A ban on evictions for non-payment of rent between March 18 and August 17, 2020 and the related Rent Repayment Plan to give tenants a reasonable timeframe to pay landlords any back payments due for rent for March 18 to August 17, 2020.[73]

Additional supports implemented by the Canadian Government for individuals, businesses, sectors and organizations included:

- The Canada Emergency Response Benefit [CERB] ($500 a week for workers who stopped working because of COVID-19),[74] and the subsequent enhanced Employment Insurance (EI) program[75] and new Canada Recovery Benefit for workers who are not eligible for EI (e.g., self-employed individuals and people working in the gig economy).[75]
- The Canada Recovery Sickness Benefit and Canada Recovery Caregiving Benefit which provide monetary support for workers who are sick or must self-isolate; or are caring for a child, a family member with a disability, or a dependent for reasons related to COVID-19, will also be available from September 27, 2020 for one year.[75]

[c] This report recognizes that The United Nations Committee on the Elimination of Racial Discrimination called on Canada to "reflect further" on the use of the term "visible minorities". The term "visible minorities" is used in this section of the report for consistency with the data source referenced: Statistics Canada's Labour Force Survey.

Considerations for Further Action

This section provides considerations for action based on the findings of this report. These are not formal recommendations, but rather ideas to consider when shaping recommendations and actions related to this topic.

Individuals who are unemployed for a longer time are less likely to successfully transition back into employment, but economists are optimistic that the uniqueness of this period of high unemployment due to COVID-19 may ease the barriers that longer-term unemployed individuals typically face when transitioning back to employment.[8] The following considerations for action are offered both to assist with the severity and impact of underemployment and unemployment as the pandemic continues, as well as to help the province adapt once response measures are no longer in effect.

1. Incorporate an equity lens into all recovery and employment/stimulus activities, to recognize that extra measures and/or policies or programs may be needed to support some of the most vulnerable groups (e.g., informal workers) and the groups who have been disproportionately impacted (e.g., women, racialized groups)
2. Adapt post-secondary training programs to provide students with the education and skills required to work in occupations that are in-demand in a post-COVID-19 economy.[76] Such programs can be helpful for new workers, as well as workers who are looking for new jobs because they lost their old jobs to automation or the permanent closure of businesses.
3. Plan for economic recovery that focuses on fixing the causes of inequitable employment outcomes (e.g., systemic discrimination and racism, and differential gender roles[53,54,77]).
4. Ensure that schools, daycares and other childcare programs are open and affordable, in a consistent, reliable manner, and are able to facilitate parents' return to full employment, particularly for women.[78]
5. Evaluate the short- and long-term impact of CERB and the revised EI program to monitor the implications for health and wellness, and potential broader societal benefits.

Appendix 4-A: Data Methodology Notes

1. **Charts provided by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer.**

For questions contact: HLTH.PHSE@gov.bc.ca.

2. **Definitions for the terms used in the Statistics Canada Labour Force Survey:**

   a. Labour Force: Number of civilian, non-institutionalized persons 15 years of age and over who, during the reference week, were employed or unemployed. Estimates in thousands, rounded to the nearest hundred.

   b. Part-time employment: Persons who usually work less than 30 hours per week at their main or only job. Estimates in thousands, rounded to the nearest hundred.

   c. Population: Number of persons of working age, 15 years and over. Estimates in thousands, rounded to the nearest hundred.

   d. Seasonally adjusted: Fluctuations in economic time series are caused by seasonal, cyclical, and irregular movements. A seasonally adjusted series is one from which seasonal movements have been eliminated. Seasonal movements are defined as those which are caused by regular annual events such as climate, holidays, vacation periods and cycles related to crops, production and retail sales associated with Christmas and Easter. The data in this report have not been seasonally adjusted.

   e. Unemployment: Number of persons who, during the reference week, were without work, had looked for work in the past four weeks, and were available for work. Those persons on layoff or who had a new job to start in four weeks or less are considered unemployed. Estimates in thousands, rounded to the nearest hundred.

   f. Unemployment rate: The unemployment rate is the number of unemployed persons expressed as a percentage of the labour force. The unemployment rate for a particular group (age, sex, marital status, etc.) is the number unemployed in that group expressed as a percentage of the labour force for that group. Estimates are percentages, rounded to the nearest tenth.

   g. Underemployment measures: Although the official rate of unemployment is a key indicator of job conditions, no single measure can capture the complexity of the labour market. For this reason, supplementary measures of unemployment have been developed to shed further light on the degree of labour market slack and the extent of hardship associated with joblessness. For more information, please see the summer 1999 issue of the Labour Force Update (catalogue 71-005-XPB), which presents supplementary measures of unemployment.

      - R4 is the official unemployment rate.
      - R5 is the first of the rates to factor-in people not normally included among the unemployed. Along with the unemployed, this rate also includes discouraged searchers. They are people who wanted and were available to take work but who did not look for a job because they believed none was available. This definition has changed and as a result, R5 is only available from 1997 onwards.
      - R6 includes those considered on the margins of the labour force, that is, those who are not searching for work but are available for work and are waiting for employment. They are either waiting to be recalled from a previous employer, or they have applied for a job and are waiting for replies. Also included are those who have lined up a job to start in five weeks or more. These people have a much higher likelihood of being in the labour force in the future than others not in the labour force.

- R7 adds a portion of those who are involuntary part-time workers to the official unemployed. There are two adjustments made to the number of involuntary part-timers to derive the portion used in R7. Firstly, involuntary part-timers who have a second job and work full-time hours between both jobs are excluded. Secondly, a large number of involuntary part-timers are removed because each involuntary part-timer is only partially utilized in the labour market.
- R8 is the most comprehensive and therefore, highest of the supplementary rates as it includes all of the groups in the preceding three rates. As such, R8 provides a single measure of labour underutilization. Included in this rate are the discouraged searchers, those waiting for recall, replies, long-term future starts and the underutilized portion of involuntary part-timers.

h. Additional notes: To ensure respondent confidentiality, estimates below a certain threshold are suppressed. For British Columbia, suppression is applied to all data below 1,500.

3. BC COVID-19 SPEAK Survey

Survey administration details: The BC COVID-19 SPEAK Survey was primarily an online survey administered from May 12, 2020 to May 31, 2020 across British Columbia. A call centre was also created to support individuals who wished to take the survey with assistance. The survey was available in English and Simplified Chinese (online), with language guides in downloadable electronic format available for 9 other languages (Arabic, American Sign Language, Farsi, French, Korean, Punjabi, Spanish, Traditional Chinese and Vietnamese). All other languages were available through the call centre from PHSA Provincial Language Services. The BC COVID-19 SPEAK Survey was funded by the BCCDC Foundation for Public Health.

Sampling details: The target population for the survey was residents of British Columbia who were 18 years of age or older. In order to achieve a large and representative sample, a response target of 2% of the urban population and 4% for rural/remote communities were set as determined by the Community Health Service Area (CHSA) density designation. Targets were also established for age, gender, income, education and ethnicity by each geographic area. Progress towards these targets was monitored daily and purposeful promotion and stakeholder outreach was done in order to better reach certain geographies and population demographics. Population targets were surpassed for each Regional Health Authority. However, not all sub-regions or demographic groups by geography did reach their target. Specifically, rural communities, populations with lower education, lower incomes, and some visible minorities were less reached and were prioritized for outreach. The final analytical dataset, which only included surveys where a Health Service Delivery Area geography, age, and gender were assigned and where the respondent must have completed at least 33% of the survey, contained 394,382 responses.

Weighting details: Statistical weighting is often used in large surveys to ensure that the sample of collected responses reflects the overall target population. This type of weighting compensates for the fact that certain demographics are less likely to respond to a survey. By establishing detailed socio-demographic targets at the outset for each geographic area of interest within the survey area, it allowed for more focused participant recruitment with the ultimate benefit of applying smaller weights. The BC COVID-19 SPEAK results presented in this chapter were weighted using 2016 Canadian Census data by demographic and geographic variables, as appropriate (e.g., age, sex, ethnicity, education level, local health area), to account for residual differences in sample demographics and to ensure that the sample is as representative as possible of the overall geographic population that is being reported on. This set of survey weights is slightly different than those used to produce the public BC COVID-19 SPEAK Round 1 Dashboard, so the results in this report are not directly comparable to the public Dashboard.

Limitations: BC COVID-19 SPEAK Survey is a non-randomized voluntary survey subject to self selection bias among those who choose to respond to the survey. To adjust the sample to the population and enhance representativeness, quota-based sampling by geography and post collection weighting are used. Correction for unknown population characteristics is not possible. This limitation is not unique to non-randomized surveys as self selection bias is apparent in voluntary randomized surveys as well where a significant proportion of those offered to take a survey choose not to participate. Despite attempts for outreach to underrepresented communities and statistical weighting and the creation of multiple points of access, this survey may be limited in its ability to fully reflect the experiences of members of communities unable to complete the survey due to language or access barriers.

Notes on racialized groups: Figure 4.7 shows BC COVID-19 SPEAK responses disaggregated by non-Indigenous racialized groups. This report analyzes data by racialized groups "to reveal and address systemic inequalities in social determinants of health and access to health care," as per the report, *Disaggregated demographic data collection in British Columbia: The Grandmother Perspective*, by the BC Office of the Human Rights Commissioner.[d]

Some of the categories charted were abbreviated for space. The category "Filipinx" is a gender-neutral term used in place of "Filipino" and/or "Filipina." The question asked, "Do you consider yourself to be (check all that apply) …."

The options included "First Nations," "Métis," and "Inuit." Respondents who selected "First Nations," "Métis," or "Inuit" are not reported in these figures. In accordance with Indigenous Data Governance practices in BC, data from Indigenous respondents is provided to the First Nations Health Authority and Métis Nation British Columbia to determine how best to use the data in planning and engaging Indigenous communities across the province.

The options also included "White (European descent)," "Chinese," "South Asian (e.g., East Indian, Pakistani, Sri Lankan)," "Black (e.g., African or Caribbean)," "Filipino," "Latin American/Hispanic," "Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian)," "Arab," "West Asian (e.g., Iranian, Afghan)," "Korean," "Japanese," "Other, please specify," and "Prefer not to answer."

Respondents are reported in every category they selected.

[d] BC Office of the Human Rights Commissioner. Disaggregated demographic data collection in British Columbia: the grandmother perspective. Vancouver, BC: BC Office of the Human Rights Commissioner; 2020 Sep [cited 2022 Aug 23]. Available from: https://bchumanrights.ca/wp-content/uploads/BCOHRC_Sept2020_Disaggregated-Data-Report_FINAL.pdf.

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Chapter 5

Food Insecurity

(Reported January 2024)

Key Findings:

- The COVID-19 pandemic and associated response measures impacted various dimensions of food security, including the availability, accessibility, and affordability of food in BC. Increased unemployment and reduced income during the pandemic substantially contributed to household food insecurity.
- In the early months of the pandemic, 14.6% of people age 18 and older in BC reported worrying that food would run out before they could get money to buy more. This proportion was highest in the Northern Health region (18.5%).
- In BC, as a result of discrimination and deeply entrenched societal inequities, food insecurity during the COVID-19 pandemic disproportionately affected people age 18–29, people with an annual household income of less than $20,000, people without a high school diploma, people with at least one disability, Indigenous Peoples (First Nations, Métis, and Inuit), and people who are racialized.

Situation

The COVID-19 pandemic and associated response measures impacted various dimensions of food security, including the availability, accessibility, and affordability of food in BC. Increased unemployment and reduced income substantially contributed to household food insecurity. People who experienced food insecurity before the COVID-19 pandemic were more likely to face increased challenges with food insecurity due to the pandemic and related response measures.

Background

Food insecurity is closely tied to structural inequities, racism, discrimination, and colonialism.[1,2] Even before the pandemic, some groups in society were more likely to experience food insecurity. Those who most frequently experience food insecurity in Canada include low-income households, people who identify as Black or Indigenous, families with children (especially female lone-parent families), and households that rely on social assistance or other income supports.[3,4]

Because understandings of food security and food insecurity vary, the BC Centre for Disease Control (BCCDC), along with Indigenous and health sector partners, has created common definitions for the BC context (see text box).[1,5] Through this work, they have also sought to describe—rather than define—the complex nature of **Indigenous food sovereignty** (IFS) and its integral role in achieving population-level food security.[6] IFS has been characterized as "a re-connection to land-based food and political systems"[7(p.18)] and "the right and responsibility of people to have access to healthy and culturally appropriate foods, while defining their own food systems."[8] IFS also forms the basis of a sustainable framework for Indigenous health, wellness, and community development; [8,9] this includes the need to restructure colonial systems to support IFS and to honour "the values and practices that guide Indigenous Peoples' relationships to the land and to each other."[a,1(p.3),5]

[a] For more information, including a discussion of key principles that guide Indigenous food sovereignty, please see the BCCDC's *Conceptual Framework for Food Security Indicators in British Columbia* summary report (pp. 9-10): http://www.bccdc.ca/pop-public-health/Documents/conceptual-framework-food-security-indicators.pdf.

Defining Food (In)security

In 2022, the BC Centre for Disease Control, working with Indigenous and health sector partners across BC, released the following definitions of food security and food insecurity.

Food security means that everyone has equitable access to food that is affordable, culturally preferable, nutritious, and safe; everyone has the agency to participate in, and influence food systems; and that food systems are resilient, ecologically sustainable, socially just, and honour Indigenous food sovereignty.

Food insecurity exists when factors outside an individual's control negatively impact their access to enough foods that promote well-being. Economic, social, environmental, and geographical factors influence this access. Food insecurity is most acutely felt by those who experience the negative impacts of *structural inequities*,[b] such as discrimination and ongoing colonial practices.

For more information, see http://www.bccdc.ca/Documents/FoodSecurity_FoodInsecurity_Definitions_FINAL.pdf.

Household food (in)security
Food security is commonly understood to exist in a household when all members of that household, at all times, have access to sufficient, safe and nutritious food for an active and healthy life. Conversely, food insecurity occurs when food quality and/or quantity are compromised, typically associated with limited financial resources.[11]

Food insecurity exists along a continuum, with different levels requiring different responses and supports. *Severe* food insecurity refers to prolonged deprivation, which can include missing meals, reducing food intake, and going without food for extended periods (even full days).[10] *Moderate* food insecurity is associated with inadequate food intake: although food is accessible, it is poor in quality, quantity, and/or diversity.[10] Food insecurity can also be described as *marginal* (i.e., worrying that food will run out before being able to get more,[10] whether through food production, hunting/fishing, gathering, or purchasing food). Some sources further distinguish between the concept of food insecurity more broadly and **household food insecurity** (see text box).[11] Any of these states of food insecurity may be linked to low income, mental health challenges,[10] and settler-colonial harms such as dispossession and displacement of Indigenous Peoples from land and resources.[12]

Food insecurity may be transitory or chronic. In other words, food insecurity can be the short-term result of unforeseen events or conditions such as disruption of food production, increased food prices, and/or reductions in household income. Food insecurity can also be the longer-lasting result of poverty, the absence of economic resources and opportunities, and/or separation from ancestral lands and traditional food sources.[13] By the time individuals or families are experiencing food insecurity, they are already likely to face challenges in terms of access to and affordability of other basic needs (e.g., housing).[14] More than one-third (36%) of food-insecure households in Canada indicated that food was the first expense they would cut from their budget (i.e., before they would cut expenses such as transportation, medicine, utilities, or housing).[15]

Food security supports positive physical, mental, emotional, and spiritual health, while food *insecurity* is associated with a range of health and wellness impacts across the life course.[15] In 2020, Canadians reported that food insecurity affected their relationships with loved ones and the health and wellness of their children, isolated them socially, created barriers to finding and maintaining employment, impeded their ability to find meaning and purpose in life, and affected their ability to express and share their culture.[15]

[b] Structural inequities are the unfair and unjust systemic biases present in institutional policies and day-to-day practices that disadvantage certain social identities over others based on race, gender, class, sexual orientation, and other domains.

Research has linked food insecurity to adverse maternal and birth outcomes;[16,17] increased risk of chronic diseases such as cardiovascular disease, diabetes, and asthma;[18,19,20,21] and higher mortality rates.[22] Having access to a balanced and healthy diet is important to reduce the risk of developing chronic disease.[23] Food-insecure adolescents and adults are more likely to experience nutritional deficiencies.[24] Food insecurity is also associated with poorer mental health, and can contribute to mental health conditions such as depression and anxiety.[25,26,27]

The COVID-19 pandemic and associated response measures impacted various dimensions of food security, including the availability, accessibility, and affordability of food. Following the declaration of the pandemic in 2020, "panic buying" and hoarding of food and household products (e.g., non-perishable food, baby formula, toilet paper) occurred for several weeks in Canada and the United States.[28,29] Sales at food and beverage stores increased 22.8% from February 2020 to March 2020 in Canada.[30] This spike in consumer demand in the early days of the pandemic led to temporary interruptions and shortages of food supplies in grocery stores.[29] These interruptions and shortages, along with subsequent disruptions in food supply chains, left individuals and families with limited options as to what remained available. Some stores eventually responded by imposing quantity purchasing limits on products.[29] These limits disproportionately impacted people in rural, remote, and Indigenous communities, many of whom tend to buy groceries in large quantities.[c,31,32] In addition, some people may have experienced limited food access due to fears of COVID-19.[29,33] Some may have shopped less because of the fear of taking public transportation or going inside grocery stores as COVID-19 case rates increased across the province and globally, especially if they did not have someone else to shop for them, or if they could not order food or groceries online.

[c] This may be because many people in rural, remote, and Indigenous communities must travel long distances to get to a grocery store, sometimes by boat or plane, with significant costs in terms of travel time, fuel, and related expenses. They might also be shopping for larger/multi-generational households or multiple community members.

Truth and Reconciliation: Food (In)security and Connection to Land

Section 35 of the Canadian Constitution recognizes and affirms the existing Aboriginal and Treaty rights of three distinct Indigenous Peoples: First Nations, Métis, and Inuit.

The lands now known as British Columbia and Canada have sustained and been stewarded by Indigenous Peoples since time immemorial. Indigenous Peoples' connectedness to the land, access to resources, and associated cultural practices have been profoundly disrupted by colonization and ongoing settler colonialism. Forced removal from ancestral lands, deliberate restriction of access to traditional resources, systemic racism and discrimination, and genocide have deeply impacted Indigenous food sovereignty and the ability of Indigenous Peoples to exercise their inherent rights and self-determination, including with respect to accessing foods (whether through food production, hunting/fishing, gathering, or purchasing food).

During the pandemic, the Governments of British Columbia and Canada identified supporting Indigenous communities to respond to COVID-19 as a high priority. The Government of British Columbia has also committed to a process of reconciliation and relationship-building with Indigenous Peoples, including implementation of the *Declaration on the Rights of Indigenous Peoples Act*. For more information, visit https://www2.gov.bc.ca/gov/content/governments/indigenous-people/new-relationship. There remains a great deal of work to be done by settler governments and systems to uphold the inherent rights of Indigenous Peoples.

As the pandemic continued, COVID-19 outbreaks in food processing plants and labour shortages in the horticulture sector caused disruptions to food supply chains in BC.[29,34,35] The pandemic has also led to new and continued pressures and disruptions in global food supply chains (e.g., production, processing, distribution), largely due to health and safety protocols and closures to curb the spread of COVID-19;[36,37] these and other economic impacts of the pandemic and response measures affected both the accessibility and affordability of food.

In addition, the pandemic and related response measures contributed to a decline in employment and a reduction in hours of work for many, due in part to increased caregiving responsibilities—especially for women—after the suspension of in-class learning at schools and the reduction of home care services.[38,39] The decline in employment further increased the risk of food insecurity.[40] Decreased employment and reduced income were inequitable in other ways as well, with disproportionate impacts felt by younger workers, Indigenous workers, recent immigrants, racialized workers, and those with lower incomes and/or less secure employment.[41] Lower income is strongly associated with household food insecurity, and even small decreases in income can increase risk.[10] Furthermore, food in Canada became substantially more expensive in 2020. For example, the prices of the following foods increased by 7 to 14% between May 2019 and May 2020: meat (7.8%), rice/rice-based mixes (9.3%), flour/flour-based mixes (9.4%), and canned tuna (13.9%).[42]

While there have been many harmful outcomes related to increased food insecurity during the pandemic, positive impacts related to COVID-19 response measures have also been identified, particularly in more rural and remote areas. In some Indigenous communities, individuals and families have "returned to the land" to self-isolate and harvest wild foods and medicines as ways to stay well and connect to culture during the pandemic.[43,44,45] In communities that rely on ferry services to get groceries, some people reported that BC Ferries' decision to deliver groceries during the pandemic—which reduced the need for people to travel long distances to the grocery store—supported people to stay at home and self-isolate, increasing access to food.[46] Many people and communities—Indigenous and non-Indigenous alike—also began or increased their home-based food production activities, which are associated with increased community cohesion, resilience, self-sufficiency, and food sovereignty.[47,48,49]

Food Banks and the Charitable Food Sector

Food banks and affiliate organizations in the charitable food sector provide important emergency relief and short-term support to individuals and families in crisis. However, food banks were not designed to increase food security. Because food insecurity is not simply a matter of "needing more food," but is clearly linked to inadequate income, food banks and the charitable food sector can only treat the symptoms of food insecurity, and not the root causes.[10,50,51] The majority of food-insecure households in Canada do not access food banks, but rely instead on strategies such as borrowing money or not paying bills so they can afford to buy food.[10]

Still, in a survey of food banks and affiliate organizations across Canada, more than half (52%) reported an increase in usage in March 2020, during the onset of the COVID-19 pandemic, compared to March 2019.[52] Food banks struggled to respond to the increased need, citing a shortage of volunteers, an insufficient food supply due to disruptions in the supply chain, reduced donations and funding, and difficulties in adjusting to public health protocols.[52] New federal and provincial funding and support from individuals, businesses, and local communities helped many food banks meet these challenges and provide increased support.[52,53]

After the initial surge in demand, however, 53% of food banks reported a decline in usage in June 2020 compared to March 2020. The majority (90%) of food bank operators believed this decline was due to government financial support for individuals in need.[52]

Findings

A Statistics Canada survey conducted in May 2020 revealed that 15.3% of BC households (14.6% of Canadian households) had experienced food insecurity in the previous 30 days.[d,40] This is higher than reported in Statistics Canada's 2017/18 Canadian Community Health Survey, which showed that 10.7% of BC households[54,55] (10.5% of Canadian households) experienced food insecurity.[56] This difference suggests a dramatic increase in food insecurity in the early days of the pandemic. The May 2020 survey also found higher rates of food insecurity among Canadians living in households with children (19.2%) compared to households without children (12.2%).[40] Canadians who were absent from work due to business closure, layoff, or personal circumstances resulting from COVID-19 were almost three times more likely to report food insecurity than those who were working (28.4% compared to 10.7%).[e,40]

The Institute for Sustainable Food Systems at Kwantlen Polytechnic University conducted a survey on food access, concerns, and perceptions during the pandemic. The survey ran from April 15 to August 15, 2020, and 2,211 BC residents responded.[29] Of these,

- 26% worried they might not always have access to enough food for a healthy life for all household members in the coming month. This percentage rose above 30% for those who were unemployed, those with a household income below $40,000, and those who identified as Indigenous.
- 60% reported at least one factor limiting their access to food during the pandemic. The factors included limited income or food being too expensive (47%), being too worried/anxious to go out (47%), limited stores in the area they lived (25%), lack of transportation (15%), quarantine/self-isolation (15%), food scarcity (8%), and closed stores (4%).
- 39% of respondents said they could get the foods they needed, while 61% of respondents identified difficulties in accessing food items.
- 46% of unemployed respondents agreed with the statement: "Thinking about next month, I'm concerned that I won't have enough food for [an] active healthy life for all household members," compared with 30% of employed respondents.[29]

This survey also found that specific groups of people indicated higher levels of difficulty in accessing food during the pandemic. These groups include families with children living at home, Indigenous people, and those at high risk of severe illness from COVID-19.[29] For Indigenous communities in BC, access to traditional foods was also affected by the pandemic response; for example, the need for physical distancing made harvesting fish and other seafoods challenging, and added to the existing impacts of climate change, industrialization and resulting habitat loss, and the need for conservation of shrinking wildlife populations.[57]

Research conducted in the fall of 2020 suggests that pandemic-related financial support slightly decreased household food insecurity in Canada, including among Indigenous Peoples.[58] However, given the temporary nature of this support and increasing inflation, this positive impact was not expected to last.

In February and March 2021, the Public Health Association of BC surveyed community service organizations that provide food access in BC: 69% of responding organizations reported increased need/usage during the pandemic, and 65% indicated that they had established new food access programming, in some cases for the first time, because of the pandemic.[59]

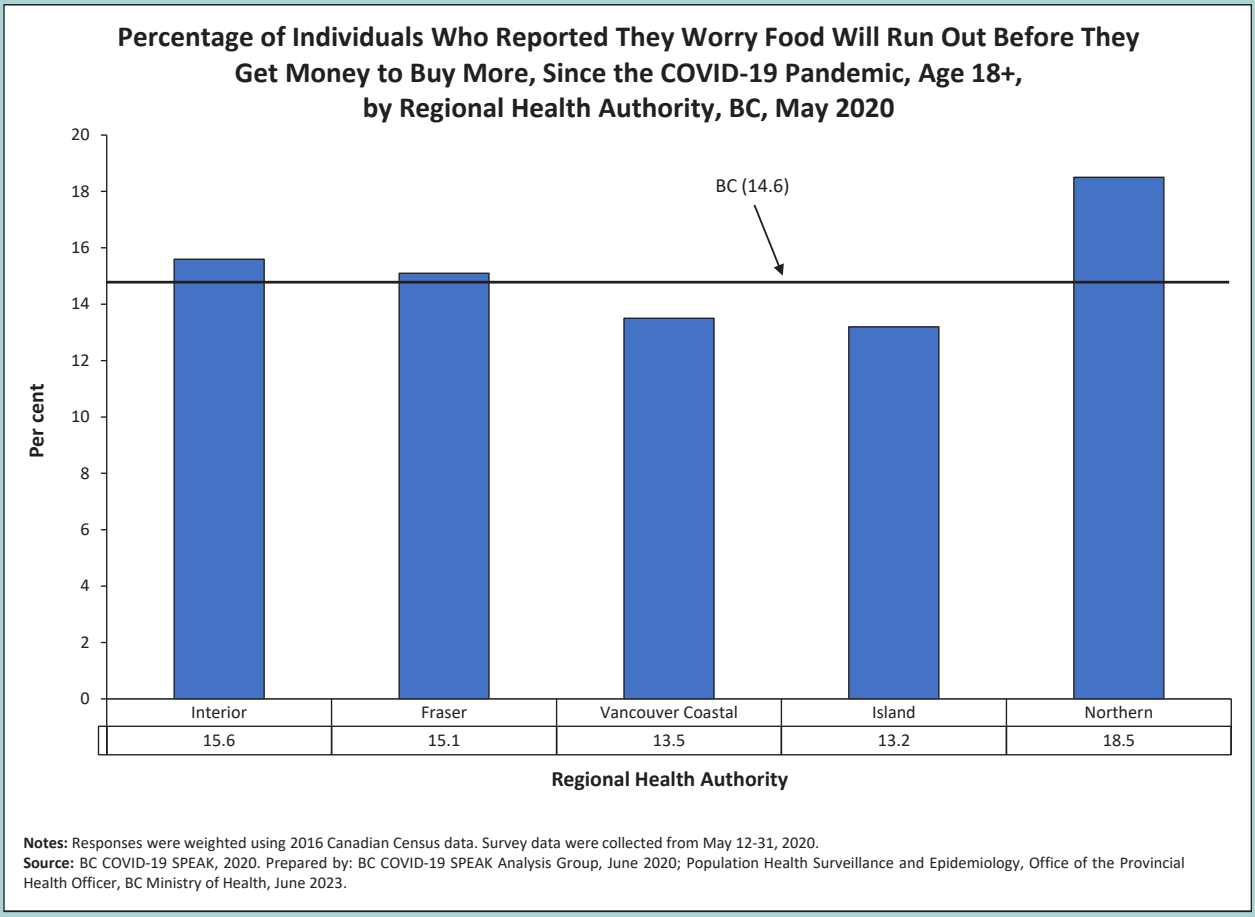
[d] Individuals within a household might experience different levels of food insecurity. For example, individual members of a food-insecure household might vary in their access to food supports outside the household (e.g., access to school-based meal programs).

[e] This section of the report presents data from several BC- and Canada-based surveys, with an emphasis on BC COVID-19 SPEAK data from May 2020. For further details about COVID-19 SPEAK, please see Appendix 5-A. For a summary of additional research projects focused on the impacts of COVID-19 on food security in BC and across Canada, please see Appendix 5-B.

Figures 5.1 to 5.7 below present findings about perceived food insecurity that are representative of the BC population, based on the first BC COVID-19 Survey on Population Experiences, Action, and Knowledge (SPEAK; May 12–31, 2020). These figures include analyses by regional health authority (Figure 5.1), age group (Figure 5.2), household income (Figure 5.3), education level (Figure 5.4), number of years in Canada (Figure 5.5), level of ability (Figure 5.6), and race/ethnicity (Figure 5.7).[f]

[f] Due to the specific analyses and weighting conducted for this report, there may be slight differences between the COVID-19 SPEAK data presented here and the data available on the COVID-19 SPEAK Dashboard (http://www.bccdc.ca/health-professionals/data-reports/bc-covid-19-speak-dashboard).

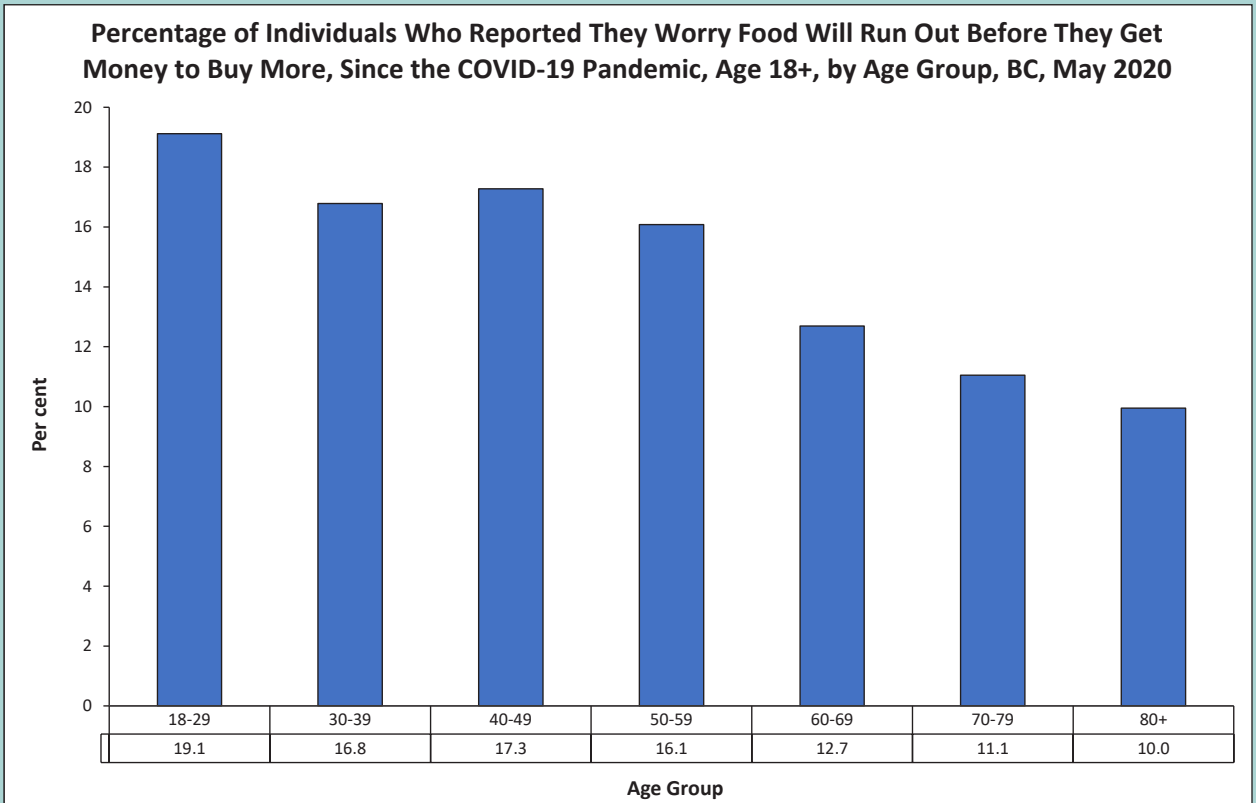
FIGURE 5.1



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, June 2023.

Figure 5.1 presents the percentage of people age 18 and older in BC, by health region, who reported worrying since the COVID-19 pandemic began that food would run out before they could get money to buy more. For example, 15.6% of people in Interior Health reported worrying about running out of food before they could get money to buy more. The average in BC was 14.6%, while the highest proportion was in Northern Health (18.5%) and the lowest proportions were in Vancouver Coastal Health (13.5%) and Island Health (13.2%). The proportions in Northern, Interior, and Fraser Health were all above the provincial average.

FIGURE 5.2

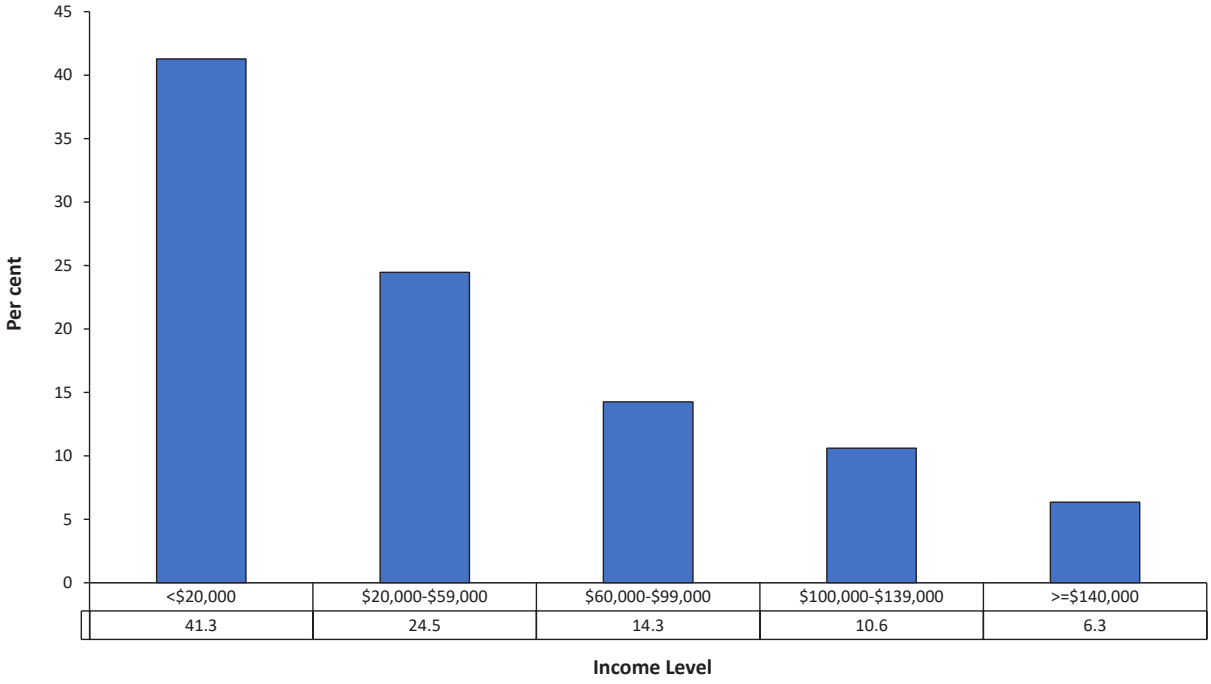


Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, June 2023.

Figure 5.2 shows the percentage of people age 18 and older in BC, by age group, who reported worrying since the COVID-19 pandemic began that food would run out before they could get money to buy more. For example, 19.1% of people age 18–29 reported worrying about running out of food before they could get money to buy more. There is an overall decrease in the proportion of individuals reporting this as age increases. People age 18–29 were most likely to report worrying about running out of food, and people in this age group were almost twice as likely as those in the oldest age group (10.0% of those age 80 and older) to worry about running out of food.

FIGURE 5.3

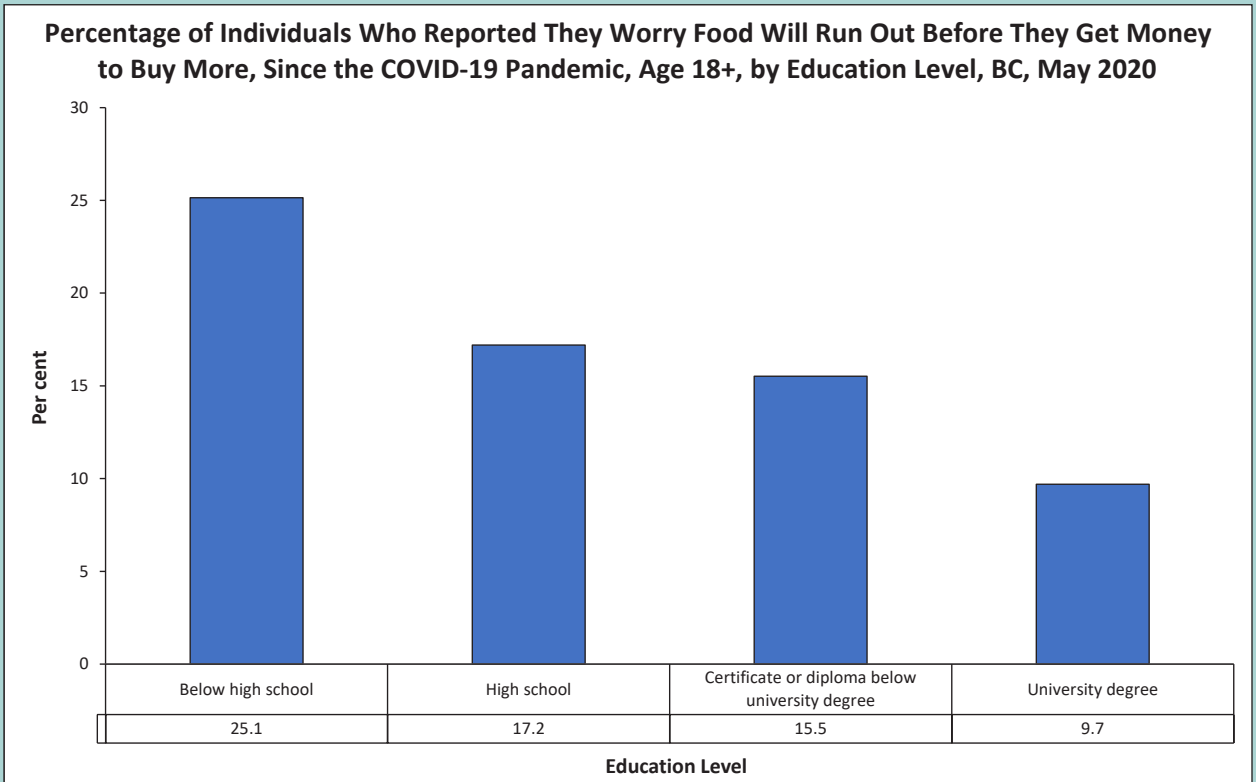
Percentage of Individuals Who Reported They Worry Food Will Run Out Before They Get Money to Buy More, Since the COVID-19 Pandemic, Age 18+, by Household Income Level, BC, May 2020



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020. Household income means income before taxes and deductions, from all sources for the last calendar (tax) year, for all family members in the household combined, excluding roommates. No adjustments were made by family size or number of dependents.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, June 2023.

Figure 5.3 shows the relationship between household income and worrying since the COVID-19 pandemic began that food would run out before having money to buy more. For example, 41.3% of people with annual household incomes below $20,000 reported worrying about running out of food before they could get money to buy more. As annual household income decreased, people were more likely to report worrying about running out of food. People with annual household incomes below $20,000 were most likely to report worrying about running out of food before they could get money to buy more, while those with annual household incomes of $140,000 or more were least likely.

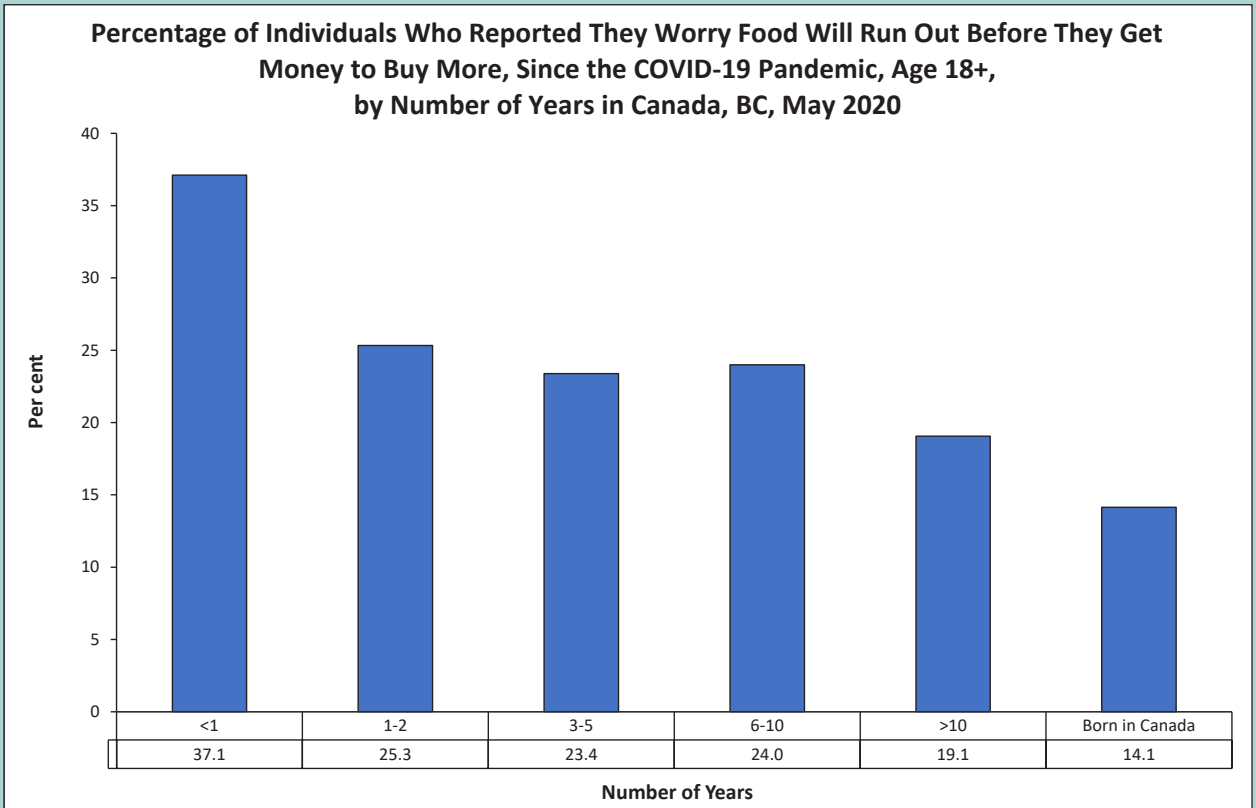
FIGURE 5.4



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020. "Prefer not to answer" and missing responses have been excluded from this analysis.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, June 2023.

As was the case with income, Figure 5.4 shows that those with lower education levels were most likely to worry since the COVID-19 pandemic began that food would run out before they had money to buy more. For example, 25.1% of those without a high school diploma and 17.2% of those who completed high school but not further education reported worrying about running out of food before they could get money to buy more. As education levels increased, people were less likely to be worried about food running out. Fewer than 10% of those with a university degree reported worrying food would run out before they could get money to buy more. This likely reflects the tendency for Canadians with university degrees to have higher incomes than those with lower levels of education.[60]

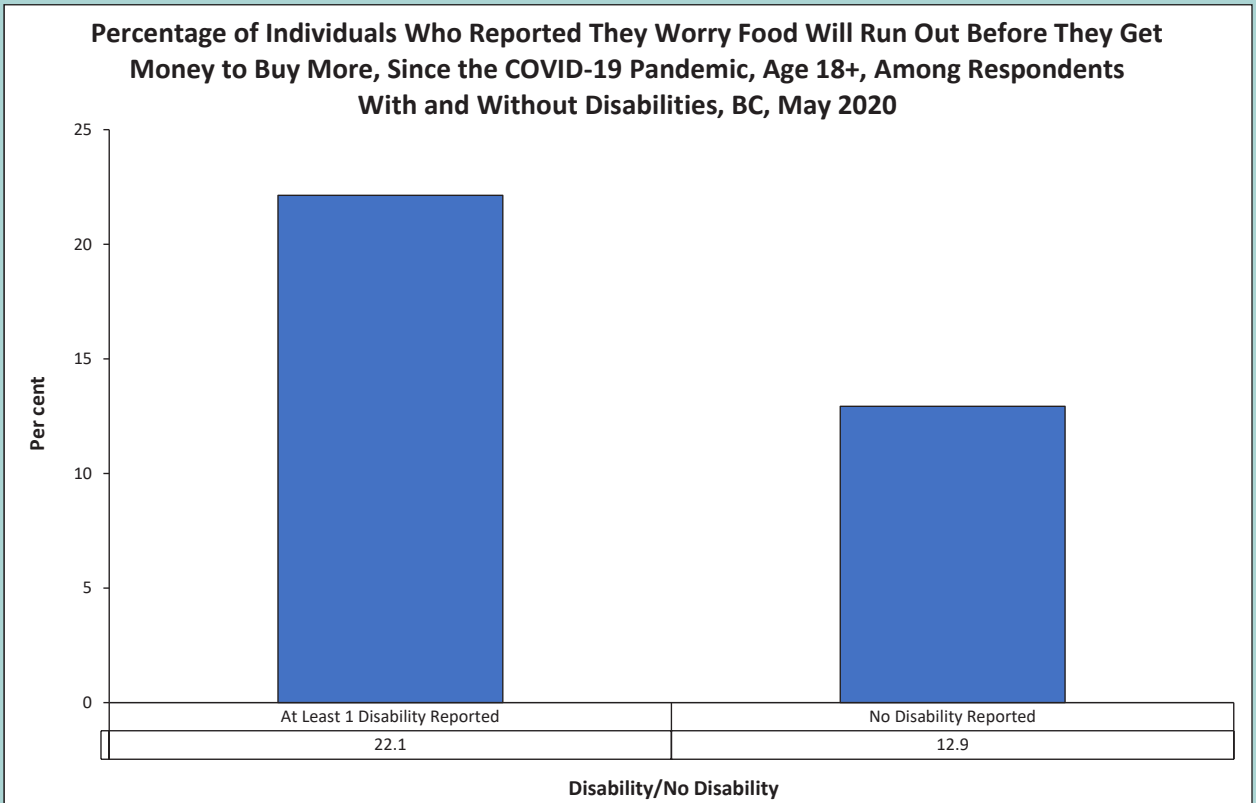
FIGURE 5.5



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, June 2023.

Figure 5.5 presents the percentage of people age 18 and older in BC, by number of years spent in Canada, who reported worrying since the COVID-19 pandemic began that food would run out before they could get money to buy more. For example, 37.1% of people who had spent less than one year in Canada reported worrying about running out of food before they could get money to buy more. People not born in Canada, regardless of the number of years spent living in Canada, were more likely than those born in Canada to report worrying about running out of food before they could get money to buy more. Those who had spent less than one year in Canada were more than two and a half times more likely to worry about running out of food than those who were born in Canada (37.1% compared to 14.1%).

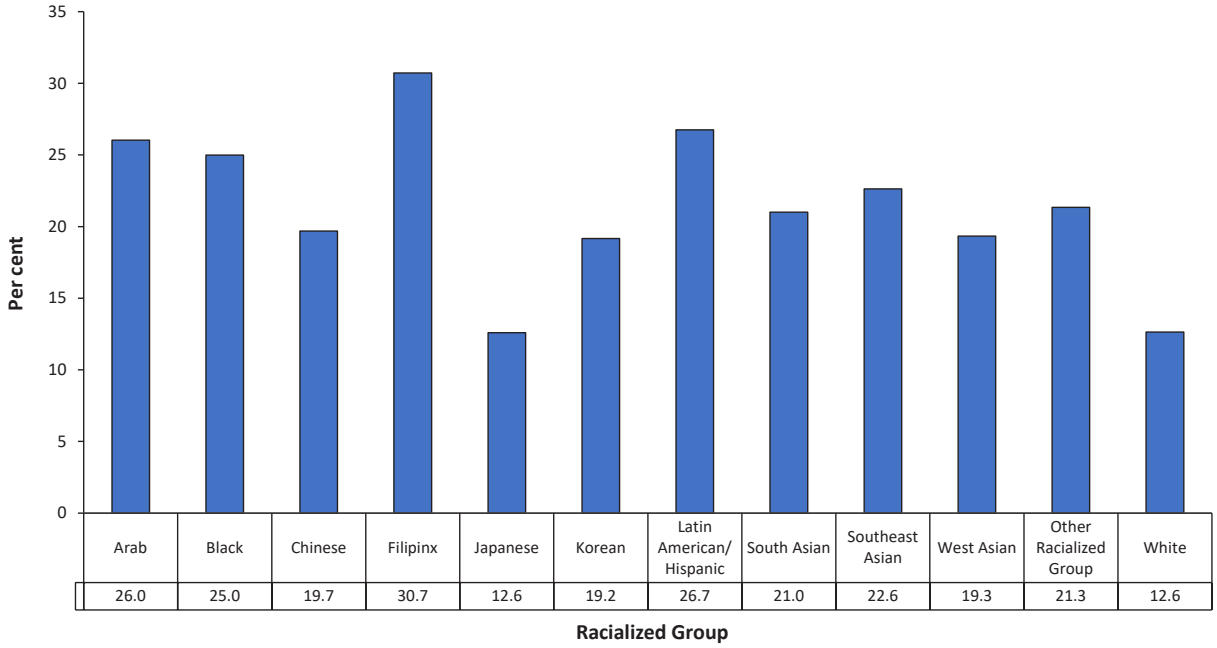
FIGURE 5.6



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, June 2023.

Figure 5.6 compares the percentages of people age 18 and older in BC, with and without disabilities, who reported worrying since the COVID-19 pandemic began that food would run out before they could get money to buy more. Of people who reported having at least one disability, 22.1% worried about running out of food before they could get money to buy more. People with at least one disability were much more likely than those without a disability to report worrying about food running out before they could get money to buy more (22.1% compared to 12.9%).

FIGURE 5.7



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020. The project team reports on race-based disaggregated demographic data to reveal inequitable outcomes between racialized groups that result from many factors, including historic and current systemic discrimination and racism. Respondents who selected more than one group were counted in each selected group, so percentages do not add up to 100%. Data from respondents who self-identified as Indigenous (First Nations, Métis, or Inuit) have been removed from this chart at the request of Indigenous partner organizations.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, June 2023.

Figure 5.7 shows the percentage of people age 18 and older in BC, by racialized group, who reported worrying since the COVID-19 pandemic began that food would run out before they could get money to buy more. For example, 26.0% of people who identified as Arab reported worrying about running out of food before they could get money to buy more. People who identified as white or Japanese were least likely to report this worry (12.6%), while other people who identified as racialized reported this worry at levels ranging from a low of 19.2% (Korean) to a high of 30.7% (Filipinx[g]). Although Figure 5.7 illustrates perceptions of food affordability rather than food insecurity more directly, research shows that increased levels of food insecurity among racialized populations—along with newcomers to Canada (as seen in Figure 5.5), many of whom are also racialized—are the result of many intersecting factors, including structural and systemic racism, as well as systems, policies, and institutions in BC and across Canada that privilege white people while marginalizing and disadvantaging People of Colour.[1,2,3,61]

[g] "Filipinx" is a gender-neutral term for people and communities originating in the Philippines, also known as "Filipino."

While not included in this chart, Indigenous Peoples and communities are known to experience very high levels of food insecurity due to the ongoing legacies of colonialism and racism. Even before the pandemic, some sources found rates of food insecurity among First Nations people that exceeded 40%.[4] Métis Nation British Columbia reports that food security is also a serious issue among Métis people in BC.[49,62] Again, it is important to recognize that this is the result of factors such as racism, colonialism, and oppressive systems, policies, and practices that create unearned advantages for white people and unfair disadvantages for Indigenous Peoples.[1,2,3,61] During the pandemic, First Nations Health Authority and Métis Nation British Columbia were among those working to address food insecurity in BC (see text box).

First Nations Health Authority created a toolkit with ideas, templates, tools, and information to support First Nations communities in increasing control over community-level food systems and making short-, medium-, and long-term plans for food security using a food systems approach.[63]

Métis Nation British Columbia (MNBC) identified food security as a key priority and launched several projects to promote increased self-sufficiency in terms of access to food. These included the Métis home garden pilot project and a Métis harvester relief fund.[64]

In addition, MNBC partnered with the Office of the Provincial Health Officer and the BCCDC to develop a report focused on Métis food (in)security and food as medicine during the COVID-19 pandemic. This report is available online (www.mnbc.ca/foodasmedicinereport), and appears as Chapter 6 in this report.

Equity Considerations

Note that the factors and considerations listed below often intersect, thus compounding their effects and deepening experiences of marginalization, poverty, stress, and food insecurity for many people. BC COVID-19 SPEAK–Round 2 data indicated an overall decrease in food insecurity concerns in BC in April–May 2021 compared to the previous spring; however, once again, certain populations (e.g., younger people, racialized people and communities, those with lower incomes and/or less education) remained disproportionately affected.[65]

- **Socio-economic status:** Food insecurity is closely linked to social and economic disadvantage, particularly low and unstable income. Households with lower household income face the greatest risks of food insecurity;[61] however, most food insecure households in BC (65%) are working households.[29] Lower wages and precarious employment can prevent a working individual from being food secure.[10] Among BC households who depend on social assistance as their main source of income, the majority (76%) are food insecure.[29] In Canada, renters are more likely to be food insecure than homeowners.[3] Furthermore, households with lower education levels are more likely to be food insecure (7.2% of households with a minimum of one member with a Bachelor's degree or higher versus 18.4% of households where the highest education level of any member is a high school diploma and 21.1% of households where no member has completed high school).[3]
- **Sex and gender:** Sexism, transphobia, and heteronormativity contribute to disproportionate levels of poverty, socio-economic marginalization, and food insecurity among women[66] and people who identify as trans, queer, and non-binary.[67,68] As noted elsewhere in this report, lone-parent households headed by women are more likely to be food insecure than lone-parent households headed by men.[3]
- **Indigenous Peoples:** The ability of Indigenous Peoples to exercise their inherent rights has been negatively impacted by factors such as historical and ongoing colonialism, systemic

racism, removal and forced separation from traditional lands and resources, and environmental degradation. Indigenous Peoples and communities experience much higher rates of food insecurity than non-Indigenous people in Canada.[10,57,69] Access to market foods may be disrupted by geographic, financial, and transportation challenges, while access to foods obtained through traditional harvesting may be affected by climate change, industrial development, and lack of access to traditional territories and harvesting grounds.[57,69] Indigenous Peoples in northern, rural, or remote locations face additional challenges (see "Northern, rural, and remote communities" below).

- **Racialized groups:** Structural racism and discrimination produce unequal socio-economic outcomes, including food insecurity, among many racialized groups.[1,2] According to weighted prevalence data from Statistics Canada's Household Food Security Survey (2005 to 2014), household food insecurity was much higher for Black respondents (28.4%) than white respondents (10.0%).[3] Although owning one's home is associated with a lower likelihood of food insecurity, levels of food insecurity among Black homeowners in Canada were similar to those among white renters in Canada (14.7% vs 14.3%) from 2005 to 2014.[70] More recent data from 2017 and 2018 have also demonstrated elevated levels of food insecurity among many racialized populations in Canada.[3]
- **Children and youth**: In BC, 15.6% of children under the age of 18 live in food-insecure households.[71] In Canada, households with children are more likely than households without children to be food insecure (16.2% of households with at least one child compared to 11.4% of households without a child).[3] The risk is even higher among children who live in a lone-parent household (33.1% for female lone-parent households and 21.6% for male lone-parent households compared to 11.8% of dual-parent households).[3] Many public schools in BC offer food programs to students whose families are food insecure. While many school districts adapted their food programs during the suspension of in-person instruction in BC, new challenges and limitations for access still emerged for children and families.[72]
- **Disability status**: Research demonstrates that people living with disabilities—including sensory, mobility, mental, cognitive, and physical impairments—face a higher risk of food insecurity due to financial, physical, and social barriers to accessing food. For example, higher rates of poverty among people living with a disability suggest that they have reduced economic access to food.[73] This is particularly the case among younger adults and individuals who have a mental health-related disability.[73] Many people have relied more on online shopping for food as an easier way to shop during the COVID-19 pandemic;[29] however, one in five individuals living with a disability in Canada does not use the Internet, making it more challenging to access food online.[74]
- **Northern, rural, and remote communities:** People living in northern, rural, and remote communities (including many Indigenous communities) face additional challenges in accessing healthy and affordable food. In BC, the Northern Health region had the highest overall rate of food insecurity in 2011/12 (16.4%),[71] which is consistent with COVID-19 SPEAK data presented in this report (see Figure 5.1). Lack of public transit and other transportation options,[75] greater distances to grocery stores, higher food prices in stores (particularly for fresh fruits and vegetables), and fewer healthy food options are some of the factors that disproportionately affect people living in rural and remote communities.[32]

Considerations for Further Action

This section provides considerations for action based on the findings of and research done for this report. These are not formal recommendations, but rather ideas to consider when shaping recommendations and actions related to this topic. The scope of the Societal Consequences of COVID-19 project (of which this report is a part) does not permit a complete cataloguing of all actions currently underway in BC on this report topic. The considerations below may lend support to actions already underway that address the issues identified and provide a starting place for discussion if action has not yet begun.

1. **Short- to medium-term**: Use a broad, intersectional equity framework in work to address food insecurity—for example, by focusing on the upstream impacts and intersections of systemic racism, colonialism, sex and gender inequity, ableism, inequitable income distribution, and other factors that increase food insecurity (e.g., poverty, housing, geography). This will require improved data collection and monitoring to ensure appropriately disaggregated data are available for improved evidence-based decision making.[14,70,76,77,78]
2. **Medium- to longer-term**: This report highlights the potential for decreasing food insecurity among Canadian and British Columbian households by reducing income inequality (i.e., improving the financial circumstances of low-income households).[79] Food insecurity was a significant theme that emerged from the 2018–19 province-wide consultations informing BC's first poverty reduction strategy, *TogetherBC*.[78]
3. **Medium- to longer-term:** The pandemic has highlighted inequities and the need for change both in terms of food security among the broader population and within the food system itself (e.g., supply chain issues, concerns regarding the situation of agricultural workers). Longer-term investments are required to achieve longer-term improvements to food security. Systems change within the food system—including increased local food production and food sovereignty in rural and remote areas and for Indigenous Peoples and communities[32]—could help build a more sustainable, more equitable food system for all.[80] This consideration around equity highlights the importance of ongoing work toward reconciliation and self-determination for Indigenous Peoples, which will ultimately support increased Indigenous food sovereignty.
4. **Planning for the future:** As part of this work, it is essential to plan and strategize for improved food security overall, and for achieving and maintaining sufficient access to food for all segments of the population in the case of future public health emergencies.

Provincial Food Security Planning and Action.

To address long-term needs, the BC government is developing a coordinated approach to food security, focused on the following:

- Providing a mechanism for the Province to respond during provincial emergencies,
- Guiding coordinated cross-government planning and action to support people living in BC to have greater food security,
- Upholding Indigenous food sovereignty, and
- Responding to the threat of climate change to food security and food sovereignty.

This work will prioritize actions that support population groups at higher risk for food insecurity and outline sustainable actions that comprehensively address food insecurity and reduce the need for short-term responses. Engagement with Indigenous and external partners has begun and the development of a coordinated approach to food security is expected to be complete in 2024.

Appendix 5-A: Data Methodology Notes

1. Charts provided by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer.

For questions contact: HLTH.PHSE@gov.bc.ca.

2. BC COVID-19 SPEAK Data

Survey administration details: The BC COVID-19 Survey on Population Experiences, Action, and Knowledge (SPEAK) was primarily an online survey administered from May 12, 2020, to May 31, 2020, across British Columbia.[h,81] A call centre was also created to support individuals who wished to take the survey with assistance. The survey was available in English and Simplified Chinese (online), with language guides in downloadable electronic format available for nine other languages (Arabic, American Sign Language, Farsi, French, Korean, Punjabi, Spanish, Traditional Chinese, and Vietnamese). All other languages were available through the call centre from Provincial Health Services Authority's Provincial Language Services. BC COVID-19 SPEAK was funded by the BCCDC Foundation for Public Health.

Sampling details: The target population for the survey was residents of British Columbia who were 18 years of age and older. To achieve a large and representative sample, a response target of 2% of the urban population and 4% for rural/remote communities was set as determined by the Community Health Service Area density designation. Targets were also established for age, gender, income, education, and ethnicity by each geographic area. Progress towards these targets was monitored daily, and purposeful promotion and stakeholder outreach was done, to better reach certain geographies and population demographics. Population targets were surpassed for each Regional Health Authority. However, not all sub-regions or demographic groups by geography did reach their target. Specifically, rural communities, populations with lower education, lower incomes, and some visible minorities were less reached and were prioritized for outreach. The final analytical dataset, which only included surveys where a Health Service Delivery Area geography, age, and gender were assigned and where the respondent must have completed at least 33% of the survey, contained 394,382 responses.

Weighting details: Statistical weighting is often used in large surveys to ensure that the sample of collected responses reflects the overall target population. This type of weighting compensates for the fact that certain demographics are less likely to respond to a survey. Establishing detailed socio-demographic targets at the outset for each geographic area of interest within the survey area allowed for more focused participant recruitment with the ultimate benefit of applying smaller weights. The BC COVID-19 SPEAK results presented in this report were weighted using 2016 Canadian Census data by demographic and geographic variables, as appropriate (e.g., age, sex, ethnicity, education level, local health area), to account for residual differences in sample demographics and to ensure that the sample is as representative as possible of the overall geographic population being reported on. This set of survey weights is slightly different than those used to produce the public BC COVID-19 SPEAK Round 1 Dashboard, so the results in this report are not directly comparable to the public Dashboard.

Limitations: BC COVID-19 SPEAK is a non-randomized voluntary survey subject to self-selection bias among those who choose to respond. To adjust the sample to the population and enhance representativeness, quota-based sampling by geography and post collection weighting are used. Correction for unknown population characteristics is not possible. This limitation is not unique to non-randomized surveys as self-selection bias is also apparent in voluntary randomized surveys where a significant proportion of those invited to participate choose not to. Despite attempts for outreach to underrepresented communities, statistical weighting, and the creation of multiple points of access, this survey may be limited in its ability to fully reflect the experiences of members of communities unable to complete the survey due to language or access barriers.

[h] At the time of this reporting, a second round of COVID-19 SPEAK data (from the Round 2 survey) was available. A Round 3 survey is underway.

Note on disability status: Respondents included in the "At least 1 disability reported" population are those who selected one or more of the following responses to the question "Do you have a permanent or long-term disability? If so please indicate what type (check all that apply)": Vision; Hearing; Mobility (e.g., difficulty walking); Flexibility (e.g., difficulty bending down and picking up an object); Dexterity (e.g., difficulty in using hands or fingers); Pain-related; Learning (e.g., attention difficulties); Developmental (e.g., autism); Mental health-related (e.g., anxiety disorder); Memory (e.g., frequent episodes of confusion); or Other (please specify).

Notes on racialized groups: Figure 5.7 shows BC COVID-19 SPEAK responses disaggregated by non-Indigenous racialized groups. This report analyzes data by racialized groups "to reveal and address systemic inequalities in social determinants of health and access to health care," as per the report, *Disaggregated demographic data collection in British Columbia: The Grandmother Perspective*, by the BC Office of the Human Rights Commissioner.[82]

Some of the categories charted were abbreviated for space. The category "Filipinx" is a gender-neutral term used in place of "Filipino" and/or "Filipina." The question asked, "Do you consider yourself to be (check all that apply) …."

The options included "First Nations," "Métis," and "Inuit." Respondents who selected "First Nations," "Métis," or "Inuit" are not reported in these figures. In accordance with Indigenous Data Governance practices in BC, data from Indigenous respondents is provided to the First Nations Health Authority and Métis Nation British Columbia to determine how best to use the data in planning and engaging Indigenous communities across the province.

The options also included "White (European descent)," "Chinese," "South Asian (e.g., East Indian, Pakistani, Sri Lankan)," "Black (e.g., African or Caribbean)," "Filipino," "Latin American/Hispanic," "Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian)," "Arab," "West Asian (e.g., Iranian, Afghan)," "Korean," "Japanese," "Other, please specify," and "Prefer not to answer."

Respondents are reported in every category they selected.

Appendix 5-B: Research and Surveys

Subject/ Scope	Title of Research/ Survey Name	Notes on Research, Researcher, and Funding
Connection between access to transit and food security	"Getting Around to Feed Ourselves Well: Exploring the Intersection of Access to Transit and Food Security"	Tammara Soma, Simon Fraser University, Simon Fraser University Start Up Grant https://www.bcpovertyreduction.ca/posts-and-releases/gafow
Impact of COVID-19 on how people engage with food and food-related media	"International Corona Cooking Survey"	Kate White, University of British Columbia Charlotte DeBacker, University of Antwerp https://covid19.research.ubc.ca/research/covid19-food-survey-international-corona-cooking-survey https://www.frontiersin.org/articles/10.3389/fnut.2020.621726/full
Other research & surveys that include themes related to food (in)security		
Canadians coping with the COVID-19 outbreak	"Cross-Canada survey on how Canadians are coping with the COVID-19 outbreak"	Partnership between Angus Reid and Dalhousie University https://www.dal.ca/sites/agri-food/research/grocery-shopping-during-the-covid-19-pandemic.html
Impact of the COVID-19 outbreak on Canadians	"The Cohesion Study"	Led by a multidisciplinary team of researchers from the University of Montreal and University of Saskatchewan and supported by various public health authorities across Canada https://cohesionstudy.ca/
Mental health of Indigenous Communities	"Pandemic experiences and impacts of COVID-19 on the mental health of Indigenous communities"	Alanaise Goodwill, Simon Fraser University Jeannie Morgan, Simon Fraser University *Pandemic experiences and impacts of COVID-19 on the mental health of Indigenous communities: Preliminary Knowledge Synthesis* Funded by the Canadian Institutes of Health Research https://cihr-irsc.gc.ca/e/52058.html

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Chapter 6

Métis Food (In)security and Food as Medicine

(Reported March 2024)

Key Findings:

- Due to settler colonialism and other complex socio-economic factors, many Métis people experience food insecurity, which in some cases was made worse by the COVID-19 pandemic and associated response measures such as physical distancing and group size limitations.
- Métis people and communities developed diverse and creative ways to stay connected and provide access to food during the pandemic.
- As a result of multiple intersecting forms of oppression, food insecurity affects certain populations disproportionately, including Indigenous Peoples (First Nations, Métis, and Inuit), women, children, Elders, lone-parent families, 2SLGBTQQIA+ people, people with lower incomes, people with diverse abilities, and those living in rural, remote, isolated, and/or northern communities.
- Métis identity is a source of strength and resilience. Increased risk to Métis people's food security is deeply rooted in historic and ongoing legacies of racism and settler colonialism found across practices, policies, systems, institutions, and norms.
- Upholding Métis people's inherent rights to health and wellness, including food as medicine, must be a key component of any strategy to support Métis food security.

Introduction

This report explores how the COVID-19 pandemic and public health response measures to prevent transmission of the virus (e.g., stay-at-home guidelines, physical distancing, group size limitations) both illuminated and worsened pre-existing inequities in terms of food security for Métis people in BC.[a]

This report is a joint initiative between Métis Nation British Columbia (MNBC), BC's Office of the Provincial Health Officer (OPHO), and the BC Centre for Disease Control (BCCDC). MNBC is grateful for the support of these partners in presenting our key findings and recommendations to improve food security for Métis people in BC.

MNBC, the OPHO, and the BCCDC affirm the inherent and treaty rights of BC First Nations, and their stewardship of the lands now known as British Columbia since time immemorial.

Please see Appendix 6-A for more information about MNBC.

[a] Please see Chapter 5 for a report on food insecurity among the overall BC population (not Indigenous-focused).

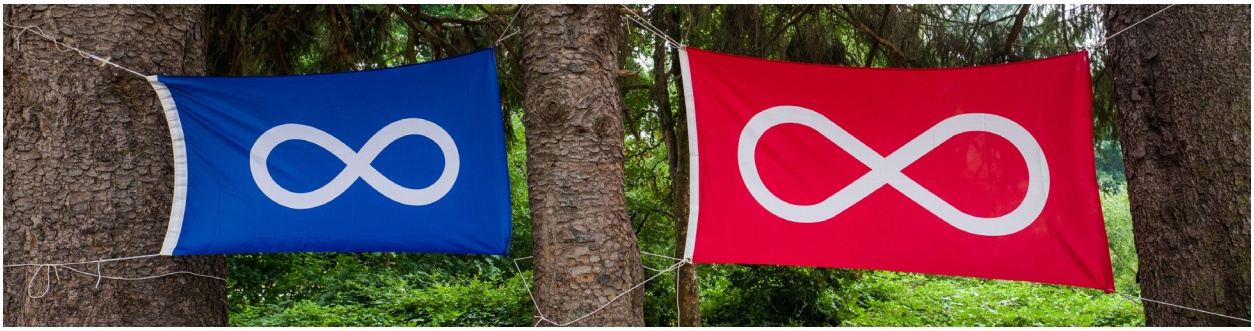


Photo credit: L. Shaw, MNBC Ministry of Environmental Protection, Agriculture, and Food Sovereignty

Situation

As this report shows, a higher proportion of Métis people experience food insecurity than other British Columbians, due to a variety of complex historic, societal, and interconnected factors.

Ongoing and often increased food insecurity during the pandemic led to many innovative community responses and highlighted the vital role of food as medicine in addressing this issue. This discussion recognizes both the historic and ongoing impacts of colonialism and the critical links between food, culture, and health.

Background

Everyone needs access to healthy, nutritious foods to survive and be well. However, food can also have cultural and spiritual meanings, and this is most certainly the case for Métis people. For the Métis, food is a vital link to community, culture, identity, ancestors, and values (e.g., sharing, cooperation, reciprocity). Food is medicine, and it is connected to ceremony, the economy, language, and the ways knowledge is passed from one generation to the next.[1,2] Food also brings families and communities together.

Understandings of food security and food insecurity vary, and have changed over time.[3,4,5] The text box on this page presents definitions of these terms recently developed by the BCCDC and Indigenous and health sector organizations in BC.[9] This report focuses on food security as a human right,[10] considered in the context of Métis identity.

"There is an old Metis saying: 'Let food be your medicine and let medicine be your food.'"

- Lawrence J. Barkwell[7(p.3)]

The cultural connection with food is sacred for many Indigenous Peoples in Canada. For the Métis, food as medicine is a way to practice culture, strengthen identity, and improve wellness.

Food security means that everyone has equitable access to food that is affordable, culturally preferable, nutritious, and safe; everyone has the agency to participate in and influence food systems; and that food systems are resilient, ecologically sustainable, socially just, and honour Indigenous food sovereignty.

Food insecurity exists when factors outside an individual's control negatively impact their access to enough foods that promote well-being. Economic, social, environmental, and geographical factors influence this access. Food insecurity is most acutely felt by those who experience the negative impacts of *structural inequities*,[b] such as discrimination and ongoing colonial practices.

For more information, see http://www.bccdc.ca/Documents/FoodSecurity_FoodInsecurity_Definitions_FINAL.pdf.

[b] Structural inequities are unfair and unjust systemic biases present in institutional policies and day-to-day practices that disadvantage certain social identities over others based on race, gender, class, sexual orientation, and other domains.

The rules of the buffalo hunt ... formed the basis of the Métis traditional governance system and served to bring together families and communities under a common purpose."

— Kaa-wiichihitoyaahk: Métis Perspectives on Cultural Wellness[11(p.19)]

Métis, among other Indigenous Nations and communities across Canada, have successfully managed local and regional food systems for generations.[6,8] This has included developing deep relationships with the land, plants, and animals; understanding seasonal changes and travelling to specific resource locations at certain times of the year; knowing which plants and animals to harvest for food and medicines, and how to prepare and store them; stewarding the land to ensure the ongoing health and sustainability of their communities, and the plants and animals that they share the land with; and agricultural pursuits such as farming and gardening.[2,12,13]

Many Indigenous communities continue to manage food systems in these ways, but in many cases, Indigenous relationships to local, wild, and traditional foods and landscapes have been profoundly damaged by the forces of colonialism, industrialization, and climate change.[6,14,15] These forces have separated Indigenous communities from traditional territories and resources, including through the Métis **scrip** system (see text box).[16,17]

As a result of deliberate settler colonial practices and policies, systemic racism and manufactured poverty have created and continue to sustain substantial inequities between Indigenous and non-Indigenous populations in Canada.[20,21,22] These inequities are reflected in disparities in social, structural, and economic determinants of health and wellness, such as literacy, education, employment, income, housing, social status, access to culturally safe health services, safe drinking water, and food security.[23,27] MNBC has heard from Métis Chartered Communities that food security is a major concern for Métis people and their families.[28] Food insecurity is also one of the biggest issues faced by Indigenous people accessing services from Aboriginal Friendship Centres in BC.[29]

Métis Scrip and the "Road Allowance People"

Scrip refers to an unjust system of land vouchers implemented by the Government of Canada in the late 19th and early 20th centuries whereby Métis communities were dispossessed of their lands.[16,24] Vouchers for small parcels of land, often hundreds of kilometres from the communities they lived in, were given to Métis individuals, many of whom were subsequently defrauded by unscrupulous land speculators. More than a century later, the unfairness of the scrip system was acknowledged in the Supreme Court's 2013 *Manitoba Métis Federation Inc. v. Canada* decision.[25(p.11)]

The ongoing displacement of Métis from their lands and territories in the Métis Homeland interrupted traditional food procurement and other economic activities and left many with nowhere to go. They settled where they could, in forested areas, parks, and on Crown land set aside for the creation of rural roads, known as "road allowances." The visibility of Métis communities springing up along these road allowances led to the Métis being known as the "Road Allowance People." The intersections of colonialism, systemic racism, and the disruption of traditional lifeways forced many Métis into low-paying jobs in the wage labour economy. Because those living on Crown land did not pay property taxes, many Métis children were not allowed to go to school. The resulting lack of formal education often prevented Métis people from getting better employment. This trapped some Métis families in a vicious cycle of poverty that has lasted for generations.[18,26]

In the face of these profound injustices, Métis people (including those in "road allowance" communities) continued to demonstrate strength and resilience, maintaining family and community connections, speaking the Michif language, and passing on traditional Métis educations, cultural practices, and values to their children.[18]

"The food that [Métis women traditionally ate during pregnancy] was very, very healthy. . . . [It] was clean, it was from the bush. All those animals ate medicines, so therefore they became medicines for us."

— Participant, Métis maternal health consultation[30(p.10)]

More affordable foods are often unhealthy, highly processed, and of low quality, and therefore do not meet peoples' nutritional needs even when they do have access to food.[31] Sex and gender inequality also lead to gendered experiences of food insecurity.[19] For example, women are more likely than men to be lone parents, and lone parenthood is associated with both lower income and higher food insecurity.[32] On average, working women make less money than working men, and women are more likely to have temporary and/or insecure employment. The same is true for 2SLGBTQQIA+ people, many of whom face additional barriers to financial security due to homophobia and transphobia; this was the case both before and during the pandemic.[33,34] This creates a disproportionate burden of food insecurity for Métis people and families overall, and, in particular, for Métis women and 2SLGBTQQIA+ people and their children. Due to pervasive ableism, people with diverse abilities are also known to be disproportionately represented among those who experience low income and food insecurity in BC and across Canada.[35]

"As Indigenous peoples migrate to urban centres, the immediate access to traditional or cultural foods is lessened and reliance on expensive and unhealthy market foods is increased. . . . Growing, harvesting, preparing, and eating cultural food is an important part of Indigenous peoples' connection to land. The disconnection from one's food and culture contributes to poorer mental, physical, emotional, and spiritual health."

— BCAAFC Urban Indigenous Wellness Report[29(p.46)]

Photo credit: L. Shaw, MNBC Ministry of Environmental Protection, Agriculture, and Food Sovereignty

Geography also poses a challenge to Indigenous food security and access to food as medicine. People in many rural, remote, isolated, and/or northern communities have difficulty accessing fresh, nutritious foods because these must be imported from a great distance and/or because the transport costs make these foods unaffordable for many community members.[14,19] In addition to reduced access to store-bought food, people in rural, remote, isolated, and/or northern communities often have reduced access to resources like food banks, meal programs, public transportation, the Internet, and the services offered by Métis Chartered Communities. People living away from their home communities may also have challenges accessing food because they are unable to participate in community food programs or to access other community-based supports and funding.

Together, the factors discussed above meant that widespread and often severe food insecurity was experienced by many Métis people long before the COVID-19 pandemic began. This experience was not unique to Métis, however. In 2017–18, 28.2% of off-reserve First Nations, Métis, and Inuit households in Canada reported food insecurity—more than double the 12.7% reported by Canadian households overall.[32] In 2017, 31% of Métis people age 18 and up living in urban areas in Canada reported living in a food-insecure household. Urban-dwelling Métis women were more likely than urban-dwelling Métis men to report food insecurity.[36] Among respondents to the 2018 BC Adolescent Health Survey, 15% of Métis youth (compared to 10% of non-Métis

youth) reported going to bed hungry at least some of the time because there was not enough money for food at home. This included 2% of Métis youth who *often* or *always* went to bed hungry.[37]

"Research has shown that food insecurity can be reduced through public policies that improve the financial circumstances of low-income households."

— PROOF Food Insecurity Policy Research[38]

A Note on the Underrepresentation of Two-Spirit, Gender Diverse, and Rural/Remote Métis

Throughout this report, data are used to identify the specific strengths and challenges of Métis people and communities regarding food (in)security and food as medicine. There are, however, gaps in the data on the lived experience of Métis. For example, gender diverse populations and people living in rural and remote locations are often underrepresented in the data. Underrepresentation based on geography may be due to factors such as lack of access to the Internet, transportation, and generally lower incomes in more rural and remote areas. Underrepresentation based on gender identity can be linked to colonial trauma, lack of trust, and insufficient safety within Western systems for Métis people of diverse gender identities to engage and/or self-identify. A wholistic understanding of Métis experiences requires work to increase access, safety, participation, and engagement for Métis people in rural and remote areas and Métis who are Two-Spirit and/or have diverse gender identities. MNBC, the BCCDC, the OPHO, and other data reporting agencies will continue to work together to improve Métis data collection with "the goal of making this work as meaningful as possible to the Métis people of today and tomorrow, while honouring the memory of those who came before."[25(p.iii)]

Findings

The COVID-19 pandemic and related response measures revealed pre-existing food security inequities, challenges, and needs for many Métis people in BC, and in many cases made them worse. However, the pandemic has also highlighted some of the strengths of Métis communities and value systems, as discussed in this report.

Income and food insecurity both impacted Métis people during the pandemic.[39] According to the BC COVID-19 Survey on Population Experiences, Action, and Knowledge (SPEAK), 38.0% of Métis respondents reported increased difficulty meeting their household financial needs in 2020, compared to 32.3% of the BC population overall.[c,40] By 2021, this proportion had increased to 41.6% for Métis respondents, while it had decreased to 28.8% for BC overall. In addition, the proportion of Métis respondents who reported accessing financial relief or support services increased from 38.3% in 2020 to 54.5% in 2021. The use of financial services was particularly high among Métis youth and young adults age 18–29 (76.1%).[40]

In 2021, higher proportions of Métis respondents in the following population groups reported difficulty meeting their financial needs:

- Métis people age 18–29 (50.5%), 30–39 (46.5%), and 40–49 (47.0%);
- Métis people who self-identified as non-binary (52.3%*) or outside the listed gender options (86.4%*); and
- Métis living in remote areas (47.0%,* down from 55.3%* in 2020).[40]

* Throughout this chapter, data marked with an asterisk (*) should be interpreted with caution due to wide confidence intervals. Although the SPEAK data for Two-Spirit, non-binary, and gender diverse people have wide confidence intervals, we include these statistics with the intention of reversing the historical/colonial erasure of gender diverse Métis. We honour their spirit and experiences here.

[c] The SPEAK data in this report are from the first two rounds of the survey: Round 1 (May 12–31, 2020) had 6,384 self-identified Métis respondents, and Round 2 (April 8–May 9, 2021) had 3,065 self-identified Métis respondents. Incomplete responses could not be analyzed, so data reported here reflect a smaller fraction of these voices. For more information, please see Appendix B.

Similarly, in 2020, 22.6% of Métis people worried that, due to the pandemic, food would run out before they had money to buy more. This was substantially higher than the rate of 15.6% reported by the BC population overall.[39,41] As with financial difficulties, the proportion of the overall BC population reporting this concern decreased between 2020 and 2021 (from 15.6% to 12.3%), while the proportion of Métis reporting this concern increased slightly to 23.2%. In 2021, even higher proportions of Métis people in the following population groups reported being concerned that food would run out before they had money to buy more:

- Métis people age 30–39 (29.8%, up from 23.7% in 2020); and
- Métis people who self-identified as Two-Spirit (33.2%*), non-binary (46.1%*), or outside the listed gender options (74.4%*).[40]

"[The relation between food and Métis identity] is an important part of our culture. The dining room was where planning and business took place usually over dinner. Métis people are rooted in sharing their resources with each other during winter months, providing for one another. Food is a central pillar to Métis culture and identity."

- Anonymous survey participant, MNBC Climate Change & Food Access Survey, 2022

Beginning early in the pandemic, many Métis leaders took immediate action to care for their communities and ensure no families were without food and other necessities. MNBC distributed information, food, and funding support through Métis Chartered Communities across BC. However, despite many such examples of community cohesion and resilience, some government-issued COVID-19 policies and response measures led to inequitable outcomes for Indigenous people already experiencing food insecurity. The BC Government identified supporting First Nations, Métis, and Inuit people and communities in BC to respond to COVID-19 as a high priority.[43] In addition, the provincial government has committed to reconciliation with Indigenous Peoples[44,45] and passed the BC *Declaration on the Rights of Indigenous Peoples Act* in 2019.[46] Nevertheless, provincial government responses and public health and other measures did not always honour or align with Indigenous self-determination. Some of the restrictions put in place to mitigate the harms of COVID-19 infections had the unintended outcome of increasing food insecurity.

For example, group size restrictions limited the ability to hold communal meals. In-class learning and in-person community programming (e.g., Healthy Babies programs, support groups)—environments where food is often provided—were temporarily suspended. Virtual get-togethers may have helped provide a sense of connection for some, but online events excluded people without access to a computer or the Internet, and could not fulfill the food redistribution and sharing aspects of in-person events. For children and others from food-insecure households, school meal programs and community kitchens may be among the only places they have consistent access to healthy and nutritious foods. Physical distancing guidelines meant that those delivering food hampers to Elders and other community members in need could not help recipients prepare food or stay to keep them company. Volunteer burnout has been another issue for Métis Chartered Communities, which had no funding to hire helpers despite the extra demand for services created by the pandemic and associated response measures.

Many people began "panic buying" and stockpiling seeds and gardening supplies early on in the pandemic. This led to reduced availability, so that individuals and communities who rely on growing their own food could not access supplies. Half of the respondents to an MNBC COVID-19 needs assessment survey in 2020 indicated that they struggled to afford groceries.[47] The increasing

Photo credit: L. Shaw, MNBC Ministry of Environmental Protection, Agriculture, and Food Sovereignty

costs of lumber and building materials also made it more difficult to construct greenhouses, garden beds, smokehouses, and other food production and processing infrastructure. The situation was made worse by racism (including "food racism")—a known contributor to food insecurity experienced by Indigenous Peoples and racialized populations.[29,48] Food racism ranges from limiting the availability and/or increasing the prices of "specialty" cultural food items in grocery stores to the environmental degradation of sacred lands (e.g., for large-scale food production or resource extraction).[48]

In some cases, people in rural, remote, isolated, and/or northern communities had difficulty accessing food while self-isolating. Challenges included lack of access to online grocery ordering and delivery and, for those who had to self-isolate in hotels or motels, lack of access to food services and cooking facilities. However, these communities also demonstrated self-determination and resilience. Some Métis communities requested access to Conservation Outdoor Recreation Education (CORE) training.

Though funding may have been available to support communities during the pandemic, some government funding programs had the unintended outcome of pitting Indigenous communities and organizations against one another for limited funds. MNBC has also found that funding is frequently project-based, administratively burdensome in terms of application and reporting requirements, and not designed with continuity or sustainability in mind. Funding may not reach people in crisis, who cannot always wait for the next government funding cycle.

The pandemic increased awareness of and interest in the local food supply, including people's desire to participate in local food-growing opportunities and have control over their own food. Families increasingly shared in traditional food practices (with appropriate licensing for hunting, fishing, gathering, smoking, canning), and included children in these practices while they were home from school. The movement toward growing and sustainably harvesting locally available foods and medicines led to increased family and cultural connectedness for many people.[22,49]

"I was so happy to hear the grocery cards were still being given to us members and it's a life saver as the money I was supposed to spend on groceries had to be spent on a dental emergency and I was sick with worry. I feared I would have to choose between fixing my teeth that were very bad or getting food for me. I called [Métis Nation of Greater Victoria] and explained and was gifted a grocery card immediately and I couldn't be more thankful. . . . I was able to get my tooth fix[ed] and get groceries."

— Community member talking about MNBC COVID supports[50]

During the pandemic, many communities provided access to groceries through shared food purchasing and distribution to community members. MNBC gave grocery cards to Métis Citizens who requested assistance. Fraser Valley Métis Association used a food truck to provide hot meals. Waceya Métis Society in Langley supplied grocery gift cards, gas cards, transportation passes, sanitation products, and personal protective equipment to low-income seniors who had lost supplementary income, low-income families where one or both parents had reduced income due to loss of jobs or reduced working hours, people with diverse abilities, vulnerable members who were undergoing medical treatment for disease or addiction, and

families who were under quarantine orders and did not have the means to purchase food.

Responses also included seed-starting groups, community gardens, and other localized food production efforts, helping to promote self-sufficiency and food as medicine. These and other community responses and stories reflect resilience, resistance, self-determination, and the diverse needs and priorities of different Métis communities. These initiatives capitalize on cultural strengths and values such as creativity, adaptability, food sharing, and looking out for one another.

Photo credit: L. Shaw, MNBC Ministry of Environmental Protection, Agriculture, and Food Sovereignty

COVID-19, Food (In)security, and Mental Health

"Seniors were lowering the quality and volume of their diets in order to save money for other needs such as medicine, household items and transportation. When we were able to step-in with grocery gift cards this allowed seniors to allocate limited incomes to these items. Seniors were very appreciative and admitted that the ability to purchase good food in adequate quantities was enormous. The benefit was both in better physical health, but definitely expressed to us in improved mental well-being."

— Waceya Métis Society (Langley), reporting on MNBC COVID supports[51]

Food security is associated with positive mental health, spiritual well-being, and self-determination. Conversely, food insecurity creates stress and can be associated with depression, mood and anxiety disorders, and suicidal thoughts.[38] Among children, food insecurity is associated with hyperactivity and inattention.[38] Given the history of colonial oppression in BC and Canada, a lack of control over one's own food supply can also be psychologically triggering for many Métis people.

During the pandemic, mental health-related impacts disproportionately affected Métis and other Indigenous people. Higher proportions of Métis people in BC reported experiencing stress related to the COVID-19 pandemic, with 25.0% of Métis rating the amount of stress in their lives as quite or extremely significant, compared to 18.3% for BC overall.[39,40] Métis people also more frequently reported concern about vulnerable family members and their access to the resources they needed. In May 2020, more than half of Métis SPEAK respondents (52.1%) rated their mental health as slightly or much worse than before the pandemic, compared to 46.4% of the BC population overall.[39,40] By 2021, those who rated their mental health as worse than it was before the pandemic had increased to

59.6% for Métis respondents, compared to 57.1% for BC overall. In both years, a higher proportion of Métis respondents in more remote locations reported worsened mental health (57.6%* in 2020 and 81.0%* in 2021).[40]

A sense of family and community belonging also promotes mental and emotional health and is a critical determinant of health for Métis people.[52] Such belonging and connectedness is also linked to food security. The concepts of *kiyokewin* (or *keeoukaywin*, a Cree word for ways of visiting) and *wahkotowin* (a Cree word for kinship) are important for building and maintaining relationships within Métis communities.[53] Food-sharing practices help to build these connections and strengthen Métis identity, health, and wellness.[52]

According to BC COVID-19 SPEAK data, during the first year of the pandemic, 59.5% of Métis survey respondents reported a strong sense of community belonging (compared to 64.5% for BC overall).[40] In 2020, a higher proportion of Métis people in remote locations reported strong feelings of community belonging (89.9%*) than Métis in rural, semi-urban, and urban locations.[d] By the following year, however, strong community belonging had decreased to 44.7% for Métis respondents overall, and more than half of Métis respondents reported feeling a weak sense of community belonging.[40] Of Métis people in all age groups, those age 30–39 (61.7%) and 40–49 (61.3%) most often reported a weak sense of community belonging in 2021.[40]

A weak sense of community belonging and feeling less connected to family and friends could be linked to concerns related to COVID-19 itself, as well as to public health response measures such as social/physical distancing and restrictions on gathering sizes. The inability to gather with friends and family over a prolonged period may have weakened connections to community and loved ones while also limiting opportunities to engage in the food-sharing practices that are so important to Métis culture.

[d] The difference between remote, rural, semi-urban, and urban locations is based on one's postal code and Community Health Service Area.

Métis Nation British Columbia Climate Change & Food Access Survey

In 2022, MNBC's Ministry of Environmental Protection, Agriculture, and Food Sovereignty administered a Climate Change and Food Access Survey among Métis.[54] The purpose of the survey was to understand how access to food is affecting Métis in British Columbia, especially in relation to climate change and the COVID-19 pandemic.

Historically, due to colonial/assimilative policies, Métis were discouraged from practicing or passing down traditional knowledge to their children and grandchildren. This included food and traditional subsistence behaviours and protocols (e.g., hunting, fishing, gathering). Métis today are attempting to reclaim and (re)learn these traditional ways of knowing, and they understand the importance of food in Métis culture. Approximately 66% of Métis in BC who responded to the Climate Change and Food Access Survey reported consuming traditional foods in the last year, but this relationship is vulnerable. According to survey respondents, their most urgent concern in accessing food was cost. When asked to estimate the percentage of their income spent on food, Métis responded with an average of 35%. This is extremely high, especially considering the average Métis income in BC is less than that of non-Indigenous BC residents.[25]

Photo credit: L. Shaw, MNBC Ministry of Environmental Protection, Agriculture, and Food Sovereignty

The comments below (and elsewhere in this report) from anonymous survey respondents express the important connection that exists between food and Métis culture, and the barriers Métis people face in nurturing that relationship:

> *"I believe it can be very difficult for people to focus on culture and identity when they are focused on surviving by finding food—of course there are traditional foods and food which can be obtained through hunting and gathering, but that is not accessible for many people. Many people must go to the grocery store[s], which have very high prices, or the food banks, which often lack nutritious foods. Those who are focused on finding cheap, nutritious food may not be as focused on connecting with their culture or how food plays into culture."*

> *"It's all about respect for all relations...I would say that food is integral to our culture because it is a way in which we come together for a hot meal, provide for each other, and continue showing our respect to the land."*

> *"I think food is an important connection to all cultures, including Métis. It brings people together in community. It brings us out on the land. It makes us feel gratitude. It is extremely important to our identity as Métis people. The lack of connection to the land and our food attributes to health problems, including physical, mental, spiritual, and emotional."*[54]

In addition, Métis must consider the cost of fuel when obtaining or accessing food. About 82% of Métis rely on a personal vehicle for transportation. As gas prices in BC remain high compared to other provinces in Canada, Métis must consider all costs that go into buying and accessing food. This is especially important for the almost 30% of Métis who must travel over 30 minutes or over 50 kilometres to access nutritious food. The costs of obtaining a Possession and Acquisition License (PAL), CORE training, and hunting and fishing licenses may create additional financial barriers for Métis people.

Canning and the preservation of foods are practices that support longer-term food sustainability. These practices are helpful when preparing for natural disasters, pandemics, or food emergencies, but are impacted by food costs and lack of knowledge transference. According to MNBC's Climate Change and Food Access Survey, the two biggest barriers to canning and preserving food among Métis people in BC are lack of knowledge (28%) and the cost of supplies (18%).

The cost and availability of food, as well as the way Métis practice subsistence behaviours, are impacted by climate change. For almost 80% of survey respondents, climate change is *very* to *extremely* important. In most cases, these respondents have seen the impacts of climate change on their environment, including in their gardens and food availability in grocery stores.

Photo credit: L. Shaw, MNBC Ministry of Environmental Protection, Agriculture, and Food Sovereignty

Looking toward the future, one-quarter of Métis (25%) were confident that their communities did *not* have plans to monitor climate-related outcomes such as chronic illness, food insecurity, and climate anxiety. An additional 42% were unsure if their community had made any plans.

As food insecurity, climate change, and COVID-19 persist, government and community leaders are served well to listen to the lived experience of Métis to help combat these issues. Following are several suggestions for improving food security from anonymous Métis respondents to the MNBC Climate Change and Food Access Survey:

> *"Go into specific communities and find out their specific needs. Every community is different and there isn't an approach that will work for all. Work with Chartered Community presidents to find the best solutions. I would also like to see... modern gardening ideas such as food forests in communities."*

> *"I think it's a great idea to teach people how to garden and preserve food. However, I think it's important to recognize this will not be accessible for all people, so ensuring there is a food system in place which can help people in urban, rural, or remote communities access nutritious foods would be beneficial. Perhaps partnering with grocery stores (similar to Loop program) to make food hampers full of nutritious food that is otherwise going to be thrown away—possibly having these food hampers handed out at Chartered Communities or shipped to people."*

> *"Métis Community kitchens & cupboards for low-income families & Elders. Teaching families & Elders how to make healthy meals on fixed incomes."*

> *"Work together with First Nation people to gain a better understanding of what Métis people can do to be good guests on the lands our people lodge on. Work with knowledge keepers to record knowledge that can then be distributed. Develop programming to teach traditional practices, with priority for youth in/from care or who do not otherwise have opportunities to learn from family. Create capacity within chartered communities to run programming, and preserve and store food. Continue to advocate for equity for Métis people in all areas of society. Invest in wide-spread good food boxes. Develop programming to provide grocery hampers, or partner with a chain store to provide gift cards for Métis people struggling with groceries."*[54]

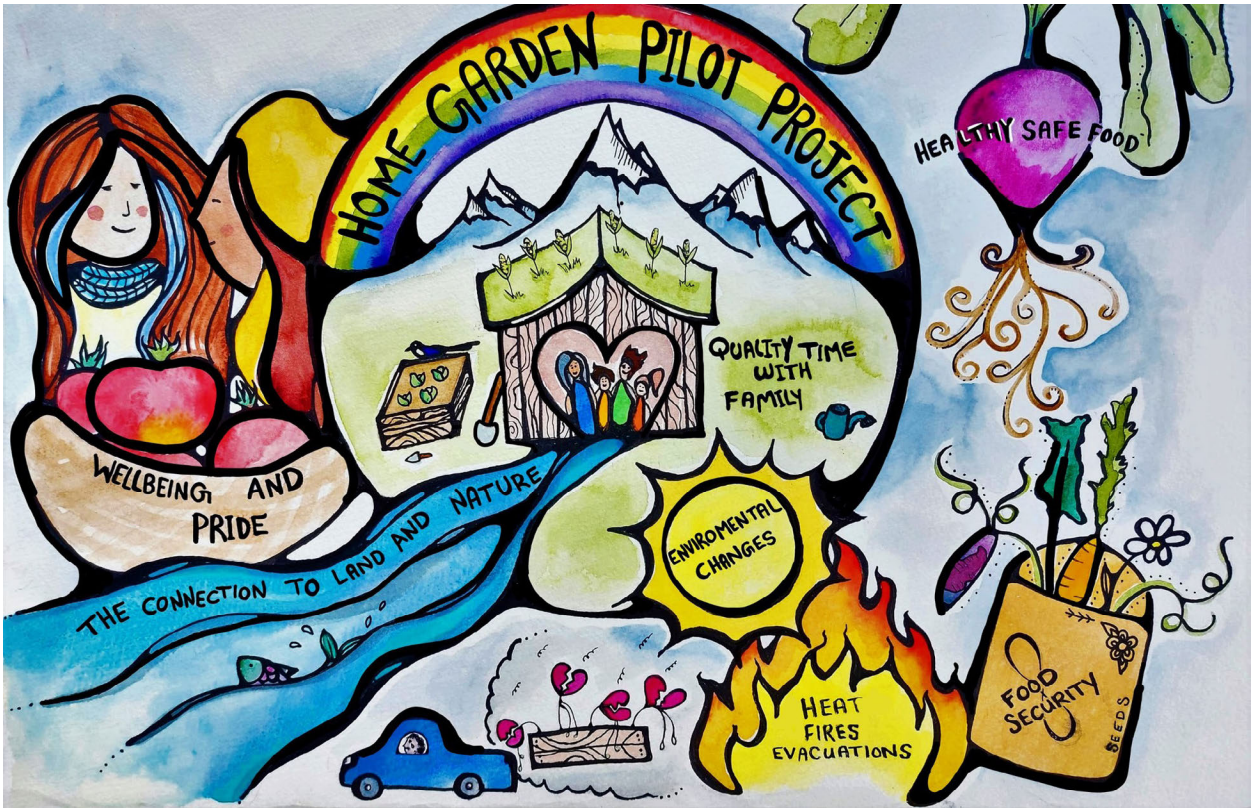
Métis Nation British Columbia K–12 School Food Survey

In fall 2022, MNBC's Ministry of Education surveyed Métis Citizens and self-identifying Métis in BC on the school food needs and nutritional literacy of K–12 families.[e]

Echoing the Métis food needs highlighted throughout this report, the survey revealed that the number one barrier to food access for Métis K–12 families in the previous 12 months was the high cost of food (92%). In addition, most respondents access foods at "big box" stores such as Superstore and Walmart (89%), as well as grocery stores (64%). Traditional Métis subsistence activities, such as harvesting (16.8%), were practiced at lesser rates.[55] This reliance on stores to access foods places Métis families in difficult food environments where healthy, traditional foods are less accessible.

Overall, Métis families would prefer to use local resources in BC (e.g., local food producers, community gardens) and move away from processed foods. There is also a desire for more opportunities to discuss traditional foods with Elders, in community, and in schools.[55] The food experiences of Métis K–12 families in BC speak to the larger picture of Métis food (in)security and food as medicine in the province.

[e] "K–12 families" refers to Métis families with at least one child attending school between Kindergarten and Grade 12. MNBC plans to publish a report on the K–12 School Food Survey in 2023/2024, at which point survey findings will be accessible to the public.



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Equity Considerations

"In addition to [providing support for other community members, including] a young family and a cancer patient, we have been proud to have been able to provide assistance to our Elders. When we did our telephone wellness calls in the early stages of the pandemic we were under the impression that our seniors had good food security and their prescription medicine requirements well in hand. That optimism, as conveyed to us, may have been due to seniors having too much pride to admit they needed assistance. Seniors did have side jobs that they used to augment their incomes. Seniors were also dependent on family members to provide a little extra every month. As the pandemic continued these sources of help became less dependable and the actual need became apparent."

— Waceya Métis Society (Langley), reporting on MNBC COVID supports[51]

As discussed in this report, inequities related to food security and food as medicine may affect certain populations disproportionately, including women, children, Elders, lone-parent families, 2SLGBTQQIA+ people, people with lower incomes, people with diverse abilities, and people in urban centres, as well as those living in rural, remote, isolated, and/or northern communities. These inequities are the result of settler colonialism, sex and gender discrimination, ableism, and other complex socio-economic factors.

What Métis Nation British Columbia is Doing to Address Food (In)Security

"The COVID-19 pandemic has brought to light the real and long-standing issue of food security in our society. The ability to create new initiatives that help make communities more self-sufficient, like the launch of Métis Nation British Columbia's new Home Gardening Pilot Project, is the first step in addressing some of the gaps that exist. As we slowly emerge from the pandemic, we must not lose sight of the importance of these investments, and how critical they are for creating healthy and self-sufficient communities."

— Lissa Dawn Smith, President, Métis Nation British Columbia[56]

For Métis in British Columbia, food insecurity has been increasing in recent years and has been further exacerbated by COVID-19. The MNBC Board of Directors and community members have identified food security as a key priority to focus future initiatives**.** MNBC developed and launched the Home Garden Pilot Project (HGPP) in response to requests for Métis people to be more self-sufficient in food security. The project was supported through the Indigenous Services Canada (ISC) COVID-19 needs-based funding and included 100 Métis households throughout the province. Participants received seed kits and a small grant to purchase soil and tools. In a post-program survey, 82% of respondents felt that their garden contributed to food security in their household. Some other benefits listed included quality time spent with family, stress relief and benefits to mental health, less money spent on produce, food for the winter, and learning culture.

Due to the success of the HGPP, it has continued as the Home Garden Program, supporting 150 households with more seeds and a gardening manual in 2022 (the gardening manual is available online: https://www.mnbc.ca/home-garden-program-manual). The Home Garden Program launched a monthly gardening resource newsletter in February 2022, and has grown to support 300 Métis households in 2023. MNBC aims to keep building its gardening network.

"Unable to access the rivers much this year due to covid restrictions. In need of new fishing rod $250–$400. Also in need of dehydrator for future chanterelle harvest season $250."

— Community member talking about MNBC COVID supports[42]

Through other ISC COVID funds, MNBC also launched a harvester relief fund. Métis harvesters and land users who were not able to harvest, access the land, or purchase required gear or licenses due to COVID-19, either directly or through the unintended consequences of COVID-19 (such as loss of employment, increased costs of fuel, taking care of family members who were sick or immunocompromised, etc.), were able to access a small grant to assist with the purchase of harvesting supplies or food. Items included, but were not limited to, butchering of wild game, fishing rods, fishing tackles, fishing lures and bait, ammunition, freezer costs, seeds, gardening tools, and soils. For more information, see www.mnbc.ca/work-programs/programs-services/harvesting-and-id-cards. In December 2021, 1,300 pounds of food were distributed to one of MNBC's Métis Chartered Communities as part of a Christmas Food Hamper pilot initiative.

Considerations for Further Action

This section provides considerations for action based on the findings of this report. These are not formal recommendations, but rather ideas to consider when shaping recommendations and actions related to this topic.

"One very interesting response that we heard and particularly from elders and larger families is how much they appreciated receiving the gift certificates from the butcher shop because they said they rarely purchased meat because it is so expensive."

— MIKI'SIW Métis Association (Comox Valley), reporting on MNBC COVID supports[57]

- Develop a combination of immediate, mid-range, and longer-term strategies to address severe food shortages and emergency situations (immediate need) in Métis communities while also promoting intermediate and longer-term sustainability.
- Provide funding and support for Métis-led food security/food as medicine work. Funding programs should follow distinctions-based principles, including Métis-specific funding to support the challenges of food insecurity.
- Establish mechanisms for governments to work with Métis people and communities to find real, sustainable, culturally appropriate solutions that address the root causes of food insecurity and promote food as medicine.
- Establish strategies to increase food security and access to food as medicine that build on community strengths and values (e.g., looking out for one another, kinship networks, the cultural importance of food-sharing), promote self-determination, and reflect the diverse priorities and needs of distinct communities.
- Develop long-term solutions that address root causes and do not rely on short-term funding—*sustainable* solutions.

Photo credit: L. Shaw, MNBC Ministry of Environmental Protection, Agriculture, and Food Sovereignty

- Incorporate a focus on climate change into food security and food as medicine initiatives and planning.
- Support internal capacity-building within the Métis Nation to better determine, and then meet, the unique needs of each Métis community.
- BC is a large and geographically diverse province, with varying access to foods and resources, as well as diverse growing conditions and subsequent access to fresh food. Food security policies, programs, and services should be community/regionally specific. Additionally, Métis people have unique food security needs that need to be addressed distinctly from those of First Nations and Inuit.

Appendix 6-A: Métis Nation British Columbia and Governance of Métis Data

Métis Nation British Columbia (MNBC) represents the Section 35 Rights[f] of over 25,000 Métis Citizens registered with MNBC and advocates on behalf of the over 98,000 self-identified Métis in the province.

The Province supports the work of MNBC as a Governing Member of the Métis National Council, towards self-determination as part of the broader collective work of expressing the rights and interests of Métis people in Canada. MNBC is democratically mandated by its over 25,000 Métis citizens to hold the Citizenship Registry and related data for Métis in the province.

As the Métis Government in BC, MNBC has a mandate to create opportunities for Métis people, communities, and children to flourish. MNBC works to ensure access to a range of programs and services to bridge socio-economic gaps and increase overall well-being for Métis in BC. This mandate is driven and upheld via a democratic process overseeing the election of the MNBC Board, which is comprised of seven (7) Elected Regional Directors, the elected representative for the Métis Women of British Columbia, the elected representative of the Métis Youth of British Columbia, the President, and the Vice President for a total of eleven (11) Members.

Métis Nation British Columbia Provincial Agreements

MNBC and the Province of BC signed a Métis Nation Relationship Accord in 2006 and renewed the agreement in 2016, which set out objectives to address health, housing, education, economic opportunities, children and families, information sharing, justice, wildlife stewardship, Métis identification and data collection, as well as any opportunities for engaging in a tripartite relationship with the federal government. A new Letter of Intent, signed in 2021, proposes a whole of government approach to Métis relations as a partnership between MNBC and British Columbia that respects Métis self-determination and moving to a Reconciliation Agreement.

Canada's Métis Nation Accord

On April 13, 2017, Prime Minister Trudeau, the MNC President, and the Presidents of the MNC Governing Members signed the Canada-Métis Nation Accord during the first Métis Nation-Crown Summit in Ottawa. The Accord marks a significant step towards a renewed government-to-government relationship based on recognition of rights, respect, cooperation, and partnership. It outlines the ways in which the Government of Canada and the MNC and its Governing Members will work together to set priorities and develop policy in areas of shared interest.

[f] Section 35 of Canada's *Constitution Act, 1982*, recognizes and affirms the Aboriginal and Treaty Rights of Indigenous Peoples (First Nations, Métis, and Inuit) in Canada.

Appendix 6-B: Data and Methodology Notes

BC COVID-19 Survey on Population Experiences, Action, and Knowledge (SPEAK) Data

The BC COVID-19 SPEAK was funded by the BCCDC Foundation for Public Health. Data from self-identified Métis respondents were provided to Métis Nation British Columbia for this report. The SPEAK data in this report are from the first two rounds of the survey: Round 1 was conducted from May 12–31, 2020, early on in the pandemic, and Round 2 was conducted from April 8 to May 9, 2021, just over a year from when the public health response measures began in March 2020. The total of Métis respondents for SPEAK Round 1 was 6,384 and for Round 2 it was 3,065. However, in the analysis of the data, incomplete responses could not be analyzed, so each reported question reflects a smaller fraction of these voices.

Public SPEAK data and methodology notes are accessible here: http://www.bccdc.ca/health-professionals/data-reports/bc-covid-19-speak-dashboard. Further notes regarding SPEAK methodology are available here: https://link.springer.com/article/10.17269/s41997-022-00708-7.[58]

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Chapter 7

Missed or Delayed Routine Childhood Immunizations

(Reported July 2021)

Key Findings:

- Lower percentages of infants and toddlers received their immunizations on time in March 2020, compared to March 2019, in most health regions.
- The percentages of infants and toddlers who received their routine immunizations on time improved between March and July 2020; however, percentages in July 2020 were still lower than July 2019 for most regions.

Situation

Routine immunizations are essential services[1] and were not suspended through response measures to COVID-19; however, numerous factors created delays or missed doses of routine childhood immunizations. Some factors included: public health staff being redeployed to meet the most urgent health-care needs, in-person health-care visits were reduced to prevent COVID-19 transmission,[2] some parents/guardians were hesitant to enter health-care facilities due to fears of exposure to COVID-19,[3] and the suspension of in-classroom learning for several months impacted the delivery of immunizations in schools.

Background

Vaccines are developed to prevent people from contracting serious and life-threatening diseases, such as meningitis, tetanus, measles, and polio.[4] Vaccines have been around since the late 18th century[5,6,7] and they work by training the immune system to recognize and combat pathogens, including viruses or bacteria.[8] Today, vaccines prevent 2 to 3 million deaths worldwide every year.[9] In Canada, vaccines have saved more lives than any other medical intervention in the past 50 years.[10]

BC's routine childhood immunization schedule recommends that infants, toddlers, children, and youth receive the vaccines listed in Table 7.1.[11]

Table 7.1 BC's Routine Childhood Immunization Schedule

Age	Routine vaccination scheduled
2 months	• DTaP-HB-IPV-Hib: Diphtheria, Tetanus, Pertussis, Hepatitis B, Polio, and *Haemophilus influenzae* type b • Meningococcal C Conjugate (Men-C) • Pneumococcal Conjugate (PCV 13) • Rotavirus
4 months	• DTaP-HB-IPV-Hib: Diphtheria, Tetanus, Pertussis, Hepatitis B, Polio, and *Haemophilus influenzae* type b • PCV 13 • Rotavirus
6 months	• DTaP-HB-IPV-Hib: Diphtheria, Tetanus, Pertussis, Hepatitis B, Polio, and *Haemophilus influenzae* type b • Rotavirus
12 months	• Varicella (Chickenpox) • Measles, Mumps, and Rubella (MMR) • Men-C • PCV 13
18 months	• DTaP-IPV-Hib: Diphtheria, Tetanus, Pertussis, Polio, and *Haemophilus influenzae* type b
4-6 years	• MMRV: Measles, Mumps, Rubella, and Varicella • DTaP-IPV: Diphtheria, Tetanus, Pertussis, and Polio
Grade 6	• Catch-up doses if needed for: Chickenpox and Hepatitis B • Human Papillomavirus (HPV) *(2-3 doses in Gr. 6)*
Grade 9	• Meningococcal Quadrivalent • DTaP: Diphtheria, Tetanus, and Pertussis

In addition to the vaccines listed here, Canada's National Advisory Committee on Immunization recommends that everyone 6 months of age and older should get a yearly influenza vaccination (with rare exceptions).[11] For more information about routine vaccinations, see: https://www.healthlinkbc.ca/tools-videos/bc-immunization-schedules.

Vaccines are delivered by a variety of practitioners in BC, including public health nurses, physicians, nurse practitioners,[12] and pharmacists.[13] Infants, toddlers, children, and youth can receive their routine immunizations at their local public health unit, community health centre, or doctor's office, and if over the age of 5, at their local pharmacy.[14] Public health units also organize clinics at schools to administer vaccines.[15] In rural areas, vaccines are more commonly administered by public health personnel, whereas they are delivered by a greater mix of practitioners in urban areas.[12] Receipt of routine vaccinations is tracked in BC immunization registries. Parents/guardians can also track routine vaccinations in BC's Child Health Passport.[16]

In March and April, 2020, public health units observed that parents were cancelling immunization appointments for fear of potentially contracting COVID-19 when visiting a health-care facility.[3] International and national health agencies have issued a call for efforts to ensure continuity of immunization against childhood vaccine preventable diseases.[17,18,19,20]

Findings

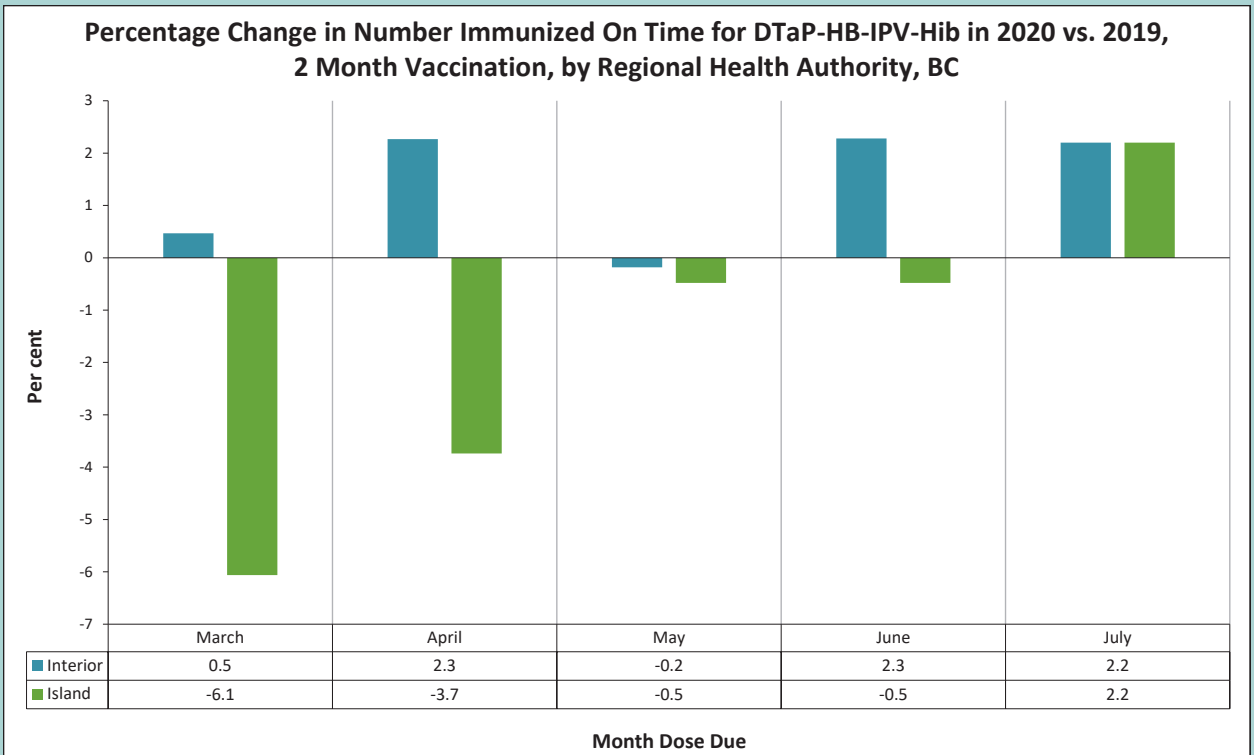
This section provides an overview of the changes between 2019 and 2020, in the percentages of infants and toddlers who were "immunized on time"[a] by vaccine, month of expected vaccination, and health region. (See Appendix 7-A for more information about data sources and methodology).

Overall, analyses of immunization data about on-time vaccinations that compare the same months in 2019 and 2020, show changes in percentages of infants and toddlers who were immunized on time at 2, 4, 6, and 18 months of age for diphtheria, tetanus, pertussis, hepatitis B, polio, and *Haemophilus influenzae* type b (DTaP-HB-IPV-Hib). Analyses also show changes in the percentages (between 2019 and 2020) of infants who were immunized on time at 12 months of age for measles, mumps, and rubella (MMR).

At the time of this reporting, the most recent data available to the project team was up to July 2020, for vaccinations of toddlers age 2 months, 4 months, 6 months, 12 months, and 18 months. Analyses of on-time immunizations for more recent months, as well as for 4–6-year-old children, and for youth in grades 6–9 were not available to the project team at the time of reporting.

[a] "Immunized on time" is defined as receiving the recommended number of doses of the indicated vaccine within one month of the recommended age milestone in the BC Routine Immunization Schedule (https://immunizebc.ca/children/immunization-schedules/infants-young-children). For example, for the 4-month DTaP-HB-IPV-Hib measure, children are counted as immunized on time if they received their second dose of DTaP-HB-IPV-Hib before they turned 5 months of age.

FIGURE 7.1

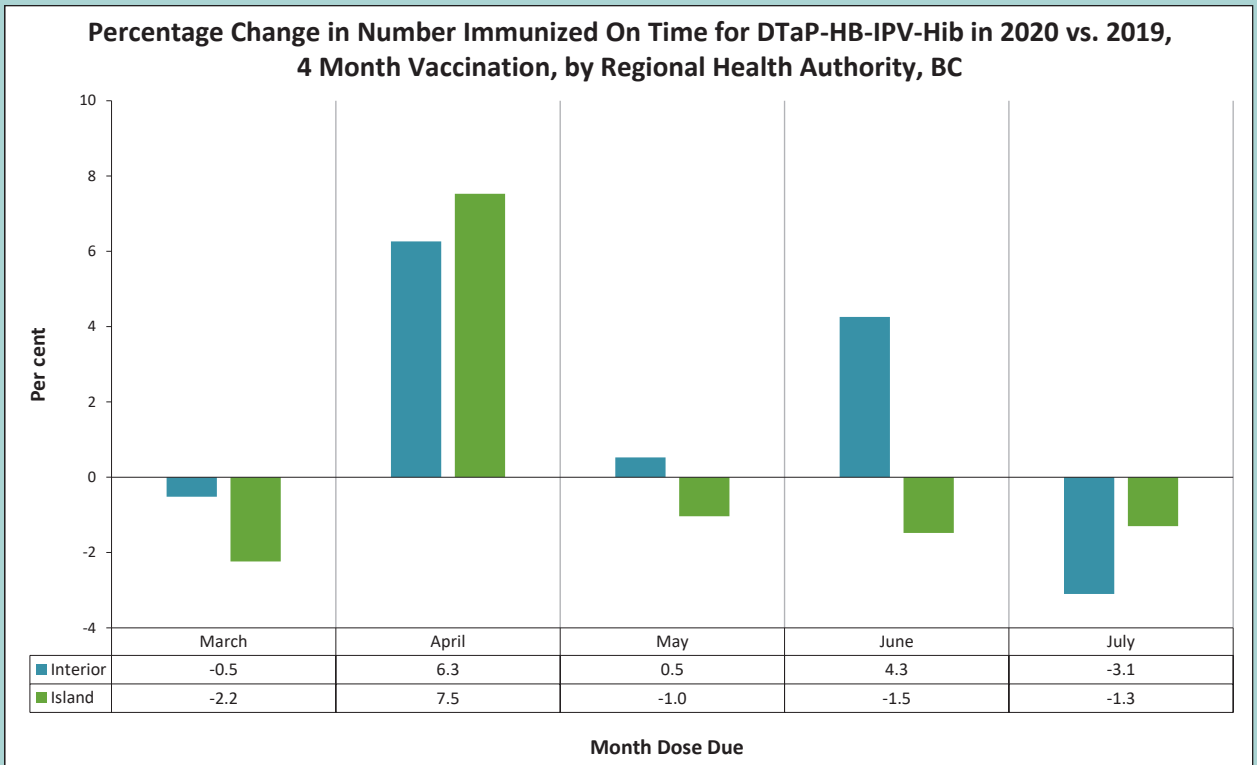


Notes: At the time of reporting, data for this variable was not available for the Fraser, Northern, and Vancouver Coastal health regions. "On Time" means received by age 2 months + 30 days. Immunizations include first dose of Diphtheria, Tetanus and Pertussis (DTaP), Hepatitis B (HB), Polio (IPV), and *Haemophilus Influenzae* type b (Hib), due at 2 months of age, January-May 2020 Birth Cohort vs January-May 2019 Birth Cohort.
Source: BC Centre for Disease Control, extracted October 2020. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, May 2021.

Figure 7.1 shows the changes between 2019 and 2020, in the percentages of infants who received their 2-month DTaP-HB-IPV-Hib vaccine on time in the Interior and Island health regions.[b] In the Island health region, the proportion of 2-month old infants who received their vaccine on time was 6.1% lower in March 2020, compared with March 2019, but it improved over the following four months. By July 2020, the proportion of 2-month old infants in the Island and Interior health regions who received their vaccinations on time was 2.2% higher in July 2020 compared to July 2019.

[b] At the time of reporting, data for this variable was not available for the Fraser, Northern, and Vancouver Coastal health regions.

FIGURE 7.2



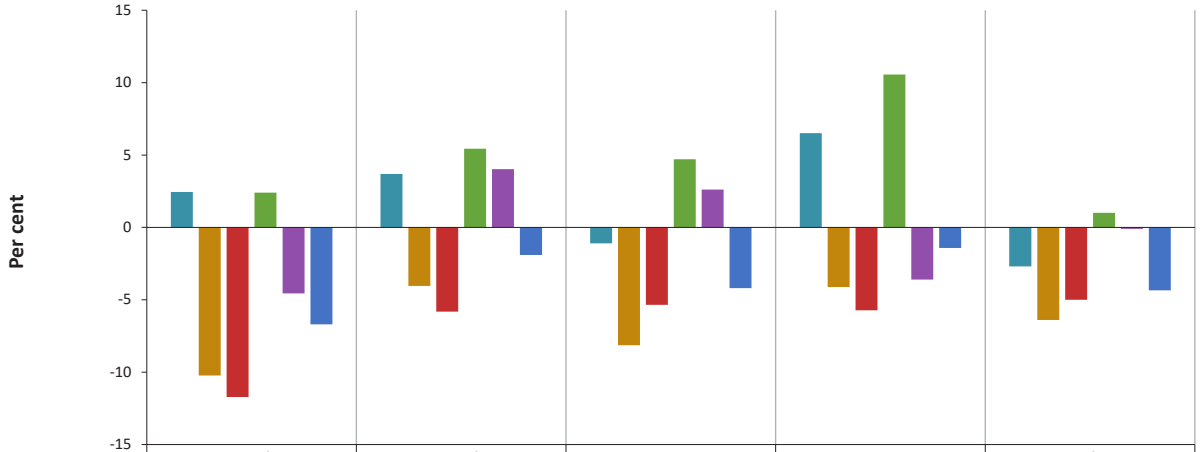
Notes: At the time of reporting, data for this variable was not available for the Fraser, Northern, and Vancouver Coastal health regions. "On Time" means received by age 4 months + 30 days. Immunizations include second dose of Diphtheria, Tetanus and Pertussis (DTaP), Hepatitis B (HB), Polio (IPV), and *Haemophilus Influenzae* type b (Hib), due at 4 months of age, for November 2019-March 2020 Birth Cohort vs November 2018-March 2019 Birth Cohort.
Source: BC Centre for Disease Control, extracted October 2020. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, May 2021.

Figure 7.2 shows the changes between 2019 and 2020, in the percentages of infants who received their 4-month DTaP-HB-IPV-Hib vaccine on time in the Interior and Island health regions.[c] The proportion of 4-month old infants who were immunized on time in the Interior health and Island health regions was lower in March 2020, compared to March 2019 (-0.5% and -2.2%, respectively). In April 2020, however, a higher proportion of 4-month old infants were immunized on time in both health regions, compared to April 2019. By July 2020, the proportion of 4-month old infants who were immunized on time was lower than it was in July 2019.

[c] At the time of reporting, data for this variable was not available for the Fraser, Northern, and Vancouver Coastal health regions.

FIGURE 7.3

Percentage Change in Number Immunized On Time for DTaP-HB-IPV-Hib in 2020 vs. 2019, 6 Month Vaccination, by Regional Health Authority, BC



	March	April	May	June	July
Interior	2.4	3.7	-1.1	6.5	-2.7
Fraser	-10.2	-4.0	-8.1	-4.1	-6.4
Vancouver Coastal	-11.7	-5.8	-5.3	-5.7	-5.0
Island	2.4	5.4	4.7	10.6	1.0
Northern	-4.6	4.0	2.6	-3.6	-0.1
BC	-6.7	-1.9	-4.2	-1.4	-4.3

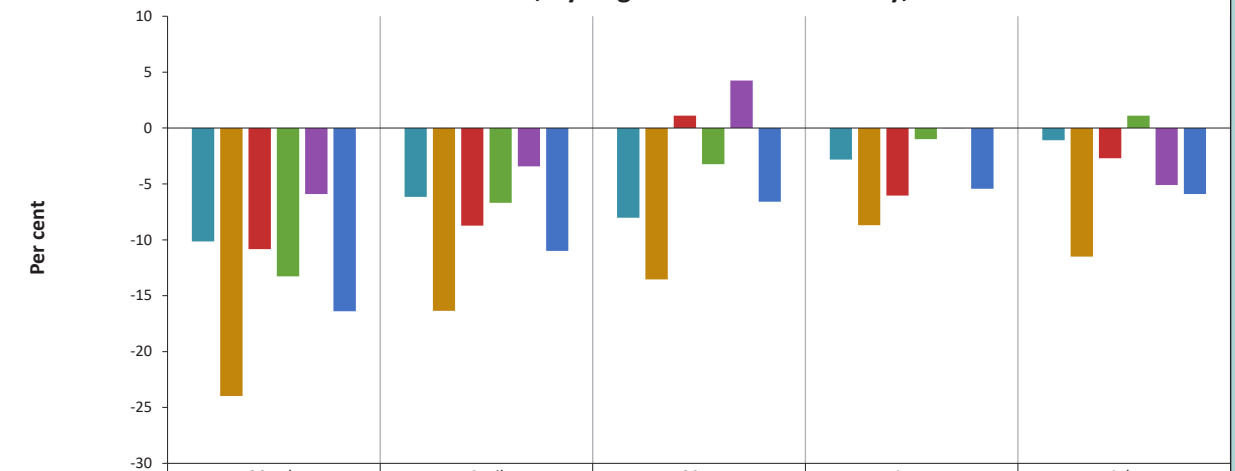
Month Dose Due

Notes: "On Time" means received by age 6 months + 30 days. Immunizations include third dose of Diphtheria, Tetanus and Pertussis (DTaP), Hepatitis B (HB), Polio (IPV), and *Haemophilus Influenzae* type b (Hib), due at 6 months of age for September 2019-January 2020 Birth Cohort vs September 2018-January 2019 Birth Cohort.

Source: BC Centre for Disease Control, extracted October 2020. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, May 2021.

Figure 7.3 shows the changes in the percentages of infants who received their 6-month DTaP-HB-IPV-Hib vaccine on time between 2019 and 2020, in all five regional health areas and for BC in total. Overall, BC experienced a decrease in the proportion of infants who received their 6-month vaccinations on time from March to July 2020, compared to those months in 2019. The proportion of infants vaccinated on time in the Fraser and Vancouver Coastal health regions, was lower in 2020 compared to 2019 for all five months. In contrast the proportion of infants in the Island health region who received their 6-month vaccines on time was higher in 2020 than 2019, for all five months.

FIGURE 7.4



	March	April	May	June	July
Interior	-10.1	-6.2	-8.0	-2.8	-1.1
Fraser	-24.0	-16.3	-13.5	-8.7	-11.5
Vancouver Coastal	-10.8	-8.7	1.1	-6.1	-2.7
Island	-13.3	-6.7	-3.2	-1.0	1.1
Northern	-5.9	-3.4	4.2	0.0	-5.1
BC	-16.4	-11.0	-6.6	-5.4	-5.9

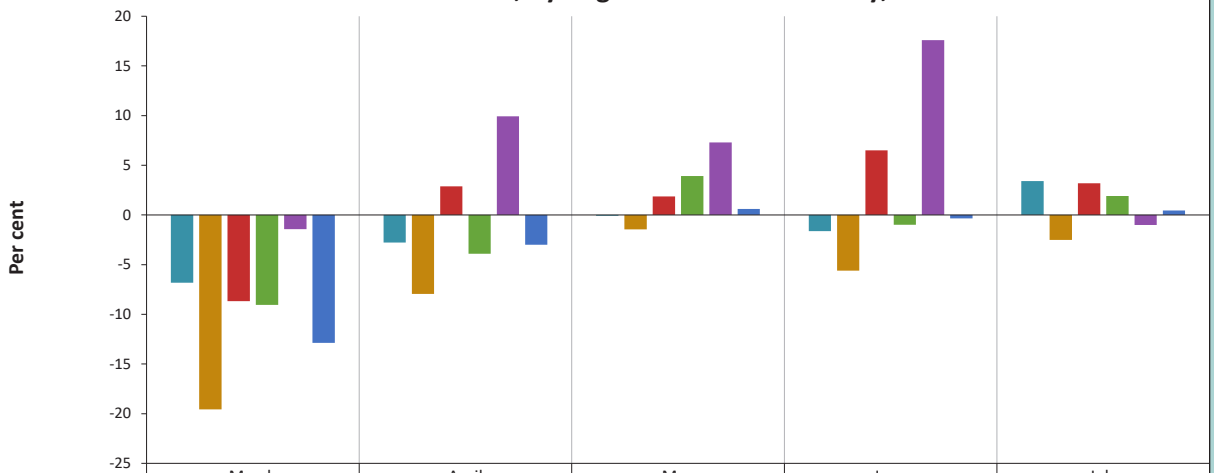
Month Dose Due

Notes: "On Time" means received by age 12 months + 30 days. Immunization includes Measles, Mumps, and Rubella (MMR), due at 12 months of age for March 2019-July 2019 Birth Cohort vs March 2018-July 2018 Birth Cohort.
Source: BC Centre for Disease Control, extracted October 2020. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, May 2021.

Figure 7.4 shows the changes between 2019 and 2020, in the percentages of infants who received their 12-month MMR vaccine on time for all five health regions. Overall, BC experienced a decrease in the proportion of infants who were vaccinated on time in all five months from March to July 2020, compared to the same months in 2019. Fraser Health experienced the largest decreases in all five months shown. The decrease in the proportions of on-time immunizations at age 12 months are larger than those for 2-month, 4-month and 6-month immunizations.

FIGURE 7.5

Percentage Change in Number Immunized On Time for DTaP-IPV-Hib in 2020 vs. 2019, 18 Month Vaccination, by Regional Health Authority, BC



	March	April	May	June	July
Interior	-6.8	-2.8	-0.1	-1.6	3.4
Fraser	-19.6	-8.0	-1.5	-5.6	-2.5
Vancouver Coastal	-8.7	2.9	1.9	6.5	3.2
Island	-9.0	-3.9	3.9	-1.0	1.9
Northern	-1.4	9.9	7.3	17.6	-1.0
BC	-12.9	-3.0	0.6	-0.3	0.5

Month Dose Due

Notes: "On Time" means received by age 18 months + 30 days. Immunizations include Diphtheria, Tetanus and Pertussis (DTaP), Polio (IPV), and *Haemophilus Influenzae* type b (Hib), due at 18 months of age for September 2018-January 2019 Birth Cohort vs September 2017-January 2018 Birth Cohort.
Source: BC Centre for Disease Control, extracted October 2020. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, May 2021.

Figure 7.5 shows the changes between 2019 and 2020, in the percentages of toddlers who received their 18-month DTaP-HB-IPV-Hib vaccination on time for all five health regions. Overall, BC experienced a decrease in the proportion of toddlers who were vaccinated on time in March, April, and June 2020, compared to the same months in 2019. While the proportion of toddlers who received their vaccination on time was lower for all health regions in March 2020 compared to March 2019, other months show mixed results.

Equity Considerations

Analyses to identify linkages between on-time vaccinations and socio-economic factors, such as household income or access to transportation, are not currently possible. Geographic analyses shown here based on health region does show differences between regions, with lower percentages of infants and toddlers being immunized on time in March 2020 compared to 2019 in most health regions, but especially for the Fraser health region.

Truth and Reconciliation: Immunization and Cultural Safety

For many Indigenous (First Nations, Métis, and Inuit) individuals and communities, public health restrictions were layered onto the existing stresses of intergenerational trauma, ongoing structural racism, and culturally unsafe health-care settings. This combination of factors exacerbated challenges to accessing routine childhood vaccinations at in-person health-care settings during the COVID-19 pandemic. More engagement with Indigenous partner organizations and analyses are required to ensure Indigenous Peoples are appropriately and respectfully supported in catch-up immunization programs.

Actions Initiated or Planned to Address Unintended Consequence

The British Columbia Centre for Disease Control (BCCDC) issued guidelines to support continuity of immunization services during the COVID-19 response measures on April 9, 2020, and a public information campaign promoting immunization services as essential and safe from COVID-19 transmission began on April 15, 2020.[21] Guidelines for immunization continuity have also been issued by the National Advisory Committee on Immunization and the Canadian Paediatric Society to continue immunization programs during the COVID-19 pandemic.[22,23]

Promotion of immunization as an essential service, and collaboration with immunization providers, will continue to be conducted to optimize and prioritize vaccination in the infant/ toddler period when on-time immunization is most important for disease prevention.

Considerations for Further Action

This section provides considerations for action based on the findings of this report. These are not formal recommendations, but rather ideas to consider when shaping recommendations and actions related to this topic.

3. Expand capacity for providing immunization services for children and youth through engagement with additional potential immunization providers in communities.
4. Continue to promote the importance of on-time immunizations for the health and well-being of children, including increased education and awareness of COVID-19 safety protocols in place in health-care settings where vaccinations are available.
5. Promote immunization catch-up programs by leveraging mass immunization processes and technologies established for COVID-19 vaccinations.
6. Increase the capacity for timely monitoring and surveillance across BC by facilitating data entry into the provincial immunization registry for monitoring all routine childhood immunizations from birth to Grade 9, and beyond.

Appendix 7-A: Data Methodology Notes

1. Charts provided by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer.

For questions contact: HLTH.PHSE@gov.bc.ca.

2. Methodology

Figures 7.1–7.5 compare the proportion of infants/toddlers immunized on time per health region with the previous year's cohorts. "On time vaccination" is defined as immunization within 30 days of the recommended age. Data for analyses were extracted from the provincial immunization registry. These figures compare the on-time receipt of vaccines for infants/toddlers turning 2-, 4-, 6-, and 18-months of age during the months of March through July 2020, compared to the corresponding cohorts who turned those ages during March through July 2019.

Collection and entry into the registry for this age cohort by Vancouver Coastal Health may not reflect all children in this health region due to a geographic difference in practice. Due to this practice, children in licensed daycares are overrepresented, while other children in some parts of this region may not have records in the registry or the record entry may lag when reported later by physician providers.

Data for infants turning 2-months and 4-months of age during March through July 2020 were not available for Fraser, Northern and Vancouver Coastal regional health authorities.

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Chapter 8

Emergency Department Use

(Reported January 2024)

Key Findings:

- There was a decrease in the number of emergency department visits from March to April 2020, compared to the same period in 2019. The number of emergency department visits returned to close to pre-pandemic numbers by June 2021.
- Among those who accessed emergency department services, the proportion of visits requiring the most urgent level of care increased in 2020, compared to previous years, while the proportion requiring less urgent care decreased.

Situation

Emergency department (ED) visits in BC changed during the early months of the COVID-19 pandemic. Likely reasons for this are as follows:

- Public messaging highlighting the prioritization of hospital resources, as well as changes to ED policies and procedures, to prevent overburdening the health system;[1,2]
- Public reluctance to attend health-care settings due to concerns about contracting SARS-CoV-2 (the virus that causes COVID-19);
- Hospitals changing ED triaging and admitting processes impacting how, when, and who used EDs; and
- Reduced ED capacity after putting new COVID-19 measures in place (e.g., increased distancing in wait rooms, staff reallocation, staff illness and burnout, isolation requirements resulting from contact with confirmed cases).[3,4,5,6]

Truth and Reconciliation in the Health-care System

Truth and reconciliation in the health-care system includes acknowledging and addressing historical injustices and dismantling systemic barriers to equitable care for Indigenous Peoples (First Nations, Métis, and Inuit). This requires health-care providers in emergency departments to take actions that ensure Indigenous Peoples feel safe and respected when receiving care.

The health system in BC continues to inflict interpersonal and systemic racism on Indigenous Peoples, often making it unsafe for them to seek health services, including emergency health services. For many Indigenous Peoples and communities, the challenges of public health restrictions during the COVID-19 pandemic added to the cumulative barriers and stresses faced every day as a result of colonialism, intergenerational trauma, manufactured poverty, and pervasive racism and discrimination. Further, those with limited access to hospital emergency departments before the pandemic (e.g., people living in rural, remote, and northern communities) may have experienced even less access during the pandemic. Urgent actions to uphold recommendations found in the *In Plain Sight* report are required to eradicate anti-Indigenous racism and discrimination in emergency departments. Continued engagement with Indigenous partner organizations and distinctions-based analyses are required to ensure Indigenous Peoples' inherent right to culturally safe and quality emergency health services is upheld.

Background

The COVID-19 pandemic and measures to reduce SARS-CoV-2 transmission, including changes to processes in EDs, may have impacted access to EDs, as well as individual attitudes towards visiting EDs and behaviour when using them.

Individuals: Reasons for avoiding EDs in the early part of the pandemic included concerns related to SARS-CoV-2 exposure, unknowingly transmitting SARS-CoV-2 to health-care providers or other patients in health-care settings, and overburdening the health system with mild or non-urgent concerns.[7,8,9,10,11] Similar findings of reduced ED use and increased severity of reason for visiting the ED were reported among pediatric populations.[12,13] In some jurisdictions, this resulted in a substantial overall decline in ED use but increased hospital admission rates, suggesting that patients presenting to EDs had more severe symptoms and diagnoses.[10,14] In BC, preliminary research shows that the proportion of those who died at home between February and April 2020 increased from 18% to 26%, which may be associated with delaying or not seeking care.[15] Virtual care visits increased considerably for family physicians during this time.[60,61]

Emergency Departments: EDs across BC revised infection prevention and control protocols to reduce the risk of SARS-CoV-2 transmission. These newly adopted protocols changed the way patients experienced EDs (e.g., physical flow, wait times) and may have influenced how and when patients sought care. Some examples include the following:

- **Physical spaces**: setting up triaging stations outdoors, increasing space between waiting patients, creating COVID-19-specific units;[16,36]
- **Personal protective equipment (PPE) use and other infection prevention and control materials**: health authorities experiencing issues related to accessing sufficient PPE in the initial months of the pandemic,[17] and—due to varying supplies of masks, hand sanitizer, and other PPE[18]—continually updating protocols around which PPE to use and when;
- **COVID-19 assessments before and during hospital triage**: implementing virtual triage and assessment processes to manage and reduce less urgent ED visits and to prevent possible SARS-CoV-2 exposures and transmission;[19] encouraging patients during the initial phases of the pandemic to complete the COVID-19 self-assessment prior to presenting at an ED, followed by additional COVID-19 screening questions (e.g., exposures, travel) at the hospital;[20] and
- **Caregiver/visitor regulations:** restricting the number of people accompanying a patient (e.g., only one accompanying individual).[21,22]

Findings

Data from the first round of the BC COVID-19 Survey on Population Experiences, Action, and Knowledge (SPEAK) conducted May 12–31, 2020, show that, among the 33.3% of BC residents who reported avoiding health-care services since the pandemic began, 6.4% reported avoiding emergency or urgent care departments.[7] Regional variation was seen among those who reported avoiding EDs. Among those who said they had avoided health care since the pandemic began, the following percentages avoided emergency or urgent care: 5.1% in Vancouver Coastal Health, 6.1% in Island Health, 6.7% in Fraser Health, 7.2% in Interior Health, and 9.0% in Northern Health. The age groups with the highest proportions reporting avoidance of EDs were 18–29 (8.0%), 30–39 (7.9%), and 40–49 (7.2%).[7]

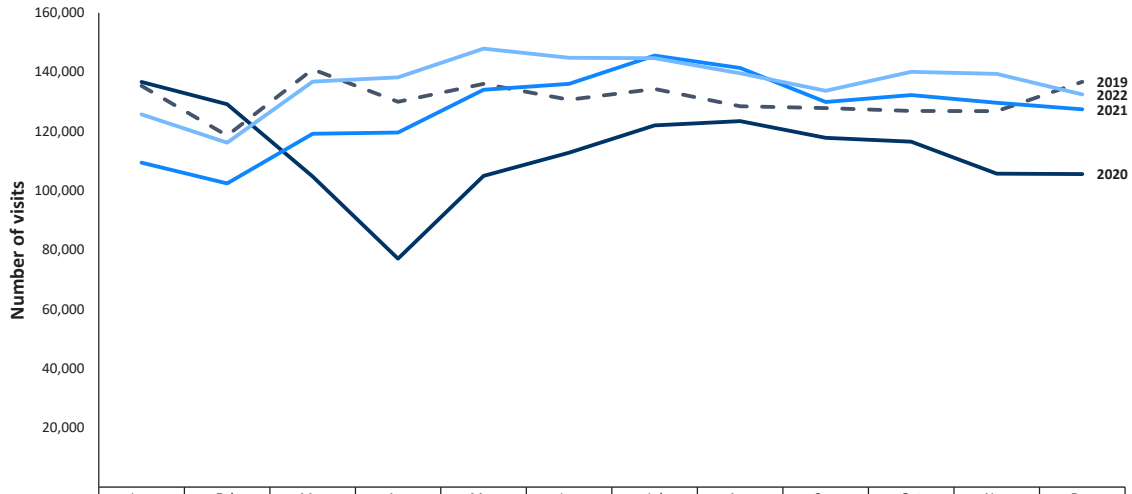
BC COVID-19 SPEAK data also found that among the 22.6% of BC residents who reported difficulty in accessing health-care services, 4.0% reported having difficulty accessing EDs during the first months of the pandemic, with similar findings across the five health authority regions (ranging from 3.1% in the Vancouver Coastal region to 5.2% in the Northern Health region).[7]

Figures 8.1A–8.1C, 8.2, 8.3, and 8.4A–8.4C in this report are based on data from facilities that report to the National Ambulatory Care Reporting Service (NACRS). NACRS-reporting facilities are based mostly in the Vancouver Coastal and Fraser Health Authorities, reflecting largely urban areas, and are not reflective of the whole of BC. Please refer to Appendix 8-A for a list of NACRS-reporting facilities.

Trends in Emergency Department Use in BC

FIGURE 8.1A

Emergency Department Visits for All Causes, by Year, NACRS-reporting Facilities, BC, January 2019 to December 2022



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	135,379	118,589	140,933	129,989	136,067	130,695	134,318	128,500	127,885	126,921	126,815	136,741
2020	136,671	129,140	104,743	77,058	104,999	112,835	122,026	123,487	117,824	116,554	105,719	105,633
2021	109,417	102,446	119,179	119,636	134,078	136,014	145,570	141,424	129,933	132,253	129,666	127,441
2022	125,723	116,194	136,804	138,221	147,921	144,855	144,661	139,589	133,681	140,063	139,434	132,465

Month

Notes: NACRS-reporting facilities in BC are mostly located in the Lower Mainland and account for 75% of total emergency department visits in BC.
Source: National Ambulatory Care Reporting System (NACRS). Prepared by BC Centre for Disease Control (data and analysis) and Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health (visualizations), November 2023.

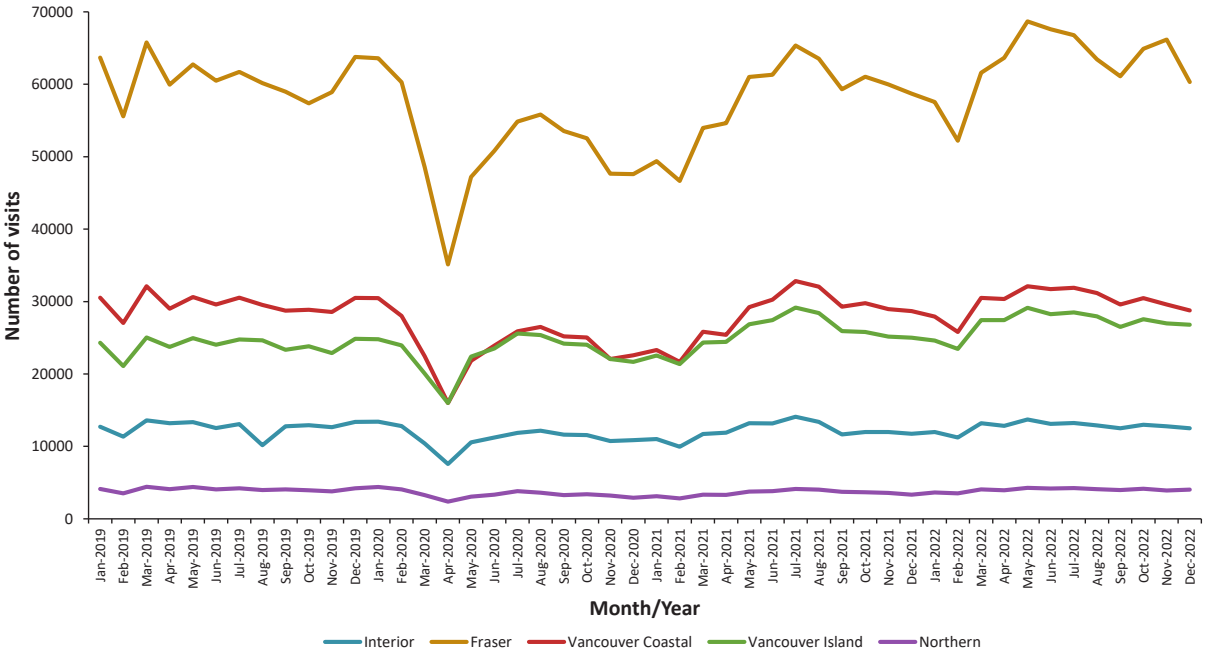
Figure 8.1A shows the number of ED visits for all causes, by month and year, from January 2019 to December 2022. There was a clear decrease in ED visits in March and April 2020 when compared to the previous year. In April 2020, 77,058 ED visits were recorded, compared to 129,989 ED visits in April 2019. This was followed by a sharp increase in May 2020, and a gradual increase followed by a gradual decrease, before a stabilizing of ED visits at the end of the year. The number of ED visits did not return to pre-pandemic levels until June 2021.[63]

It is important to note that ED use may have decreased in part because of the reduced occurrence of medical events requiring emergency services during the COVID-19 pandemic. The literature suggests that:

- The incidence of many respiratory diseases (e.g., influenza) was significantly lower in 2020 compared to previous years;[24,25,26,27] and
- There was either no change in, or decreased incidence of, physical traumas (e.g., sports-related injuries,[28] blunt assault, motor vehicle crashes).[29,63]

The occurrence of some medical events (e.g., myocardial infarction) is likely to have stayed the same despite reduced presentation in EDs.[30] Other conditions, such as toxic drug poisoning/overdose, increased during the COVID-19 pandemic due to the worsening unregulated drug emergency. These findings suggest that the data may reflect a change in the use of EDs rather than a change in the need for visits to EDs overall.[11,30,31,32]

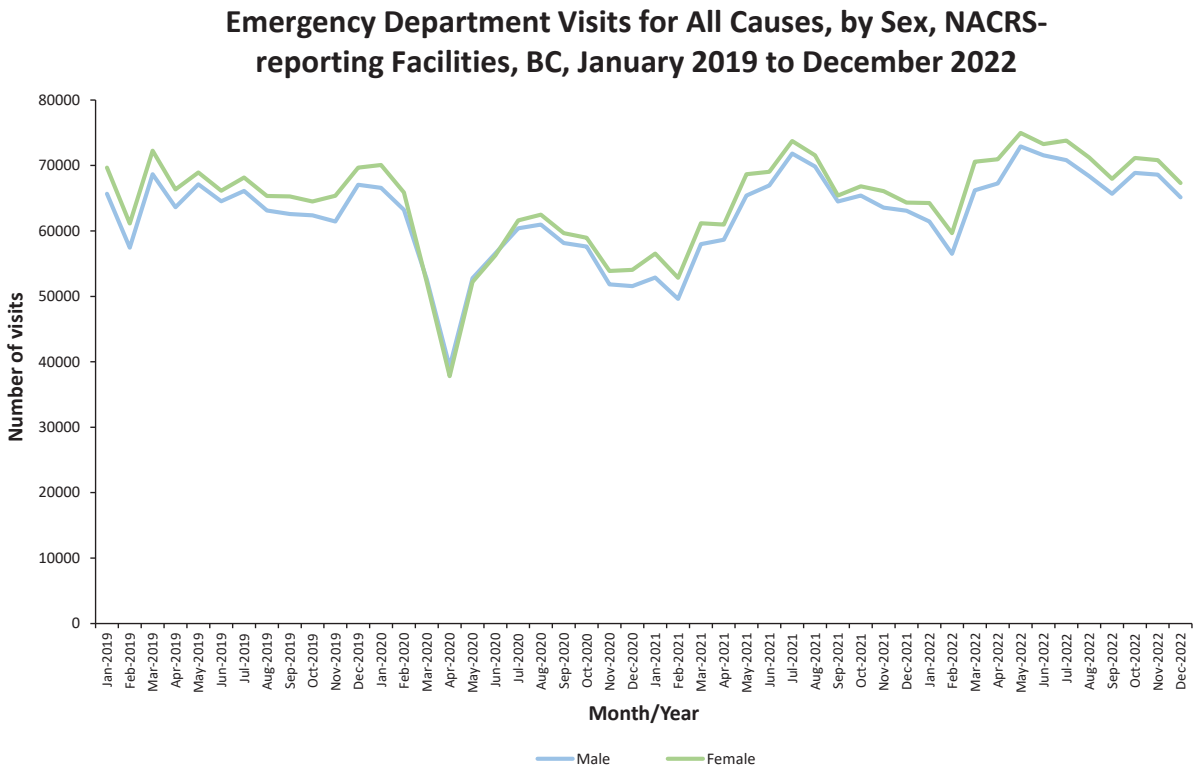
FIGURE 8.1B



Notes: NACRS-reporting facilities in BC are mostly located in the Lower Mainland and account for 75% of total emergency department visits in BC.
Source: National Ambulatory Care Reporting System (NACRS). Prepared by BC Centre for Disease Control (data and analysis) and Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health (visualizations), November 2023.

Figure 8.1B shows the number of ED visits for all causes from January 2019 to December 2022, by regional health authority, among facilities that report to NACRS. As noted earlier, the majority of these facilities are based in the Vancouver Coastal and Fraser Health authority regions (see Appendix 8-A). Because of this, and because Fraser Health has a substantially higher population than the other health regions,[62] this health region has higher counts. This chart shows that the substantial decrease in ED visits in 2020 demonstrated in Figure 8.1A was experienced across all health regions.

FIGURE 8.1C



Notes: NACRS-reporting facilities in BC are mostly located in the Lower Mainland and account for 75% of total emergency department visits in BC.
Source: National Ambulatory Care Reporting System (NACRS). Prepared by BC Centre for Disease Control (data and analysis) and Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health (visualizations), November 2023.

Figure 8.1C shows the number of ED visits for all causes from January 2019 to December 2022, by sex. This chart shows a clear and significant decline in the number of ED visits by both sexes from February to April 2020. There does not appear to be a difference between female and male[a] patients—both show the same decline and rebound in number of ED visits. Please refer to Appendix 8-B for a detailed data table related to this chart.

[a] In this report, data presented by sex (female/male) may reflect biological sex assigned at birth. Therefore, Two-Spirit, transgender, non-binary, intersex, and gender diverse people may be misidentified in the data.

Trends in Acuity of Emergency Department Cases Across BC and Canada

The previous section focused on the change in number of ED visits early in the pandemic. Looking at the change in acuity of ED visits provides more nuanced information about how people changed their use of EDs in response to COVID-19 and related measures. Data in this section come from Canadian Triage Acuity Scale (CTAS) scores.[33] The CTAS is used to triage patients presenting at EDs based on urgency. Lower CTAS scores represent more urgent needs.

In Canada:

Compared to March 2019, March 2020 saw a 25% drop in the number of ED visits across Canada.[23] This reduction in visits was not distributed evenly across all levels of acuity. Less urgent (CTAS 4) visits decreased the most (by 29%), but there was also a 14% decrease in the most urgent cases (CTAS 1). Additionally, there were sizeable decreases at levels CTAS 2 (emergent—25%), CTAS 3 (urgent—23%), and CTAS 5 (non-urgent—18%).[34]

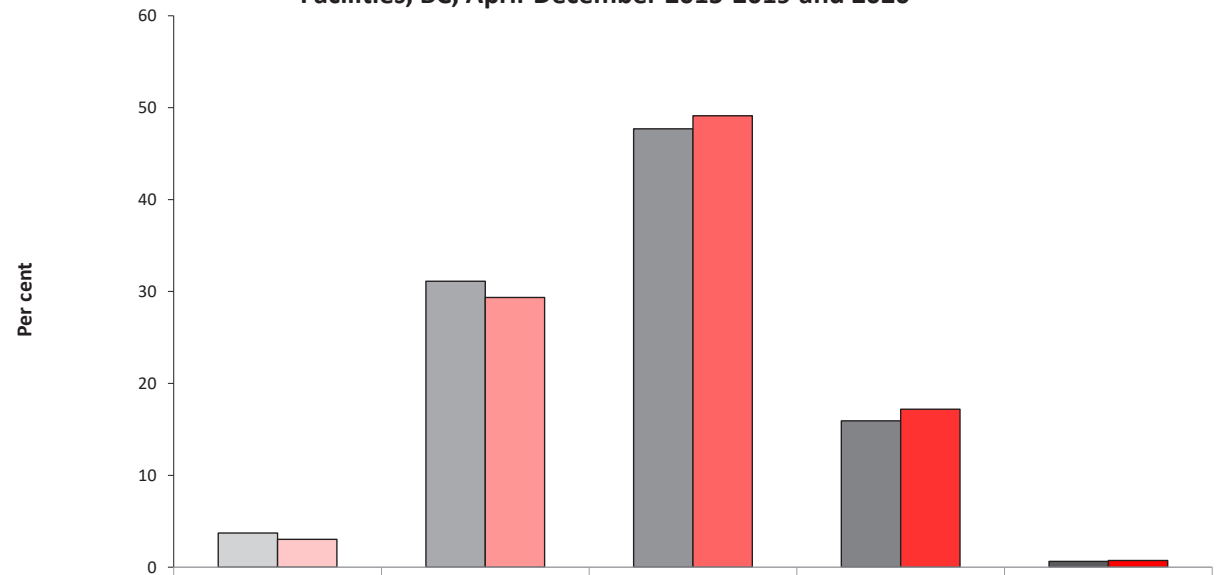
Canadian Triage Acuity Scale Levels

- **CTAS 1**: Resuscitation (conditions that are threats to life or limb).
- **CTAS 2**: Emergent (conditions that are a potential threat to life, limb, or function).
- **CTAS 3**: Urgent (serious conditions that require emergency intervention).
- **CTAS 4**: Less urgent (conditions that relate to patient distress or potential complications that would benefit from intervention).
- **CTAS 5**: Non-urgent (conditions that are non-urgent or that may be part of a chronic problem).

In BC:

FIGURE 8.2

Percentage of Emergency Department Visits, by Triage Level, NACRS-reporting Facilities, BC, April-December 2015-2019 and 2020



	Non-urgent CTAS 5	Less Urgent CTAS 4	Urgent CTAS 3	Emergent CTAS 2	Resuscitation CTAS 1
Apr-Dec 2015-2019	3.7	31.1	47.7	15.9	0.6
Apr-Dec 2020	3.0	29.4	49.1	17.2	0.7

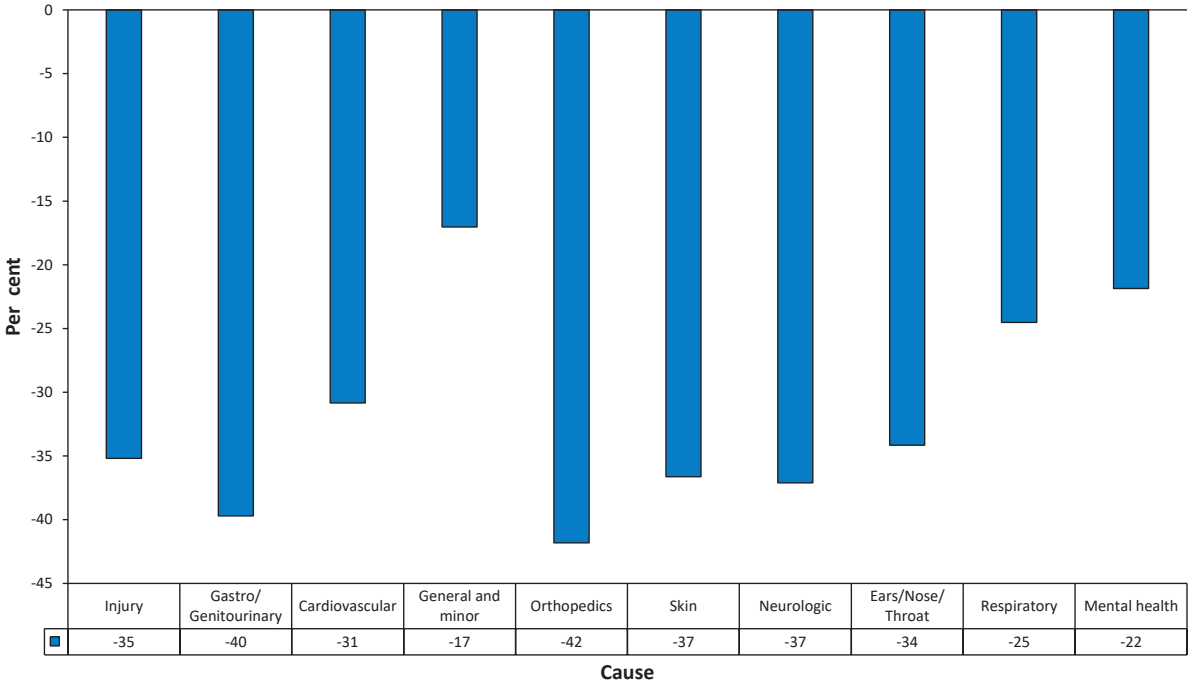
Canadian Triage Acuity Scale (CTAS) Level

Notes: NACRS-reporting facilities in BC are mostly located in the Lower Mainland and account for 75% of total emergency department visits in BC. Canadian Triage Acuity Scale (CTAS) levels are: 1 (resuscitation), 2 (emergent), 3 (urgent), 4 (less urgent) and 5 (non-urgent). Records with missing or unknown CTAS are not included.
Source: National Ambulatory Care Reporting System (NACRS). Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, January 2022.

Figure 8.2 shows the percentage of ED visits by CTAS level across BC, comparing CTAS scores during pandemic months of 2020 (i.e., April 1–December 31) with average scores during the same months in pre-pandemic years spanning 2015–2019. The proportion of visits with more urgent CTAS scores was higher in 2020 than in previous years. Additional analyses of these data indicate that these trends are similar by sex and across age groups.[35] All differences reported are statistically significant when comparing 2020 to previous years' averages. These findings are consistent with national reporting, which showed that many people avoided the ED for less severe conditions.[23]

Trends in Reasons for Seeking Care in Emergency Departments Across BC

FIGURE 8.3



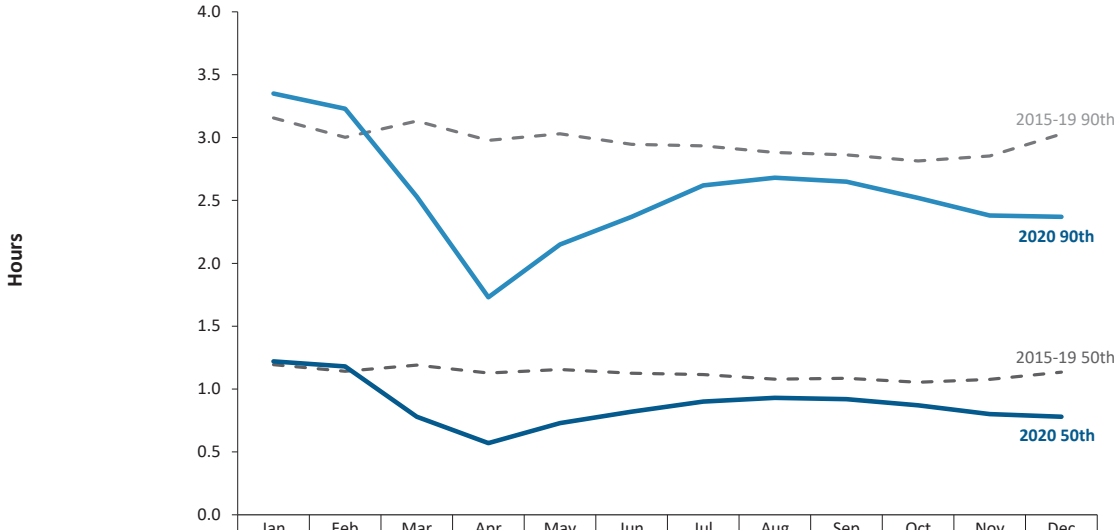
Notes: NACRS-reporting facilities in BC are mostly located in the Lower Mainland and account for 75% of total emergency department visits in BC. Overall reasons for emergency department visits using the patients' presenting complaints, coded with the Canadian Emergency Department Information System (CEDIS) Presenting Complaint List, version 5.1.
Source: National Ambulatory Care Reporting System (NACRS). Prepared by BC Centre for Disease Control (data and analysis) and Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health (visualizations), November 2023.

Figure 8.3 shows the percentage change in number of ED visits from March–April 2019 to March–April 2020, by cause, in BC. The negative values indicate the percentage decrease from 2019 to 2020. Across BC, the values range from a 17% decrease in the number of ED visits for general and minor conditions to a 42% decrease for orthopedic conditions.

Emergency Department Experiences Across BC

FIGURE 8.4A

50th and 90th Percentile for Emergency Department Wait Time to Physician Initial Assessment, NACRS-reporting Facilities, BC, 2015-2019 and 2020



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015-2019 Average (90th Percentile)	3.16	3.00	3.13	2.98	3.03	2.95	2.93	2.88	2.86	2.81	2.85	3.03
2020 (90th Percentile)	3.35	3.23	2.53	1.73	2.15	2.37	2.62	2.68	2.65	2.52	2.38	2.37
2015-2019 Average (50th Percentile)	1.19	1.14	1.19	1.13	1.16	1.13	1.12	1.08	1.09	1.05	1.08	1.13
2020 (50th Percentile)	1.22	1.18	0.78	0.57	0.73	0.82	0.90	0.93	0.92	0.87	0.80	0.78

Month

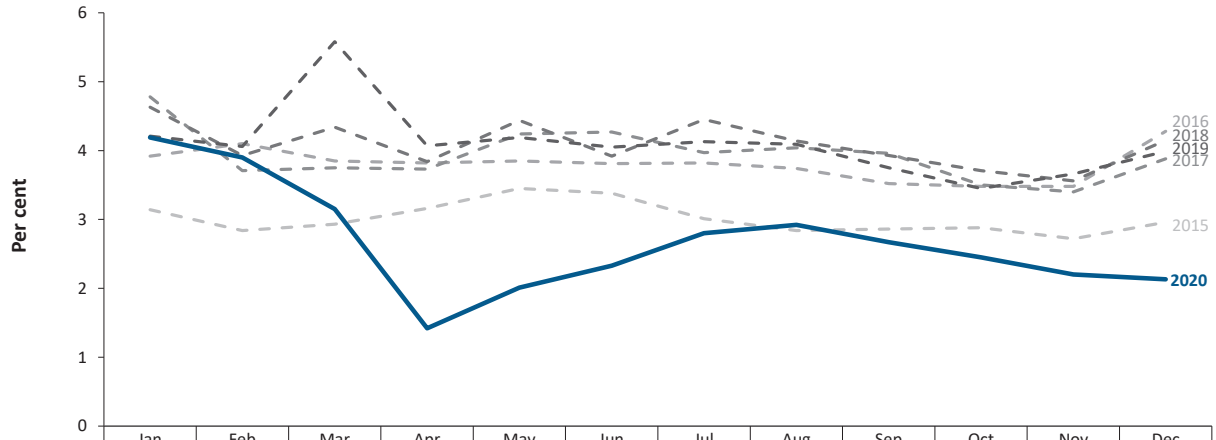
Notes: NACRS-reporting facilities in BC are mostly located in the Lower Mainland and account for 75% of total emergency department visits in BC. Wait time is the time between triage time or registration time (whichever is earlier) and the time of physician initial assessment.
Source: National Ambulatory Care Reporting System (NACRS). Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, April 2021.

Figure 8.4A shows the 50th percentile (median) and 90th percentile wait times in hours for an initial assessment by an ED physician,[b,37] comparing 2020 to the average for 2015–2019. Wait times from March to June 2020 were lower than in previous years, with the shortest wait times in April. There are no differences when comparing wait times by sex or age. A comparison of wait times by CTAS score had not yet been done at the time this report was written, but it may offer further insights into the impact of the urgency of ED visits on wait times for physician initial assessments.

[b] This indicator measures the time between the earlier of either triage date/time or registration date/time, and the date/time of the physician initial assessment in the ED. The 90th percentile of this indicator is interpreted as the longest wait time in hours among 90% of patients waiting for the physician initial assessment in an ED, as only 10% of ED patients waited longer than this benchmark to be seen. Similarly, the 50th percentile represents the longest wait time in hours among half of those waiting for the physician initial assessment in an ED. Smaller numbers represent shorter wait times.

FIGURE 8.4B

Monthly Percentage of Emergency Department Patients Who Left Without Being Seen by an Emergency Department Physician, NACRS-reporting Facilities, BC, January 2015 to December 2020



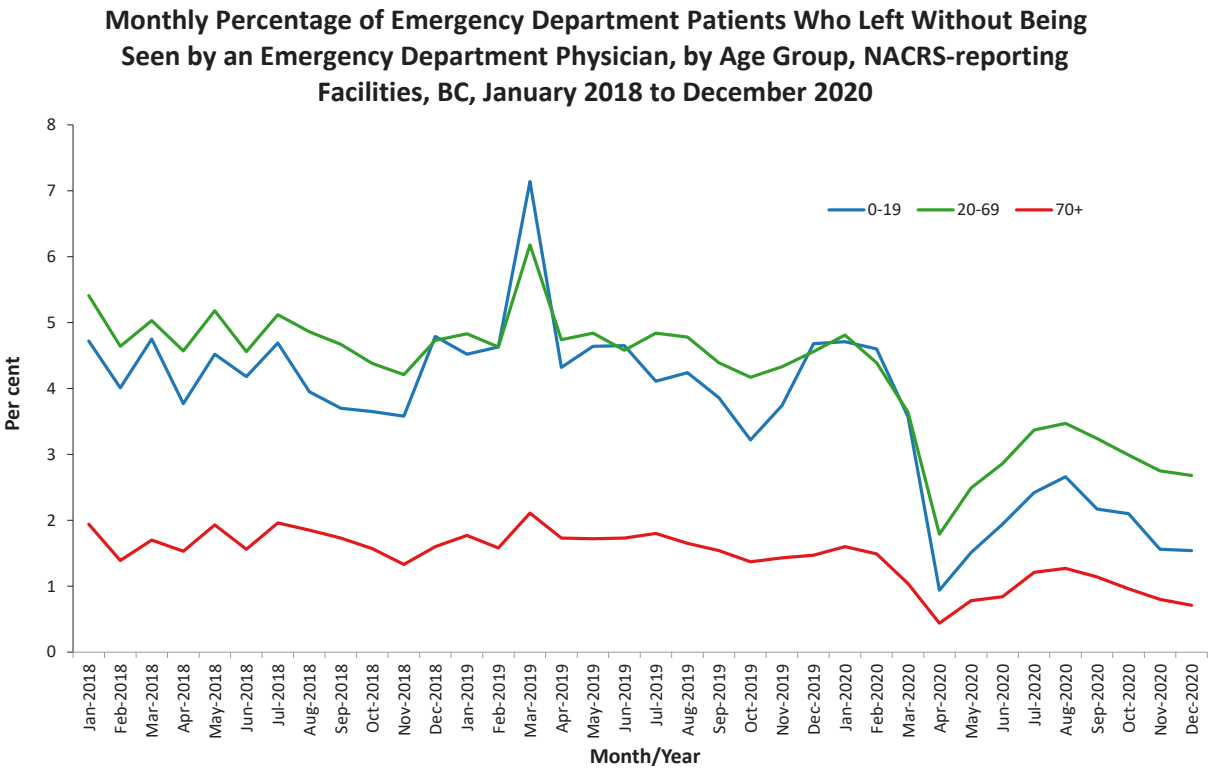
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	3.1	2.8	2.9	3.2	3.5	3.4	3.0	2.8	2.9	2.9	2.7	3.0
2016	3.9	4.1	3.9	3.8	3.9	3.8	3.8	3.7	3.5	3.5	3.5	4.3
2017	4.8	3.7	3.8	3.7	4.2	4.3	4.0	4.0	4.0	3.5	3.4	3.9
2018	4.6	3.9	4.3	3.8	4.4	3.9	4.5	4.1	3.9	3.7	3.6	4.2
2019	4.2	4.1	5.6	4.1	4.2	4.1	4.1	4.1	3.8	3.5	3.7	4.0
2020	4.2	3.9	3.2	1.4	2.0	2.3	2.8	2.9	2.7	2.5	2.2	2.1

Month

Notes: NACRS-reporting facilities in BC are mostly located in the Lower Mainland and account for 75% of total emergency department visits in BC. Patients who presented to the emergency department but decided to leave before they were triaged or registered are not included.
Source: National Ambulatory Care Reporting System (NACRS). Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, April 2021.

Figure 8.4B shows the monthly percentage of ED patients who left without being seen by a physician. The trend appears correlated with ED wait times, and is consistent with decreased ED use. In addition, the data may reflect a greater proportion of patients with higher-acuity health problems visiting EDs in 2020 compared to previous years. There are no significant trends seen when comparing sexes.

FIGURE 8.4C



Notes: NACRS-reporting facilities in BC are mostly located in the Lower Mainland and account for 75% of total emergency department visits in BC. Patients who presented to the emergency department but decided to leave before they were triaged or registered are not included.
Source: National Ambulatory Care Reporting System (NACRS). Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, November 2022.

Figure 8.4C shows the monthly percentage of patients who left without being seen by a physician from January 2018 to December 2020, comparing three age groups: 0–19, 20–69, and 70 and older. There was a substantial decline in 2020 for all age groups from January/February to April, with percentages steadily increasing from May to August, followed by another decline from September to December. This decline might suggest that, with fewer people using the ED (see Figures 8.1A–8.1C) and wait times steadily decreasing during the early months of the pandemic, patients below age 70 chose to wait to see a physician, whereas previously they might have chosen to leave without being seen. The decline might also speak to the severity of the issue necessitating an ED visit and the need for urgent care (see Figure 8.2) in which triaging would result in decreased wait times. Figure 8.4C also shows a clear peak in the monthly percentage of patients who left without being seen by a physician in March 2019. The reason for this peak has not been determined and is outside the scope of this report, but similar—though lower in magnitude—peaks were observed in the colder months of preceding years, from 2016 to 2018.[c] Please refer to Appendix 8-B for a detailed data table related to this chart.

[c] These peaks were observed by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, in the same data set charted in Fig. 8.4C. As determining the cause of the peaks is outside the scope of the current report, this was not investigated further. The cause of the peaks is not known.

Equity Considerations

Several populations already experienced inequitable access to EDs prior to the pandemic, which may have worsened during the early months of the COVID-19 pandemic.[38] For example:

- Those with limited access to EDs before the pandemic (e.g., people living in rural, remote, and northern communities) may have experienced even less access.
- Populations with lower socioeconomic status were disproportionately affected by the pandemic. These populations were more likely to work in frontline positions, and less likely to have paid sick leave or the time to seek health-care services.[38,39,40,41]
- Women who bore unequal burdens of caregiving responsibilities may have experienced increased barriers to ED access. For example, if they were not permitted or did not wish to bring their children with them when they needed to access the ED, they may have delayed or chosen not to go.[42,43,44]
- Indigenous Peoples (First Nations, Métis, and Inuit) consistently experience interpersonal and systemic racism in the BC health system, which contributes to reluctance to access health services.[45,46,47,48,49]
- Those who identify as non-binary already faced distinct challenges in accessing safe care due to discrimination experienced in health-care settings.[50,51]
- Refugee, immigrant, and racialized communities continually faced unique challenges in accessing health services both prior to and during the pandemic.[52,53,54] Examples of these challenges include administrative challenges with enrolling in the Medical Services Plan/ Health Insurance BC,[55] language and cultural barriers,[56] experiences of poverty,[57] lack of access to technology as health services transitioned to virtual care,[58] health systems that are difficult to navigate,[56] and avoidance of the health system due to fears of medical professionals.[56]

Considerations for Further Action

This section provides considerations for action based on the findings of this report. These are not formal recommendations, but rather ideas to consider when shaping recommendations and actions related to this topic. The scope of this report does not permit a complete cataloguing of all actions currently underway in BC on this report topic. The considerations below may lend support to actions already underway that address the issues identified and provide a starting place for discussion if action has not yet begun.

1. Commit to offering culturally safe health care informed by anti-racist policies, including in EDs, and acting on the 24 recommendations outlined in the *In Plain Sight* report, an independent review of Indigenous-specific racism in the BC health-care system.[45,59]
2. Continue long-term monitoring to evaluate and address the short- and long-term impacts of the pandemic and related response measures on access to primary care, care avoidance, and ways to ensure that emergency services continue to be available during pandemic situations.
3. Explore initiatives started during the COVID-19 pandemic (such as virtual triage and assessment processes)[19] and alternative urgent care structures (such as urgent and primary care centres) to determine the impact on demand for ED services, and to understand the regional and rural/urban differences in ED visits and wait times.

Appendix 8-A: Data Methodology Notes

1. The BC Observatory for Population and Public Health completed data acquisition, analysis, and interpretation for Figures 8.1A, 8.1B, 8.1C, and 8.3. Analysis and interpretation for Figures 8.2, 8.4A, 8.4B, and 8.4C, as well as chart visualizations for all figures, were completed by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health. For questions, contact HLTH.PHSE@gov.bc.ca.
2. **BC COVID-19 SPEAK Data:** The BC COVID-19 SPEAK was funded by the BCCDC Foundation for Public Health. The SPEAK data are publicly accessible here: http://www.bccdc.ca/health-professionals/data-reports/bc-covid-19-speak-dashboard.

3. **National Ambulatory Care Reporting System (NACRS) Charts:** Figures 8.1A–8.1C, 8.2, 8.3, and 8.4A–8.4C report on emergency department visits from NACRS. NACRS provides information on all levels of ambulatory care within Canada. There are 30 sites in BC that report to NACRS as of fiscal year 2020, most of which are in the Lower Mainland. This data limitation results in an underrepresentation of events that take place in the Interior and Northern Health Authorities in NACRS data.

   The following table lists the hospitals with emergency departments that reported to NACRS during 2015–2020. There are three facilities that did not report to NACRS for the entire time period, as noted in the table.

NACRS Reporting Facilities

Health Authority	Hospital Name
Interior	Kelowna General Hospital
Interior	Royal Inland Hospital
Fraser	Royal Columbian Hospital
Fraser	Langley Memorial Hospital
Fraser	Surrey Memorial Hospital
Fraser	Burnaby Hospital
Fraser	Peace Arch District Hospital
Fraser	Delta Hospital
Fraser	Eagle Ridge Hospital and Health Care Centre
Fraser	Chilliwack General Hospital
Fraser	Mission Memorial Hospital
Fraser	Ridge Meadows Hospital and Health Care Centre
Fraser	Fraser Canyon Hospital
Fraser	Abbotsford Regional Hospital and Cancer Centre
Vancouver Coastal	Vancouver General Hospital
Vancouver Coastal	St. Paul's Hospital
Vancouver Coastal	Mount Saint Joseph Hospital
Vancouver Coastal	Lions Gate Hospital
Vancouver Coastal	Richmond Hospital
Vancouver Coastal	UBC Health Sciences Centre
Vancouver Coastal	BC Children's Hospital
Vancouver Island	Royal Jubilee Hospital
Vancouver Island	Victoria General Hospital
Vancouver Island	Cowichan District Hospital
Vancouver Island	Saanich Peninsula Hospital
Vancouver Island	Nanaimo Regional General Hospital
Vancouver Island	St. Joseph's General Hospital (closed in October 2017)
Vancouver Island	North Island Hospital, Comox Valley (opened in October 2017)
Vancouver Island	North Island Hospital, Campbell River and District
Vancouver Island	West Coast General Hospital (started reporting in March 2020)
Northern	The University Hospital of Northern British Columbia

Appendix 8-B: Data tables

Figure 8.1B-Data: Emergency Department Visits for All Causes, by Regional Health Authority, BC, January 2019 to December 2022

Month/Year	Regional Health Authority				
	Interior	Fraser	Vancouver Coastal	Vancouver Island	Northern
Jan-2019	12,715	63,698	30,527	24,308	4,131
Feb-2019	11,346	55,583	27,035	21,096	3,529
Mar-2019	13,584	65,776	32,121	25,028	4,424
Apr-2019	13,203	59,936	29,010	23,747	4,093
May-2019	13,350	62,744	30,632	24,940	4,401
Jun-2019	12,530	60,486	29,599	24,030	4,050
Jul-2019	13,082	61,722	30,534	24,758	4,222
Aug-2019	10,154	60,171	29,543	24,658	3,974
Sep-2019	12,789	58,963	28,729	23,347	4,057
Oct-2019	12,927	57,356	28,862	23,826	3,950
Nov-2019	12,656	58,912	28,559	22,885	3,803
Dec-2019	13,398	63,764	30,515	24,849	4,215
Jan-2020	13,418	63,587	30,466	24,787	4,413
Feb-2020	12,821	60,298	28,003	23,955	4,063
Mar-2020	10,394	48,567	22,453	20,060	3,269
Apr-2020	7,572	35,126	15,988	15,995	2,377
May-2020	10,549	47,186	21,808	22,400	3,056
Jun-2020	11,222	50,825	23,927	23,523	3,338
Jul-2020	11,878	54,852	25,886	25,588	3,822
Aug-2020	12,182	55,825	26,489	25,384	3,607
Sep-2020	11,632	53,536	25,192	24,183	3,281
Oct-2020	11,560	52,531	25,031	24,029	3,403
Nov-2020	10,735	47,642	22,074	22,060	3,208
Dec-2020	10,870	47,597	22,591	21,677	2,898
Jan-2021	11,021	49,388	23,321	22,549	3,138
Feb-2021	9,960	46,639	21,658	21,362	2,827
Mar-2021	11,720	53,960	25,819	24,340	3,340
Apr-2021	11,884	54,625	25,391	24,421	3,315

Figure 8.1B-Data: Emergency Department Visits for All Causes, by Regional Health Authority, BC, January 2019 to December 2022 *continued*

Month/Year	Regional Health Authority				
	Interior	Fraser	Vancouver Coastal	Vancouver Island	Northern
May-2021	13,204	61,004	29,231	26,863	3,776
Jun-2021	13,167	61,329	30,260	27,429	3,829
Jul-2021	14,094	65,363	32,831	29,170	4,112
Aug-2021	13,398	63,533	32,063	28,405	4,025
Sep-2021	11,639	59,324	29,303	25,923	3,744
Oct-2021	11,975	61,041	29,767	25,787	3,683
Nov-2021	11,995	59,976	28,953	25,148	3,594
Dec-2021	11,740	58,709	28,670	24,999	3,323
Jan-2022	11,973	57,565	27,925	24,614	3,646
Feb-2022	11,229	52,195	25,786	23,470	3,514
Mar-2022	13,193	61,592	30,499	27,452	4,068
Apr-2022	12,850	63,638	30,349	27,445	3,939
May-2022	13,728	68,685	32,103	29,126	4,279
Jun-2022	13,098	67,602	31,706	28,255	4,194
Jul-2022	13,240	66,781	31,908	28,491	4,241
Aug-2022	12,896	63,453	31,174	27,969	4,097
Sep-2022	12,507	61,109	29,596	26,487	3,982
Oct-2022	12,985	64,887	30,474	27,552	4,165
Nov-2022	12,788	66,162	29,595	26,981	3,908
Dec-2022	12,516	60,323	28,766	26,813	4,047

Figure 8.1C-Data: Emergency Department Visits for All Causes, by Sex, BC, January 2019 to December 2022

Month-Year	Male	Female
Jan-2019	65,683	69,675
Feb-2019	57,434	61,139
Mar-2019	68,656	72,258
Apr-2019	63,618	66,347
May-2019	67,124	68,931
Jun-2019	64,520	66,153
Jul-2019	66,124	68,162
Aug-2019	63,131	65,353
Sep-2019	62,577	65,280
Oct-2019	62,390	64,508
Nov-2019	61,431	65,376
Dec-2019	67,044	69,687
Jan-2020	66,595	70,068
Feb-2020	63,236	65,889
Mar-2020	52,592	52,143
Apr-2020	39,246	37,805
May-2020	52,779	52,215
Jun-2020	56,553	56,274
Jul-2020	60,414	61,599
Aug-2020	60,982	62,497
Sep-2020	58,142	59,672
Oct-2020	57,601	58,942
Nov-2020	51,827	53,883
Dec-2020	51,577	54,044

Month-Year	Male	Female
Jan-2021	52,882	56,525
Feb-2021	49,606	52,826
Mar-2021	57,979	61,188
Apr-2021	58,660	60,961
May-2021	65,417	68,650
Jun-2021	66,953	69,046
Jul-2021	71,805	73,738
Aug-2021	69,841	71,564
Sep-2021	64,481	65,421
Oct-2021	65,404	66,806
Nov-2021	63,557	66,090
Dec-2021	63,093	64,325
Jan-2022	61,437	64,269
Feb-2022	56,505	59,664
Mar-2022	66,213	70,572
Apr-2022	67,241	70,964
May-2022	72,912	74,974
Jun-2022	71,556	73,260
Jul-2022	70,821	73,816
Aug-2022	68,360	71,202
Sep-2022	65,683	67,969
Oct-2022	68,862	71,164
Nov-2022	68,600	70,813
Dec-2022	65,123	67,323

Figure 8.4C-Data: Monthly Percentage of Emergency Department Patients Who Left Without Being Seen by an Emergency Department Physician, by Age Group, NACRS-reporting Facilities, BC, January 2018 to December 2020

Month/Year	Age Group		
	0–19	20–69	70+
Jan-2018	4.7	5.4	1.9
Feb-2018	4.0	4.6	1.4
Mar-2018	4.8	5.0	1.7
Apr-2018	3.8	4.6	1.5
May-2018	4.5	5.2	1.9
Jun-2018	4.2	4.6	1.6
Jul-2018	4.7	5.1	2.0
Aug-2018	4.0	4.9	1.9
Sep-2018	3.7	4.7	1.7
Oct-2018	3.7	4.4	1.6
Nov-2018	3.6	4.2	1.3
Dec-2018	4.8	4.7	1.6
Jan-2019	4.5	4.8	1.8
Feb-2019	4.6	4.6	1.6
Mar-2019	7.1	6.2	2.1
Apr-2019	4.3	4.7	1.7
May-2019	4.6	4.8	1.7
Jun-2019	4.7	4.6	1.7
Jul-2019	4.1	4.8	1.8
Aug-2019	4.2	4.8	1.7
Sep-2019	3.9	4.4	1.5
Oct-2019	3.2	4.2	1.4
Nov-2019	3.7	4.3	1.4
Dec-2019	4.7	4.6	1.5
Jan-2020	4.7	4.8	1.6
Feb-2020	4.6	4.4	1.5
Mar-2020	3.6	3.6	1.0
Apr-2020	0.9	1.8	0.4
May-2020	1.5	2.5	0.8
Jun-2020	1.9	2.9	0.8
Jul-2020	2.4	3.4	1.2
Aug-2020	2.7	3.5	1.3
Sep-2020	2.2	3.2	1.1
Oct-2020	2.1	3.0	1.0
Nov-2020	1.6	2.8	0.8
Dec-2020	1.5	2.7	0.7

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Chapter 9

Selected Communicable Diseases other than COVID-19

(Reported September 2022)

Key Findings:

- Response measures introduced to reduce transmission of COVID-19 and changes in individuals' behaviour may have also led to the decline in cases of several reportable communicable diseases compared to previous years.
- Decreases in communicable diseases during 2020 may be due to reduced social contacts, travel restrictions, more frequent cleaning (i.e., surfaces and hands), and increased use of personal protective equipment. Decreases in testing may have also contributed to the decline in cases identified.

Vaccines are available for some of the communicable diseases discussed in this report. For information on BC's Immunization Schedules, please see details from HealthLinkBC (https://www.healthlinkbc.ca/bc-immunization-schedules) for:

- Infants and Children (https://www.healthlinkbc.ca/bc-immunization-schedules#child)
- School Age Children (https://www.healthlinkbc.ca/bc-immunization-schedules#school)
- Adults, Seniors, and Individuals at High Risk (https://www.healthlinkbc.ca/bc-immunization-schedules#adult)

Situation

Response measures to the COVID-19 pandemic included temporary restrictions on traveling; visiting long-term care or seniors' assisted living facilities; indoor dining at restaurants, pubs, and bars; and gatherings and events.[1,2] People were encouraged to physically distance themselves from others, sanitize frequently touched surfaces and objects more often than usual, wear masks, wash hands, and self-isolate if exposed to anyone infected with COVID-19.[2] Many workplaces also implemented remote working policies, and enhanced infection control practices with guidance from WorkSafeBC.[3,4] In addition to reducing the transmission of COVID-19, these measures may have decreased the number of new cases for several other communicable diseases in 2020, compared to previous years.

Background

Communicable diseases are infectious diseases that are contagious. They can be spread from person to person, through a vector (e.g., insects), through contaminated foods, water, or surfaces, or from the environment.[5] Infectious agents include bacteria, viruses, or parasites.[6] Some communicable diseases are reportable in British Columbia under the Reporting Information Affecting Public Health Regulation (B.C. Reg. 167/2018), under the *Public Health Act*.[7] The BC Centre for Disease Control (BCCDC) monitors, evaluates, and reports on more than 80 reportable

For more information about public health measures during COVID-19, see:

https://www2.gov.bc.ca/gov/content/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/current-health-issues/covid-19-novel-coronavirus

Truth and Reconciliation: Communicable Disease and Decolonizing Care

As the original Peoples of what is now known as Canada, First Nations, Métis, and Inuit Peoples have pre-existing rights (commonly referred to as Indigenous or Aboriginal rights) that are recognized and affirmed by Section 35 of the *Constitution Act*, 1982. First Nations, Métis, and Inuit Peoples are distinct Indigenous groups in Canada that each have their own customs, practices, and traditions.

Prior to contact, communicable diseases amongst First Nations and Inuit were limited and did not pose an existential threat. The arrival of Europeans introduced new communicable diseases that caused devastating illness and death. First Nations, Métis, and Inuit Peoples continue to face many historical and ongoing structural inequities that make them more susceptible to many kinds of communicable diseases. In addition, the BC health-care system continues to discriminate against Indigenous Peoples (First Nations, Métis, and Inuit) as documented in the *In Plain Sight* report (https://engage.gov.bc.ca/addressingracism/). As a result, many Indigenous individuals face challenges in accessing culturally safe health services. Indigenous Peoples have remained strong and resilient through the COVID-19 pandemic. Indigenous leaders and communities have prioritized public health supports to manage both COVID-19 and other communicable diseases, while ensuring community wellness and cultural priorities continued to be met through these challenging times.

communicable diseases in the province, including respiratory (droplet and airborne infections), enteric or water/foodborne, sexually transmitted and bloodborne, vector-borne, and zoonotic diseases.[a,7,8]

Some public health measures put in place to limit the spread of COVID-19 may have impacted the incidence of other reportable communicable diseases. As COVID-19 is a respiratory infection, public health measures to slow the spread of COVID-19 may have slowed and prevented the spread of other respiratory infections (e.g., influenza, pertussis). Restrictions or limitations on the size of gatherings, as well as physical distancing measures, can also limit the spread of respiratory infections. Additionally, restrictions on travel, particularly to tropical destinations where certain infections are more common than in BC (e.g., malaria, *Shigella* infections, typhoid fever, hepatitis A), have likely led to fewer reports of these infections in BC in returning travellers. Environmental measures may have similarly reduced the potential for infections to be transmitted through contaminated surfaces (e.g., through more frequent cleaning). Lastly, decreased testing may have resulted in fewer diagnoses of reportable communicable diseases. This is more likely for reportable communicable diseases that are mildly symptomatic and those that may be present without symptoms (e.g., sexually transmitted infections).

The diseases included in this report were chosen because they are examples of respiratory, foodborne, or travel-related diseases, and therefore likely to have been affected by COVID-19 response measures. Sexually transmitted and bloodborne infections are not included here because they are being considered for separate reporting. For further information on reportable diseases in BC, including surveillance reports, please visit the BCCDC webpage on communicable diseases (http://www.bccdc.ca/health-professionals/data-reports/communicable-diseases).

[a] This report provides an overview of recent trends in selected respiratory and foodborne diseases only.

Equity Considerations

Due to structural inequities in our society, some groups of people are more likely to contract communicable diseases, get sicker, and take longer to recover.[9] Specifically, the social determinants of health (e.g., income, housing, food security) affect the distribution of infectious diseases by influencing exposure to diseases, impacting access to health services, and rendering some people more likely to experience adverse effects.[10] For example, poverty can be associated with reduced access to material and social resources that can lead to unsafe habitation (e.g., crowded living conditions), food insecurity and malnutrition (including maternal-fetal malnutrition), poor water quality, and increased exposure to infectious agents, as well as environmental toxins.[11] These circumstances can contribute in turn to the spread of many pathogens, including acute and chronic infectious diseases.[11,12] An overview of inequities between groups of people for each of the eight diseases examined in the findings section is out of scope for this report; however, please see the following for more information about communicable diseases and the social determinants of health:

- Canada communicable disease report: Social determinants of health (https://nccdh.ca/resources/entry/canada-communicable-disease-report-social-determinants-of-health)
- Infectious disease, social determinants and the need for intersectoral action (https://doi.org/10.14745/ccdr.v42is1a04)

Findings

This section describes case counts for selected communicable diseases in BC, before and after March 2020 (see Appendix 9-A for information about data sources and methodology). Of note, case counts reflect diagnoses for these communicable diseases. The number of diagnoses may be impacted by delays or avoidance in seeking medical care (e.g., difficulty accessing medical care or avoidance due to concern regarding COVID-19 infection).[13,14,15] In addition, health provider and testing resources may have been less available due to re-deployment to respond to COVID-19.[16]

Table 9.1 provides an overview of trends in the moving averages of cases of selected respiratory and foodborne diseases in 2020, compared to previous years (see Appendix 9-A for a definition of the moving average). Three out of eight communicable diseases analyzed in this report showed sustained decreases in the moving averages in 2020, following the implementation of public health measures, compared to the moving averages in previous years. Temporary declines in moving averages were observed for the other five diseases in 2020, compared to the moving averages in previous years.

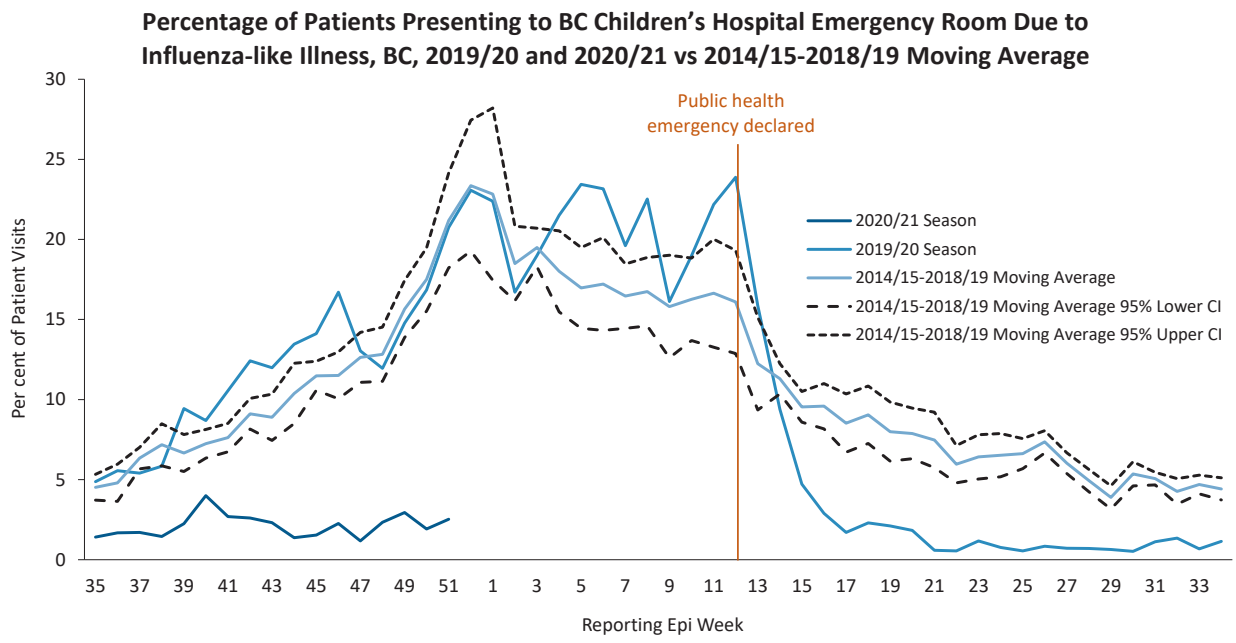
Table 9.1 Overall Trend in Select Communicable Diseases in BC in 2020, Compared to Previous Years

Primary Transmission Route	Diseases with Sustained Decrease in 2020	Diseases with Temporary Decrease in 2020
Respiratory	• Mumps*† • Pertussis*†	• Invasive pneumococcal disease (IPD)** • Invasive group A streptococcal disease (iGAS)
Foodborne	• *Shigella*^	• *Campylobacter* • Shiga-toxigenic *Escherichia coli (E. coli)* • *Giardia*

Legend: *vaccines are available; **vaccines are available for many but not all pneumococcal serotypes; †impacting mainly children, with severe outcomes primarily impacting infants; ^commonly travel-associated.

Respiratory Diseases: Influenza-like Illness, Mumps, Pertussis, Invasive Pneumococcal Disease, and Invasive Group A Streptococcal Disease

FIGURE 9.1

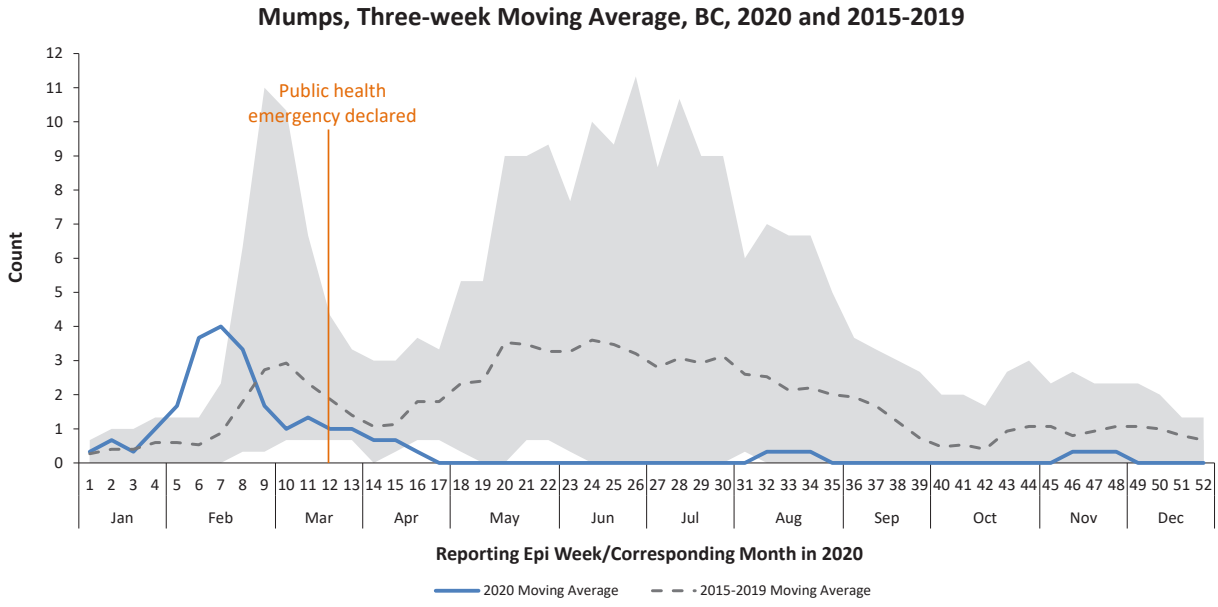


Notes: Data include records with a triage chief complaint of "flu" or "influenza" or "fever/cough." The five-year historical average is based on 2014/15 to 2018/19 seasons.
Source: BC Children's Hospital (BCCH) Admitting, Discharge, Transfer database (ADT). Prepared by BC Centre for Disease Control (BCCDC) Influenza and Emerging Respiratory Pathogens Team; and Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, September 2020.

Figure 9.1 shows the percentage of patients who presented to the BC Children's Hospital Emergency Room due to influenza-like illness between August 25, 2019 (epi week 35) and December 19, 2020 (epi week 51), compared to previous years (see Appendix 9-A for details about epidemiological [epi] weeks). A public health emergency was declared in response to COVID-19 on March 17, 2020. This date is marked on the chart for reference. A substantial reduction in the percentage of patients who visited the emergency department due to influenza-like illnesses occurred from the end of April to December 2020. While a decrease in April 2020 would generally be expected since it was the end of the flu season, a sustained decrease through the fall and into December 2020 was not expected—this shows that the percentage of visits was far below the historical average. In fact, as of May 1, 2021, there was no sign of influenza virus circulation throughout the 2020/21 fall-winter season when respiratory viruses usually circulate.[b,17]

[b] For more information about influenza in BC, see: http://www.bccdc.ca/health-professionals/data-reports/communicable-diseases/influenza-surveillance-reports.

FIGURE 9.2

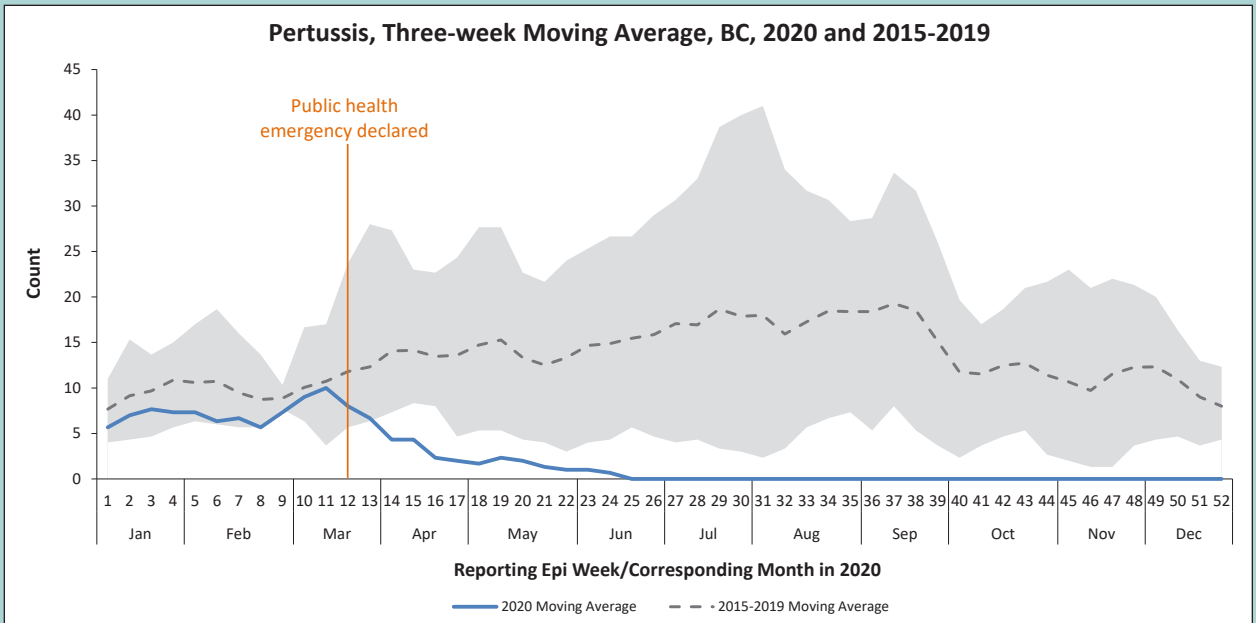


Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figures 9.2 to 9.9 show the three-week moving average of selected respiratory communicable diseases in 2020, compared to the moving average in previous years. A public health emergency was declared in response to COVID-19 on March 17, 2020. This date is marked on all of the charts for reference.

Figure 9.2 shows the three-week moving average of mumps infections in BC in 2020 compared to the 2015–2019 moving average in the corresponding epi weeks. Mumps is a disease caused by the mumps virus.[18] Mumps is characterized by the acute onset of unilateral or bilateral, tender, self-limited swelling of the salivary glands. Mumps can sometimes cause complications, such as orchitis (inflammation of one or both testicles), encephalitis or meningitis (inflammation of the brain or infection of the lining of the brain), and temporary or permanent deafness.[18] The figure shows that the moving average of the number of reported mumps cases fell to zero beginning in April 2020 (epi week 17), and remained close to zero until the end of 2020. Of note, mumps is an uncommon infection in BC because of a highly effective vaccine and high rates of immunization.[18]

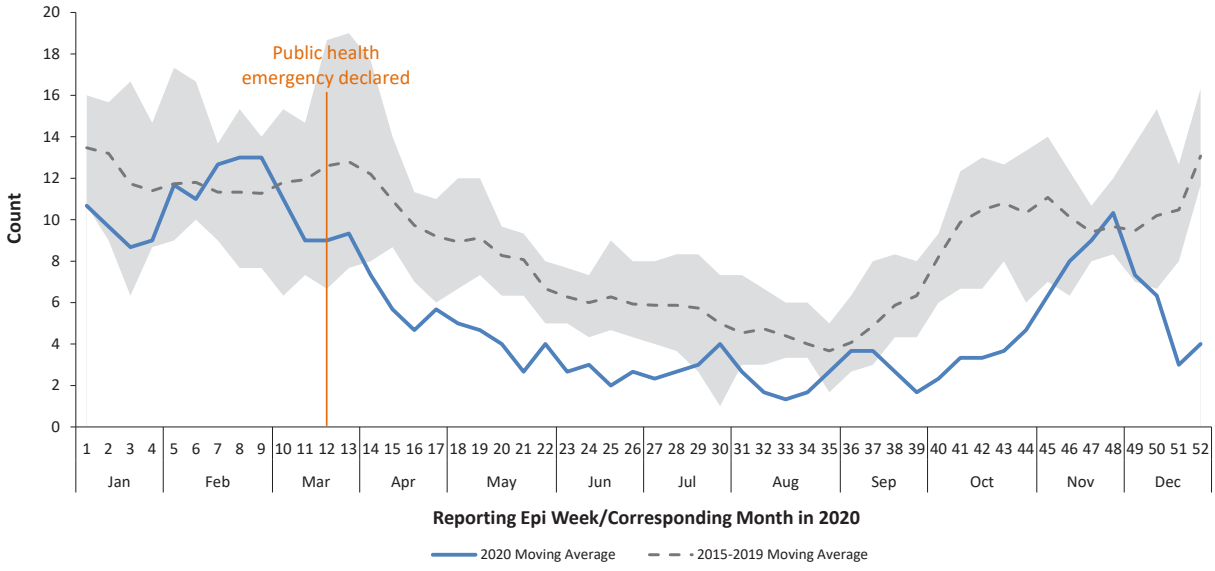
FIGURE 9.3



Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.3 shows the three-week moving average of pertussis infections in BC in 2020 compared to the 2015–2019 moving average in the corresponding epi weeks. Pertussis is caused by a bacterium, *Bordetella pertussis*, found in the mouth, nose, and throat of a person who is infected.[19] Pertussis, also called whooping cough, can cause pneumonia, seizures, brain damage, and death.[19] Approximately one in 170 infants with pertussis will die from it.[19] In BC, pertussis is rare, as the vaccine for pertussis is part of BC's childhood immunization schedule. The figure shows that, beginning in March–April 2020 (epi week 14), the three-week moving average for the number of reported pertussis cases fell far below the three-week moving average of the previous five years. The three-week moving average declined to zero beginning in June (epi week 25), and stayed at zero until the end of 2020.

FIGURE 9.4

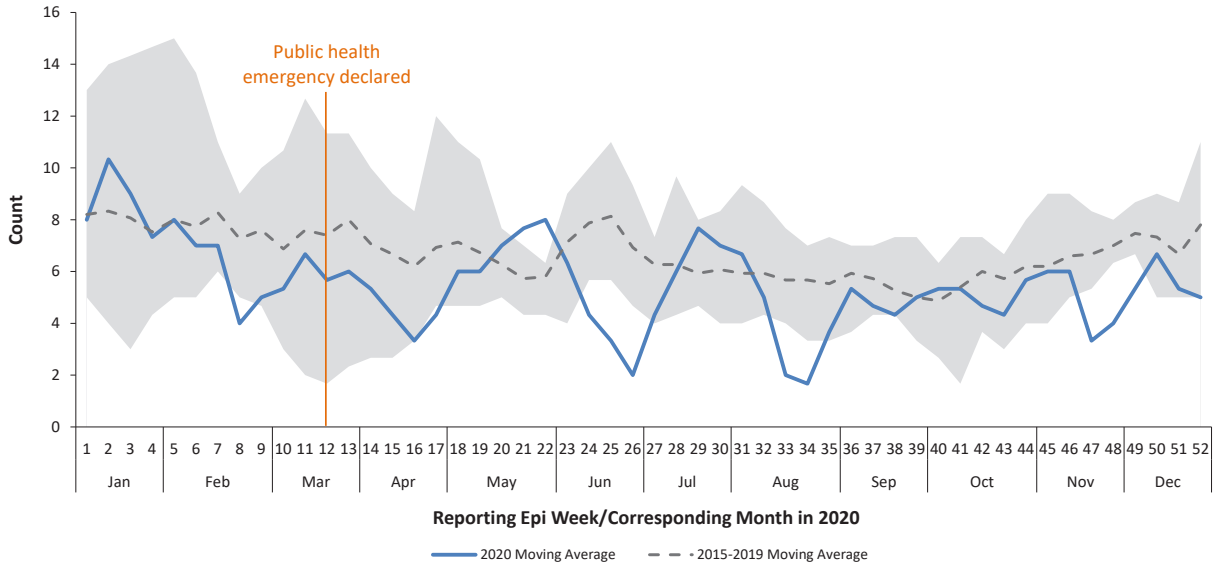


Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.4 shows the three-week moving average of invasive pneumococcal infections[20] in BC residents over 16 years of age[c] in 2020, compared to the 2015–2019 moving average in the corresponding epi weeks. Invasive pneumococcal disease occurs when the bacterium *Streptococcus pneumoniae* infects a part of the body that is normally free of germs, such as blood (also known as bacteremia), bone, or joint fluid. It is a serious disease and typically requires care in a hospital. Non-invasive pneumococcal infections are more frequent but not reportable. Immunization against pneumococcal infections is part of BC's childhood immunization schedule. A pneumococcal vaccine is also available for free to seniors age 65 years and older.[21] The three-week moving average for the number of cases reported of invasive pneumococcal infections in adults over 16 years of age fell below the three-week moving average of the previous five years beginning in March 2020 (epi week 10). With the exception of November 22–28 (epi week 48), the three-week moving average remained below the three-week moving average of the previous five years until the end of 2020.[d]

[c] Case counts for people under 16 years of age are low. BC Centre for Disease Control provides information for all age groups in its Reportable Diseases Data Dashboard: http://www.bccdc.ca/health-professionals/data-reports/reportable-diseases-data-dashboard.
[d] The three-week moving average for weeks 47 and 49 in 2020 may appear to be higher than the three-week moving average for the same weeks in the previous five years. This is due to spatial constraints with visualizing this data. Values for weeks 47 and 49 in 2020 are not higher than the three-week moving average in the previous five years.

FIGURE 9.5

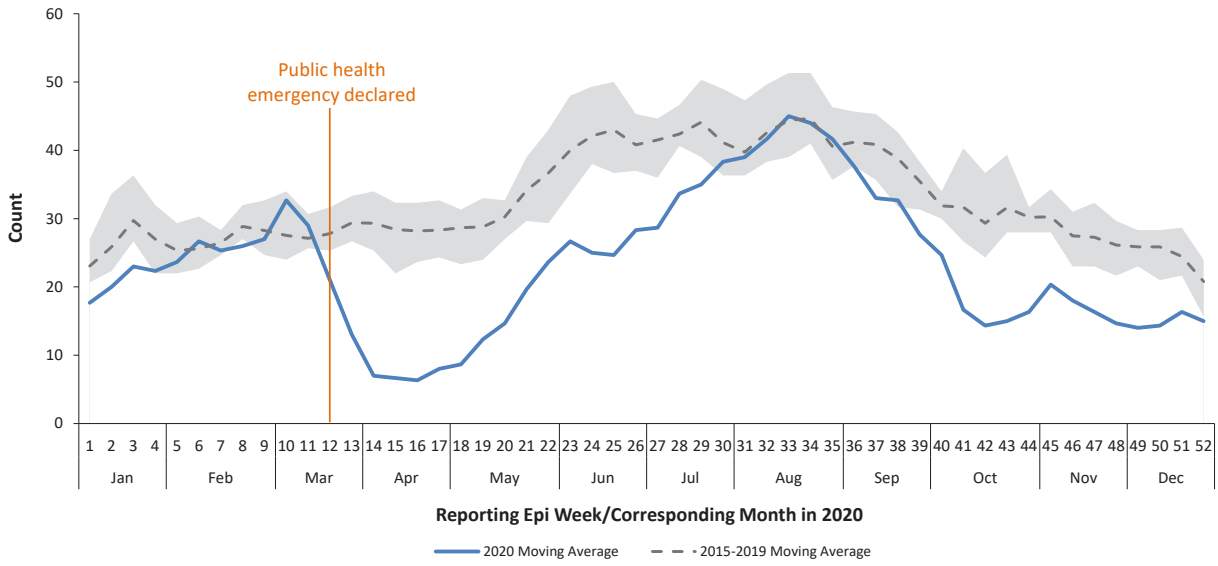


Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.5 shows the three-week moving average of invasive group A streptococcal (iGAS) infections in BC in 2020 compared to the 2015–2019 moving average in the corresponding epi weeks. Like invasive pneumococcal disease, iGAS infection occurs when the bacterium, group A *Streptococcus,* infects a part of the body that is normally free of germs. It is a serious disease and typically requires care in a hospital. Non-invasive group A streptococcal infections (e.g., strep throat) are more frequent and are not reportable. The three-week moving average number of iGAS infections reported in 2020 was generally similar to the three-week moving average of the previous five-years, despite occasional fluctuations.

Foodborne Diseases: Campylobacter *Infection,* E-coli *Infection,* Giardia, *and* Shigella

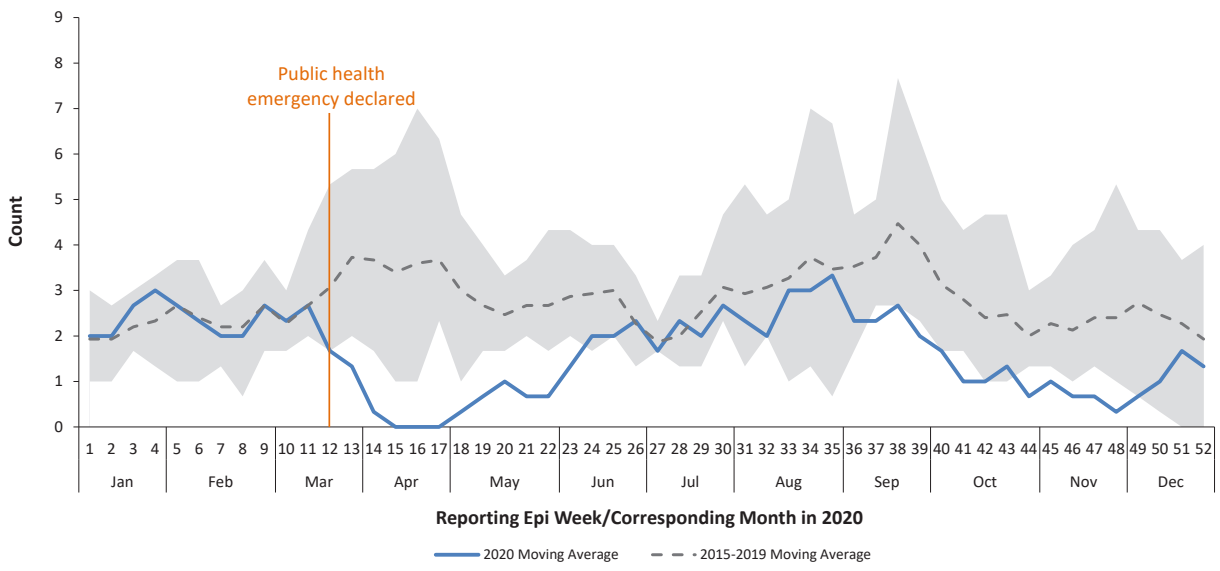
FIGURE 9.6



Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.6 shows the three-week moving average of *Campylobacter* infections in BC in 2020 compared to the 2015–2019 moving average in the corresponding epi weeks. *Campylobacter* infection refers to an infection caused by bacteria in the *Campylobacter* genus.[22] When a person gets sick from this infection, it is called campylobacteriosis. Campylobacteriosis is a common cause of diarrhea in BC and in other parts of the world. In rare instances, arthritis and Guillain-Barré Syndrome (a neurological condition) can occur after campylobacteriosis.[22] The three-week moving average number of *Campylobacter* infections fell below the three-week moving average of the previous five years in March 2020 (epi week 12). The three-week moving average began to rise again beginning in epi week 17 (April 19–25). In August (epi weeks 31–35), the moving average of *Campylobacter* infections was the same as the three-week moving average observed in the 2015–2019 period.

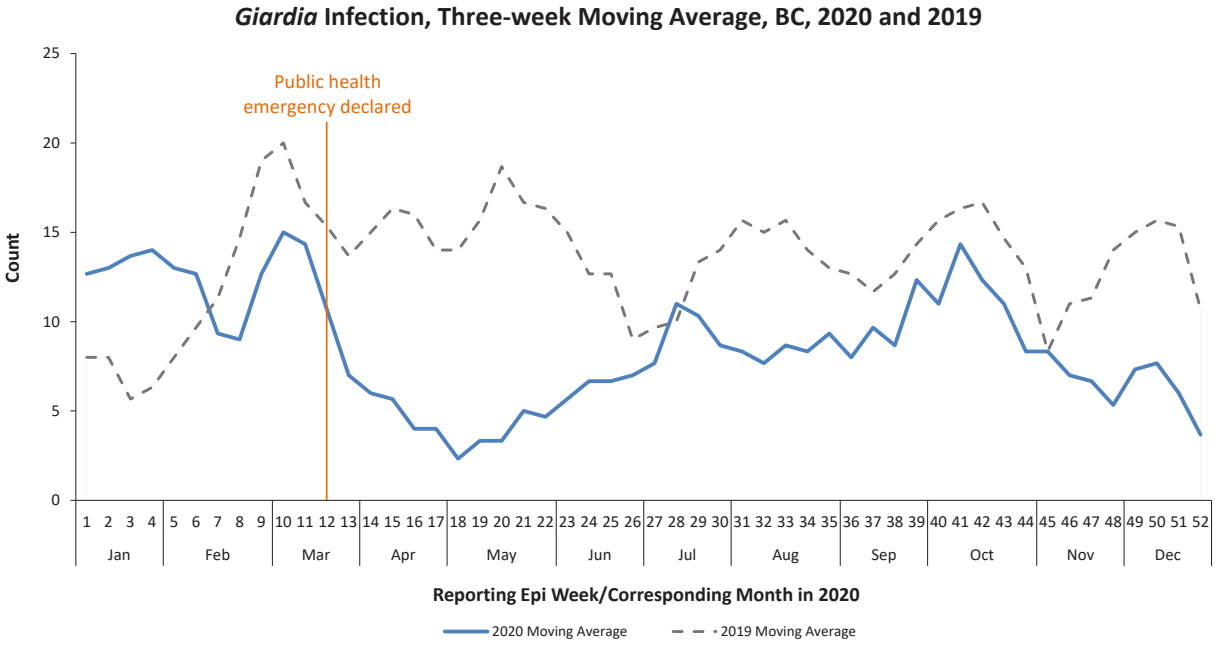
FIGURE 9.7



Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.7 shows the three-week moving average of shiga-toxigenic *Escherichia coli (E. coli)* infections in BC in 2020 compared to the 2015-2019 moving average in the corresponding epi weeks. Shiga-toxigenic *E. coli* infection refers to an infection caused by *E. coli* bacteria that produces the shiga toxin (also known as enterohemorrhagic *E. coli* [EHEC] and verotoxigenic *E. coli* [VTEC]).[23] Shiga-toxigenic *E. coli* can cause much more severe disease than non-shiga-toxigenic *E. coli*, and symptoms can include severe diarrhea, serious complications, and death.[23] The 2020 three-week moving average number of shiga-toxigenic *E. coli* infections fell far below the 2015–2019 moving averages beginning in late March 2020 (epi week 12) and down to zero by mid-April (epi week 15). The moving average began to rise beginning in late April (epi week 17) until the end of August (epi week 35), after which the three-week moving average of shiga-toxigenic *E. coli* infections remained below the three-week moving average of the previous five years for the rest of 2020.

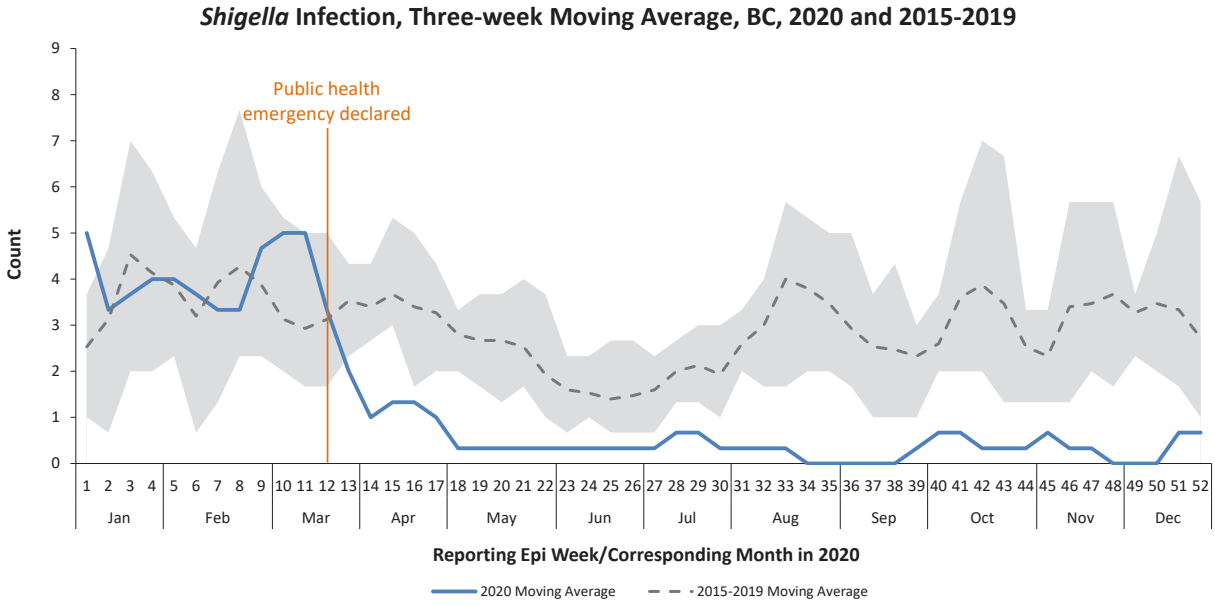
FIGURE 9.8



Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. Three-week moving averages were calculated for 2020 and 2019.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.8 shows the three-week moving average of *Giardia* infections in BC in 2020 compared to the 2019 moving average in the corresponding epi weeks. *Giardia* infections are caused by an enteric parasite, *Giardia lamblia,* and the corresponding clinical illness is characterized by diarrhea, abdominal cramps, bloating, weight loss, or malabsorption.[24] Unlike gastrointestinal infections caused by *Campylobacter*, and shigatoxin-producing *E. coli,* both of which are usually short-lasting, *Giardia* infections can last for months. For this reason, the diagnosis date for *Giardia* infections can be days or months after exposure. The moving average for the number of *Giardia* infections fell below the 2019 moving average beginning in March 2020 (epi week 13). The three-week moving average began to rise beginning in May (epi week 19) up until July (epi week 28), when it again fell below the 2019 three-week moving average and generally stayed below it for the rest of the year.

FIGURE 9.9



Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.9 shows the three-week moving average of *Shigella* infections in BC in 2020 compared to the 2015–2019 moving average in the corresponding epi weeks. *Shigella* infections are caused by four species of *Shigella* bacteria: *Shigella sonnei, Shigella flexneri, Shigella boydii,* and *Shigella dysenteriae.*[25] People with a *Shigella* infection may experience diarrhea, fever, and stomach pain.[25] The figure shows that the three-week moving average for the number of *Shigella* infections fell far below the range of the moving average of the previous five years beginning in mid-March 2020 (epi week 12). The moving average remained below the moving average of the previous five years, and close to zero, from May (epi week 18) until the end of 2020.

Considerations for Further Action

This section provides considerations for action based on the findings of this report. These are not formal recommendations, but rather ideas to consider when shaping recommendations and actions related to this topic.

The findings of this report suggest that COVID-19 public health measures may have decreased cases of other communicable diseases, though further analysis would be needed to explore other potential contributing factors before drawing conclusions about the role of COVID-19 public health measures in the observed decreases. The following are ideas to consider for the future:

1. Continued attentiveness to routine infection control practices (such as hand washing), and continued supports for staying home from work and school when ill, including public messaging encouraging these practices.
2. Continued monitoring of disease trends, and further examination of data to investigate the reasons for the case count declines, including changes in transmission dynamics as well as potential artefactual reasons (e.g., decreased or delayed testing and reporting).
3. Continued immunizations for vaccine preventable diseases. While not directly evaluated in this report, immunizations have played a valuable role in reducing the burden of many communicable diseases.
4. Expanded support for community-led infection control practices among populations that experience a higher communicable disease burden (e.g., isolation supports and accommodations), and attention to the socioeconomic factors driving higher disease burden in certain populations.

Appendix 9-A: Data Methodology Notes

1. Charts provided by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer.

For questions contact: HLTH.PHSE@gov.bc.ca.

2. Methodology

The analysis in Figure 9.1 was provided by the Influenza and Emerging Respiratory Pathogens Team at the BC Centre for Disease Control (BCCDC), based upon the BC Children's Hospital (BCCH) Admitting, Discharge, Transfer database (ADT). Data include records with a triage chief complaint of "flu," "influenza," or "fever/cough." The five-year historical average is based on the 2014-15 to 2018-19 seasons. The data table for this figure is downloadable from the main project website (http://www.bccdc.ca/health-professionals/data-reports/societal-consequences-covid-19) as an Excel workbook.

The data and analyses for Figures 9.2–9.9 were provided by Communicable Diseases and Immunization Service at the BCCDC. The data tables for these figures are downloadable from the main project website (see link above) as an Excel workbook.

Moving average: In Figures 9.2–9.9, the three-week moving average of new cases is reported for each week. A moving average smooths out short-term (weekly, in this case) fluctuations by reporting the average over a longer period of time (three weeks in this case). It is referred to as a "moving" average because the three-week window moves along with the reporting week. That is, the value reported for epi week 9 is the average of epi weeks 8, 9, and 10, while the value reported for epi week 10 is the average of epi weeks 9, 10, and 11.

Epidemiological week (epi week): Many disease measures in this report use the epi week as the unit of time. Using epi weeks allows for a standardized way to number weeks in a year and for comparison of weekly measures across years. An epi week begins on Sunday and ends on Saturday. The first epi week of each year ends on the first Saturday of January, as long as that week has at least four days. This means that the first epi week of some years begins in the previous year. For instance, epi week 1 of 2019 is December 30, 2018 to January 5, 2019. Most years have 52 epi weeks, but some years, such as 2020, have 53 epi weeks.

The following table shows the final day of each epi week for the years 2015 through 2020.

Epi Week Number	2015	2016	2017	2018	2019	2020
1	Jan 10	Jan 09	Jan 07	Jan 06	Jan 05	Jan 04
2	Jan 17	Jan 16	Jan 14	Jan 13	Jan 12	Jan 11
3	Jan 24	Jan 23	Jan 21	Jan 20	Jan 19	Jan 18
4	Jan 31	Jan 30	Jan 28	Jan 27	Jan 26	Jan 25
5	Feb 07	Feb 06	Feb 04	Feb 03	Feb 02	Feb 01
6	Feb 14	Feb 13	Feb 11	Feb 10	Feb 09	Feb 08
7	Feb 21	Feb 20	Feb 18	Feb 17	Feb 16	Feb 15
8	Feb 28	Feb 27	Feb 25	Feb 24	Feb 23	Feb 22
9	Mar 07	Mar 05	Mar 04	Mar 03	Mar 02	Feb 29

Epi Week Number	2015	2016	2017	2018	2019	2020
10	Mar 14	Mar 12	Mar 11	Mar 10	Mar 09	Mar 07
11	Mar 21	Mar 19	Mar 18	Mar 17	Mar 16	Mar 14
12	Mar 28	Mar 26	Mar 25	Mar 24	Mar 23	Mar 21
13	Apr 04	Apr 02	Apr 01	Mar 31	Mar 30	Mar 28
14	Apr 11	Apr 09	Apr 08	Apr 07	Apr 06	Apr 04
15	Apr 18	Apr 16	Apr 15	Apr 14	Apr 13	Apr 11
16	Apr 25	Apr 23	Apr 22	Apr 21	Apr 20	Apr 18
17	May 02	Apr 30	Apr 29	Apr 28	Apr 27	Apr 25
18	May 09	May 07	May 06	May 05	May 04	May 02
19	May 16	May 14	May 13	May 12	May 11	May 09
20	May 23	May 21	May 20	May 19	May 18	May 16
21	May 30	May 28	May 27	May 26	May 25	May 23
22	Jun 06	Jun 04	Jun 03	Jun 02	Jun 01	May 30
23	Jun 13	Jun 11	Jun 10	Jun 09	Jun 08	Jun 06
24	Jun 20	Jun 18	Jun 17	Jun 16	Jun 15	Jun 13
25	Jun 27	Jun 25	Jun 24	Jun 23	Jun 22	Jun 20
26	Jul 04	Jul 02	Jul 01	Jun 30	Jun 29	Jun 27
27	Jul 11	Jul 09	Jul 08	Jul 07	Jul 06	Jul 04
28	Jul 18	Jul 16	Jul 15	Jul 14	Jul 13	Jul 11
29	Jul 25	Jul 23	Jul 22	Jul 21	Jul 20	Jul 18
30	Aug 01	Jul 30	Jul 29	Jul 28	Jul 27	Jul 25
31	Aug 08	Aug 06	Aug 05	Aug 04	Aug 03	Aug 01
32	Aug 15	Aug 13	Aug 12	Aug 11	Aug 10	Aug 08
33	Aug 22	Aug 20	Aug 19	Aug 18	Aug 17	Aug 15
34	Aug 29	Aug 27	Aug 26	Aug 25	Aug 24	Aug 22
35	Sep 05	Sep 03	Sep 02	Sep 01	Aug 31	Aug 29
36	Sep 12	Sep 10	Sep 09	Sep 08	Sep 07	Sep 05
37	Sep 19	Sep 17	Sep 16	Sep 15	Sep 14	Sep 12
38	Sep 26	Sep 24	Sep 23	Sep 22	Sep 21	Sep 19
39	Oct 03	Oct 01	Sep 30	Sep 29	Sep 28	Sep 26
40	Oct 10	Oct 08	Oct 07	Oct 06	Oct 05	Oct 03
41	Oct 17	Oct 15	Oct 14	Oct 13	Oct 12	Oct 10
42	Oct 24	Oct 22	Oct 21	Oct 20	Oct 19	Oct 17
43	Oct 31	Oct 29	Oct 28	Oct 27	Oct 26	Oct 24

Epi Week Number	2015	2016	2017	2018	2019	2020
44	Nov 07	Nov 05	Nov 04	Nov 03	Nov 02	Oct 31
45	Nov 14	Nov 12	Nov 11	Nov 10	Nov 09	Nov 07
46	Nov 21	Nov 19	Nov 18	Nov 17	Nov 16	Nov 14
47	Nov 28	Nov 26	Nov 25	Nov 24	Nov 23	Nov 21
48	Dec 05	Dec 03	Dec 02	Dec 01	Nov 30	Nov 28
49	Dec 12	Dec 10	Dec 09	Dec 08	Dec 07	Dec 05
50	Dec 19	Dec 17	Dec 16	Dec 15	Dec 14	Dec 12
51	Dec 26	Dec 24	Dec 23	Dec 22	Dec 21	Dec 19
52	Jan 02, 2016	Dec 31	Dec 30	Dec 29	Dec 28	Dec 26
53	--	--	--	--	--	Jan 02, 2021

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Chapter 10

Mental Health

(Reported June 2021)

Key Findings:

- The COVID-19 pandemic and related response measures have negatively impacted mental health and may lead to lasting poor mental health and mental illness for some people.
- In a survey conducted by Statistics Canada, over half of respondents age 15+ in BC reported experiencing "somewhat worse" or "much worse" mental health due to COVID-19 and related measures. Females and individuals age 15–24 and 25–44 were more likely to report worsened mental health.
- Experiences of greater stress and worsened mental health were reported more among individuals living with disabilities, people with a pre-existing mental health issue, gender diverse individuals, recent immigrants, and individuals earning lower levels of income. This reflects multiple deeply entrenched and intersecting forms of discrimination, oppression, and inequity throughout society.

Situation

The COVID-19 pandemic and related response measures introduced in BC to curb the spread of COVID-19 have contributed to worsened mental health and increased stress. People are reporting concerns about immediate health impacts of COVID-19 (e.g. fear of infection), dying or the death of family members from COVID-19, uncertainty regarding the future, reduced or lost employment and/or income, and increased childcare responsibilities.[1,2] Physical distancing, travel restrictions, and other measures have disrupted social networks and social supports, and increased social isolation.[3]

Background

Pandemics and other large-scale emergencies can negatively affect mental health both during the event and long after.[3,4] *Mental health* refers to a "state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to their community."[5] Specific stressors or demands can contribute to poor mental health. While this is usually temporary, it can be permanent.[6] In contrast, *mental illness* refers to a health condition that challenges a person's ability to function due to persistent and intense disturbances in thoughts, feelings, and perceptions.[7,8]

Mental health and mental illness are related but distinct concepts.[9] A person may have poor mental health, sometimes known as "languishing" (i.e., low levels of well-being and functioning), but not have a mental illness.[9,10] Alternatively, a person may have good mental health, sometimes known as 'flourishing' (i.e., elevated well-being, positive feelings, and functioning well), but be living with a mental illness. Both mental health and mental illness exist along a continuum and both can change over time.

While it is normal for individuals to experience stress in response to changes in circumstances and pressures, severe and/or long-term stress

contributes to poor mental health, which increases the risk of developing mental illness and/or physical health problems.[11]

Groups at higher risk for experiencing poorer mental health during the COVID-19 pandemic include:[4,12,13,14]

- Older adults already struggling with isolation,
- Frontline health-care workers,
- People at higher risk of contracting or at risk of experiencing severe symptoms of COVID-19,
- Those who already face marginalization and social exclusion,
- People in vulnerable situations or experiencing concentrated stressors (i.e., socioeconomic inequities, family violence, children in care),
- Children and youth disconnected from schools and supports, and
- Individuals with pre-existing mental illness, especially if access to mental health services is reduced.

Protective health behaviours that build resilience have decreased during COVID-19, particularly for children and youth (e.g., physical activity).[15] At the same time, behavioural risk factors (e.g., excess internet and social media use), which are linked to mental distress in youth, have increased.[16]

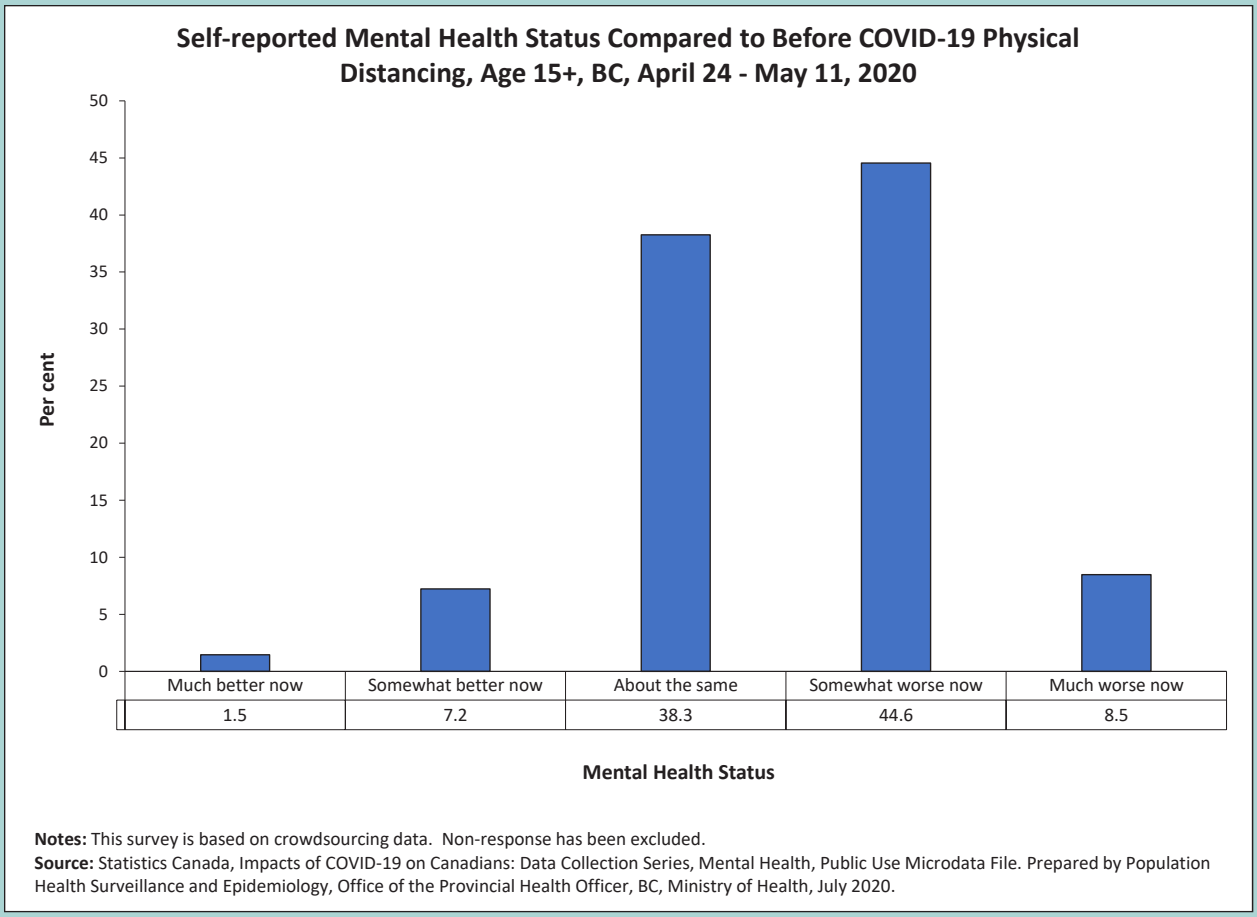
Findings

A survey of over 50,000 individuals in the UK one month into the COVID-19 response measures found that the proportion of respondents reporting substantial levels of mental distress rose from 19% in 2018/19 up to 27% in April 2020. The study found that increases in mental distress were reported the most among younger people (age 18–34), women, and people living with young children.[2] A study in Spain also found that people living with children reported higher levels of mental distress during the COVID-19 pandemic.[13]

Across Canada there is also evidence of worsened mental health since COVID-19 began. For example, there has been a substantial increase in calls to mental health crisis lines since the onset of the pandemic. Crisis Services Canada reported a 30–50% increase in call volume for crisis or mental health support.[17] Crisis lines reported additional operating expenses and the inability to continually retain enough staff to respond to the increased call volume.[17]

In a national longitudinal survey by the Canadian Mental Health Association and University of British Columbia, 42% of BC respondents reported their mental health deteriorated during the COVID-19 pandemic. This includes 60% of those aged 18–24 years (compared to 21% of those ages 75+), 45% of women (compared to 34% of men), and 61% of unemployed individuals.[18] Worsening mental health was reported by 62% of those with a pre-existing mental health issue, 50% of those with a disability, 54% of LGBTQ2S respondents, and 50% of respondents with children under 18. Stressors identified by parents/caregivers with children under 18 included finances (48%), job loss (36%), and having enough food to meet their family's needs (27%). Parents/caregivers were 1.5–2 times more likely to report increased use of alcohol, fear of domestic violence, and suicidal thoughts.[19] Of Canadians reporting a mental health concern in this survey, 48% felt they were not in need of help, 22% did not know resources existed, 21% did not believe resources would be helpful, and 18% preferred in-person supports.[18]

FIGURE 10.1

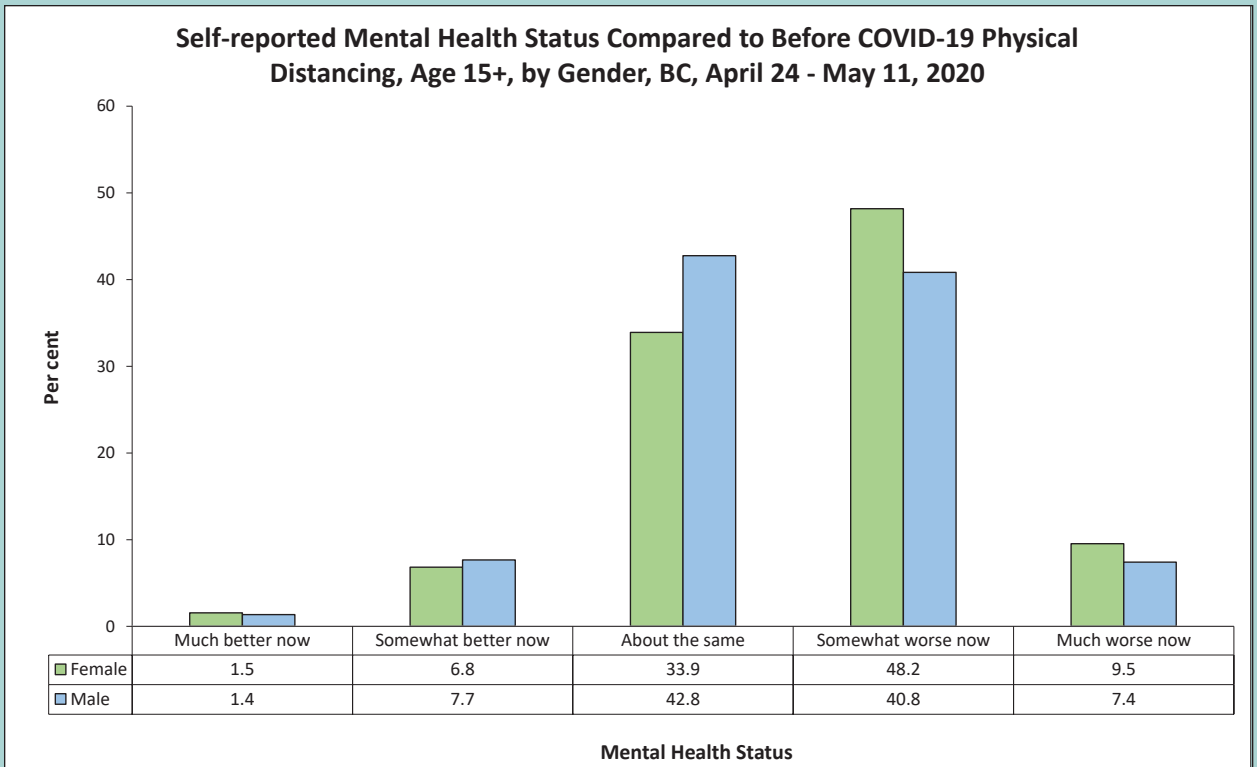


Notes: This survey is based on crowdsourcing data. Non-response has been excluded.
Source: Statistics Canada, Impacts of COVID-19 on Canadians: Data Collection Series, Mental Health, Public Use Microdata File. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC, Ministry of Health, July 2020.

Figures 10.1 to 10.3 present data from national sources, focusing on data for BC respondents. See Appendix 10-A for more information about data sources and methodology.

As shown in Figure 10.1, in a Statistics Canada survey that collected data between April 24, 2020, and May 11, 2020, over half of respondents age 15 and up in BC reported experiencing worsened mental health compared to before the COVID-19 response measure of physical distancing.

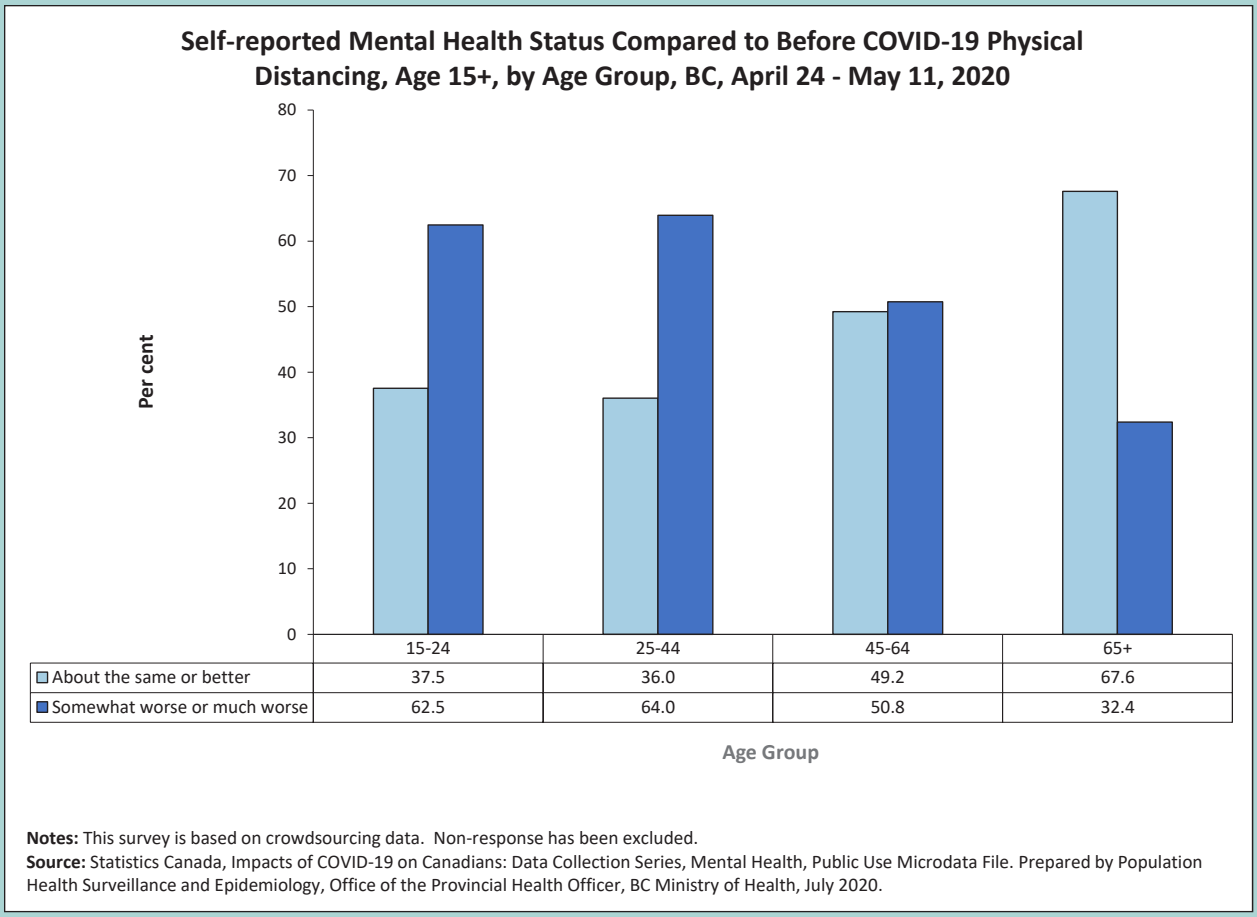
FIGURE 10.2



Notes: This survey is based on crowdsourcing data. In order to safeguard the confidentiality of participants due to small reported numbers, Statistics Canada has assigned all gender responses to either male or female. Non-response has been excluded.
Source: Statistics Canada, Impacts of COVID-19 on Canadians: Data Collection Series, Mental Health, Public Use Microdata File. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, July 2020.

Figures 10.2 and 10.3 present the same Statistics Canada survey using BC data to assess impacts with analyses by gender and by age. Figure 10.2 shows that female respondents in BC were more likely to report mental health as "somewhat worse" or "much worse" compared to male respondents. Male respondents were more likely than females to report that their mental health was "about the same" (42.8% compared to 33.9%, respectively).

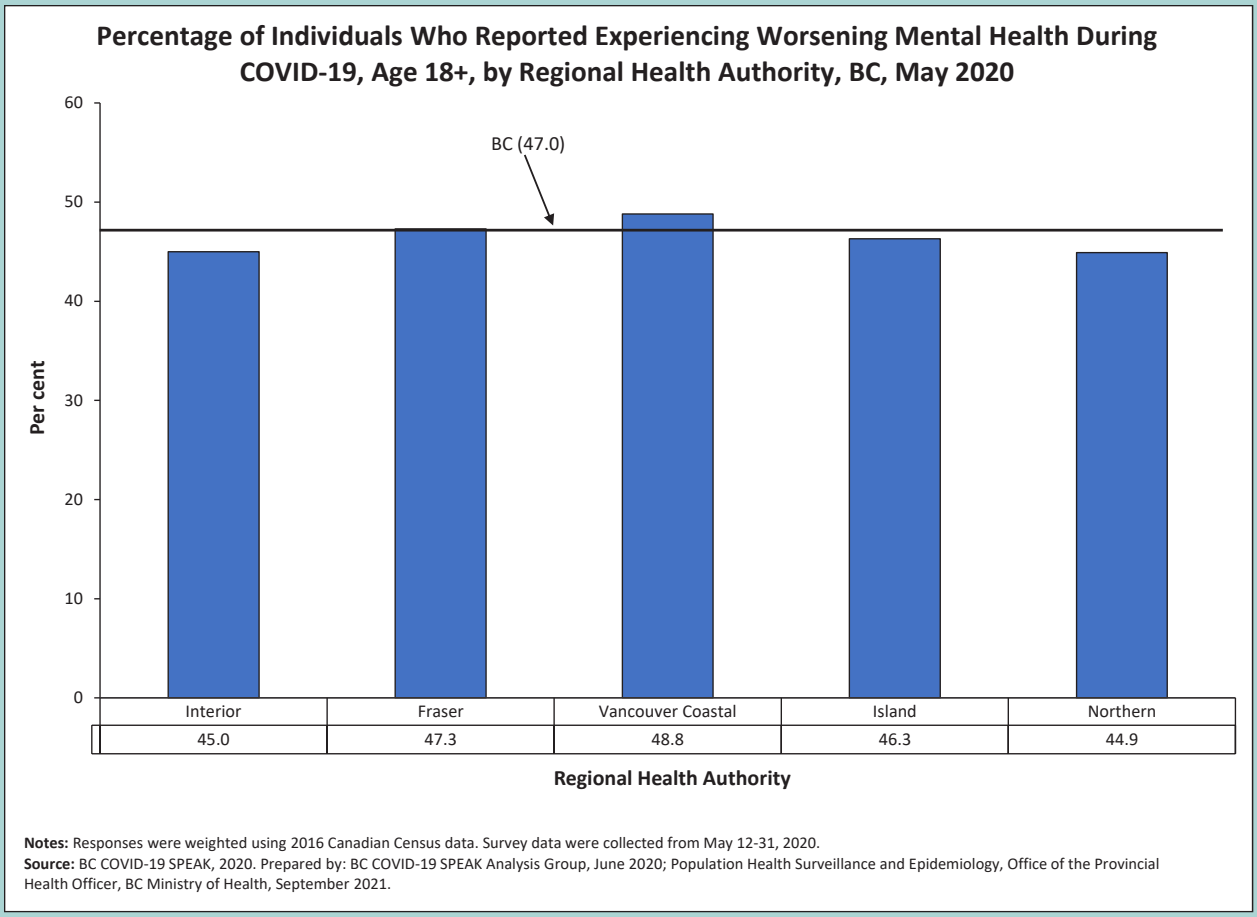
FIGURE 10.3



Notes: This survey is based on crowdsourcing data. Non-response has been excluded.
Source: Statistics Canada, Impacts of COVID-19 on Canadians: Data Collection Series, Mental Health, Public Use Microdata File. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, July 2020.

Figure 10.3 shows that a greater proportion of younger respondents reported worsened mental health, specifically those age 15–24 and 25–44.

FIGURE 10.4

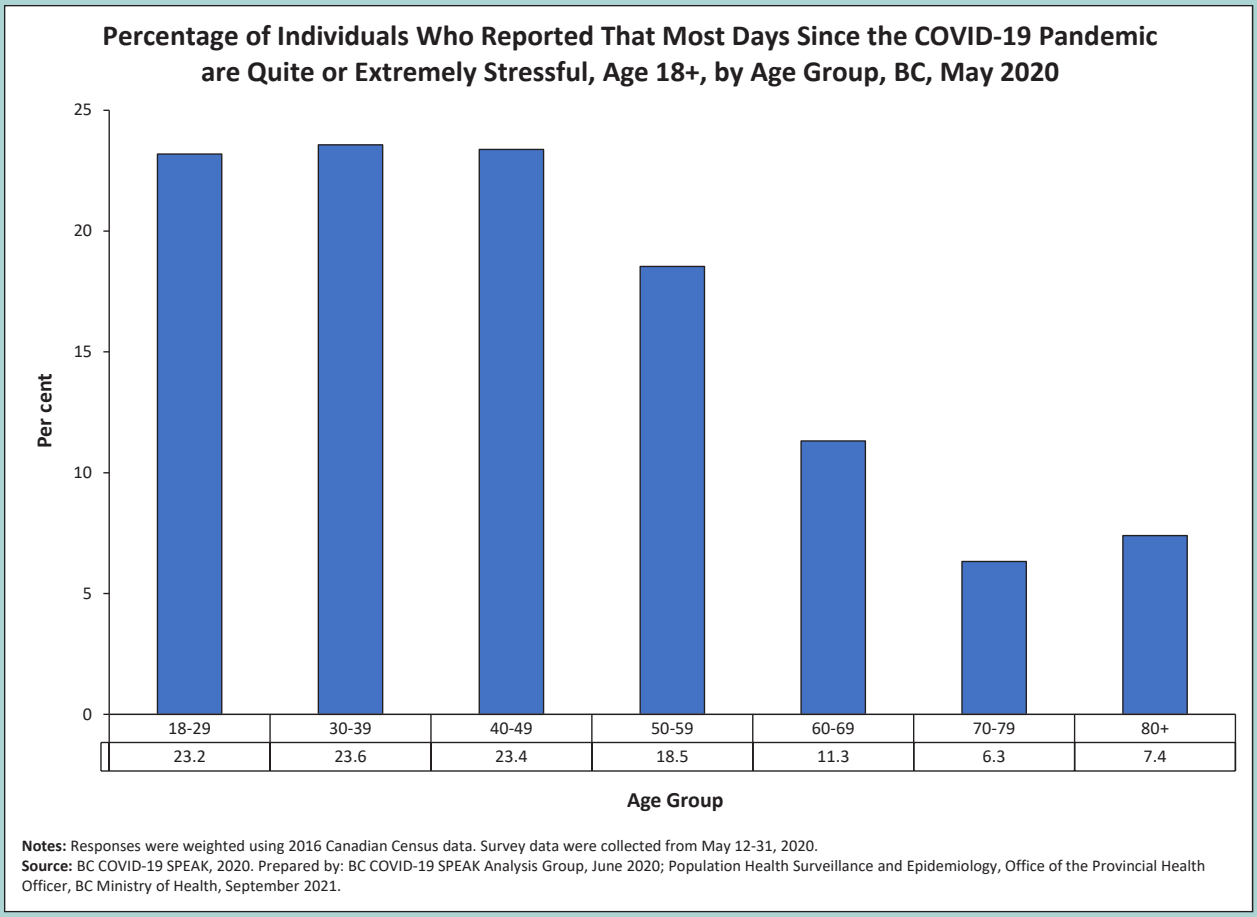


Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, September 2021.

The following seven figures present results from the BC COVID-19 SPEAK Survey, including analyses of worsening mental health and/or stress, by regional health authority (Figure 10.4), age group (Figure 10.5), household income (Figure 10.6), education level (Figure 10.7), disability (Figure 10.8), and racialized group (Figure 10.9). BC COVID-19 SPEAK Survey analyses by sex and gender are forthcoming and will be included in future reports.

Figure 10.4 shows that nearly half of survey respondents reported worsening mental health during COVID-19, with a provincial average of 47.0% reporting this, and only slight variation between regions.

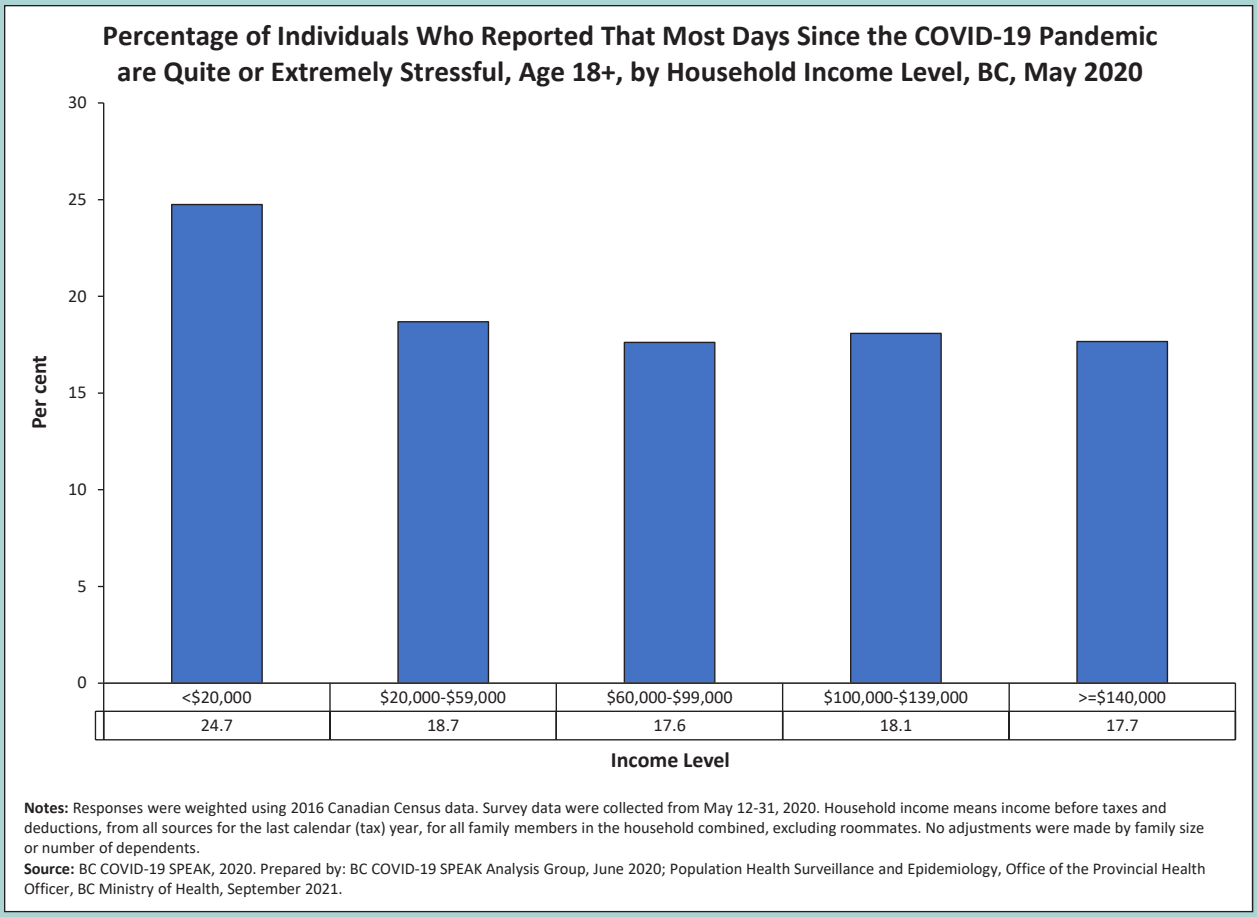
FIGURE 10.5



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, September 2021.

Figure 10.5 shows the percentage of individuals who reported that they have been "quite" or "extremely" stressed since the COVID-19 pandemic began, based on age. It shows that a greater proportion of younger respondents (those age 18 to 49) reported feeling quite/extremely stressed. This may reflect the impact of suspension of in-class learning and physical distancing on youth, young adults, and on parents/caregivers of children and youth, as well socioeconomic and employment impacts for young adults, parents, and caregivers.

FIGURE 10.6

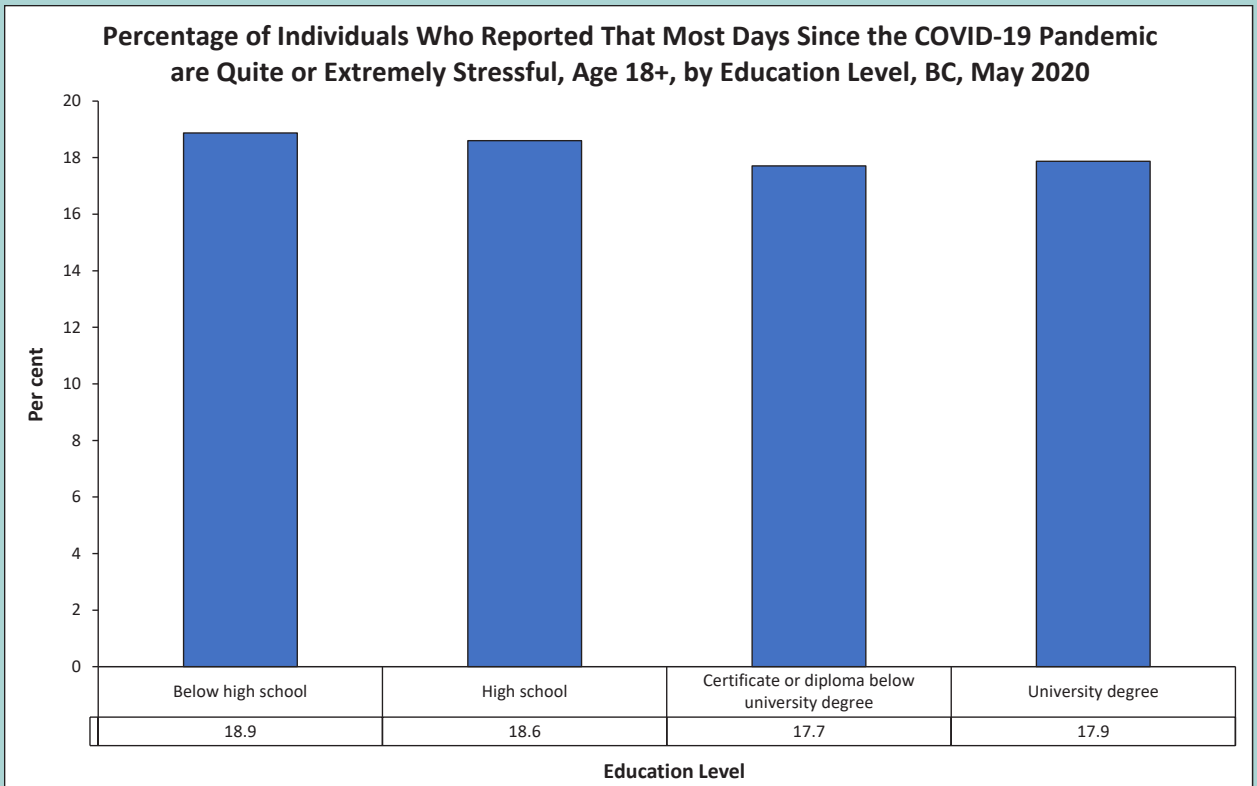


Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020. Household income means income before taxes and deductions, from all sources for the last calendar (tax) year, for all family members in the household combined, excluding roommates. No adjustments were made by family size or number of dependents.

Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, September 2021.

Figure 10.6 shows that British Columbians who reported household income levels in the lowest category (<$20,000) were more likely to report being “quite” or “extremely” stressed since the pandemic. Other than the lowest income category, household income level does not clearly link to high levels of stress reported.

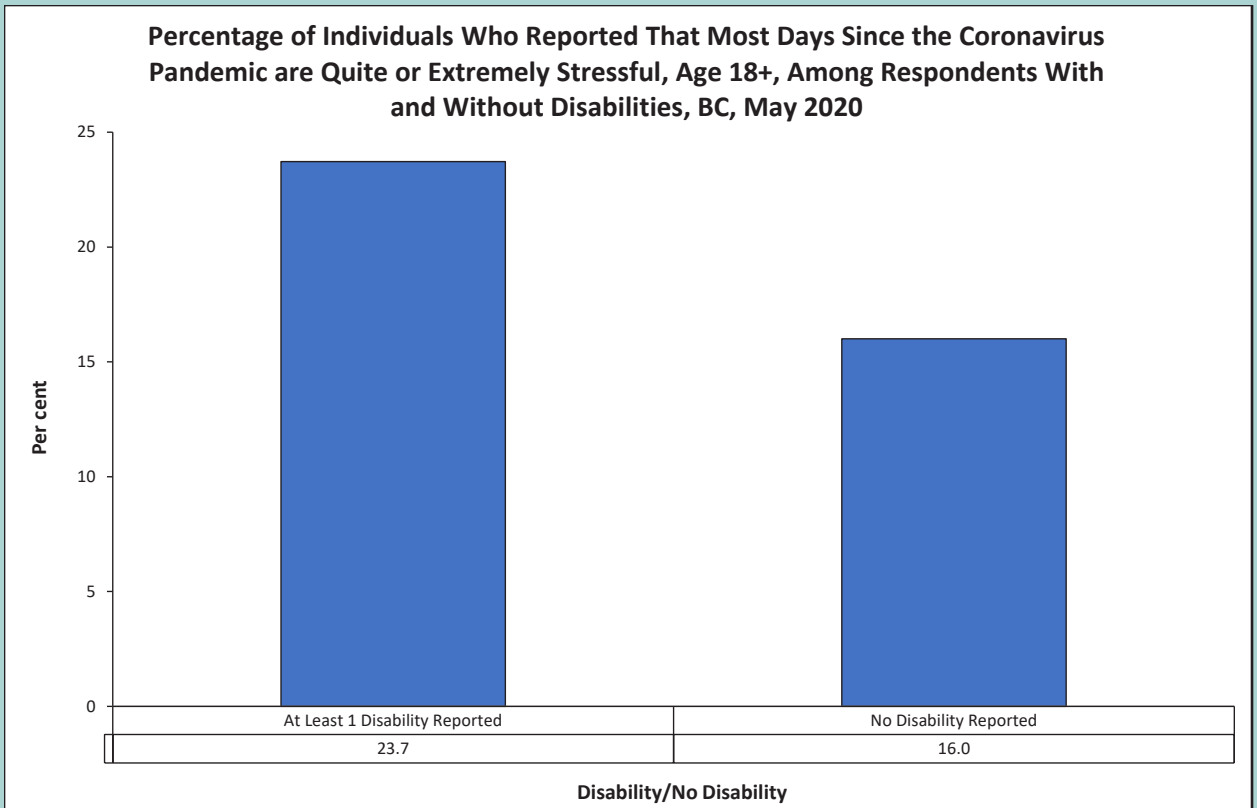
FIGURE 10.7



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020. "Prefer not to answer" and missing responses have been excluded from this analysis.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, September 2021.

Figure 10.7 shows that high levels of stress since the pandemic were reported across education levels with little variation.

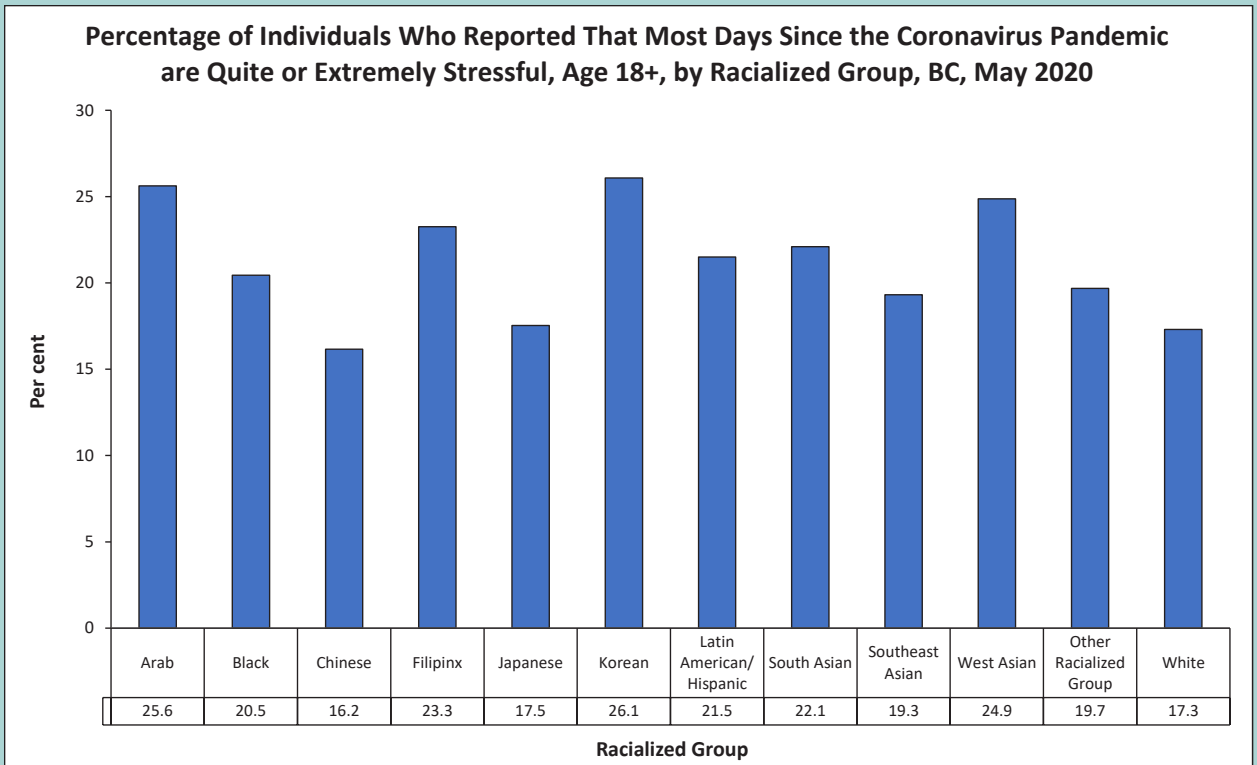
FIGURE 10.8



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group, June 2020; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, September 2021.

Figure 10.8 presents responses to the BC COVID-19 SPEAK Survey regarding stress levels since the beginning of the pandemic, based on whether respondents had one or more disabilities. It shows that individuals with at least one disability were more likely to report being "quite" or "extremely" stressed compared with individuals who did not report any disability (23.7% compared to 16.0%).
This finding may reflect many complexities navigating the pandemic for those with one or more disability. People with disabilities may have reduced ability to access health and other essential services (e.g., medical appointments, obtaining groceries), difficulty using virtual care and service options, have concerns about ability to adhere to response measures or stay safe (e.g., physical distancing, avoiding high-touch areas), or be at increased risk of contracting or having more serious health outcomes if they contract COVID-19 due to other underlying health conditions.

FIGURE 10.9



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020. The Project team reports on race-based disaggregated demographic data to reveal inequitable outcomes between racialized groups that result from many factors, including historic and current systemic discrimination and racism. Respondents who selected more than one group were counted in each selected group, so percentages do not add up to 100%. Data from respondents who self-identified as Indigenous (First Nations, Métis, or Inuit) have been removed from this chart at the request of Indigenous partner organizations.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, September 2021.

Figure 10.9 shows analyses of BC COVID-19 SPEAK Survey data indicating that some racialized groups in BC reported higher percentages of feeling “quite” stressed or “extremely” stressed since the pandemic. The highest proportions are reported among Korean (26.1%), Arab (25.6%), and West Asian (24.9%) respondents. Reduced ability to engage in social and cultural gatherings as well as socioeconomic impacts may be a contributing factor to feelings of increased stress across all racialized groups in BC.

Equity Considerations

Risk factors at the individual, family, and societal levels may result in disproportionate mental health impacts on some groups.

- Statistics Canada found that gender diverse people reported worse mental health than people identifying as male or female during the COVID-19 pandemic.[20]
- COVID-19 response measures may cause additional challenges for individuals with disabilities because more than a quarter (28%) live alone and require outside support.[21] In addition, one in five Canadians living with disabilities reported they did not use the internet,[21] which can limit access to virtual mental health services during the pandemic.
- Parents of children with disabilities in Canada were more likely to report being very or extremely concerned for their children's mental health during the pandemic compared to parents of children without disabilities (60% compared to 43%).[22]
- Recent immigrants (five years or less since admission to Canada) were more likely to rate their mental health as fair or poor (28%) since the introduction of COVID-19 response measures compared to more established immigrants (20%) and Canadian-born participants (24%).[23] This may be a shift related to COVID-19 response measures because previous research suggests that self-perceived mental health of immigrants is typically better upon arrival in Canada and decreases over time.[24]

Truth and Reconciliation: Settler Colonialism and Mental Health

The mental health and wellness of Indigenous Peoples has been adversely impacted by past and present colonialism, which has deliberately undermined the cultural practices that are central to holistic wellness and community resilience. The stresses of public health restrictions were layered onto the cumulative stresses of intergenerational trauma, manufactured poverty and pervasive racism and discrimination. Despite the cumulative impacts of these stresses, Indigenous Peoples remain strong and resilient and continue to assert that their inherent rights must be respected and upheld.

Actions Initiated or Planned to Address Unintended Consequence

- The Province is providing $5 million to expand existing mental health programs and services and launch new services to provide support for people of all ages during COVID-19.[25] The funding will also provide greater access to mental health supports for Indigenous, rural, and remote communities, and individuals with pre-existing mental health conditions.[25]
- Enhanced virtual services are now available in the province to help people with mental health needs arising from the COVID-19 pandemic. See Appendix 10-B for a list of available virtual mental health services.
- In September 2019, the Province announced $8.87 million would be provided over three years to improve students' mental health through wellness supports and programs.[26] On September 2, 2020, the Province added $2 million for school-based wellness programs and supports.[27]
- There is research planned and/or underway to better understand the impacts on mental health in BC and Canada from a number of research teams. Research will focus on various groups, including Indigenous Peoples, children, youth, families, older adults, sexual minorities and gender diverse People, vulnerable populations, health-care workers, employees, Asian-Canadians, and men. See Appendix 10-C for a more detailed list of planned and/or underway research.

This list provides examples of actions taken or initiated and is not a comprehensive list. Readers are encouraged to visit the websites of ministries involved in this work to find the latest information.
www.gov.bc.ca/mmha

Considerations for Further Action

1. Foster positive mental health in individuals, families, and communities during COVID-19.[28]
   - Provide evidence-based information for individuals, families, and communities to promote mental health in places such as in the home, schools, workplaces, and care facilities.
   - Actively promote protective health behaviours (i.e., getting enough sleep, physical activity, reducing screen time, stress management) that are important for active coping and are affordable, accessible, and within current pandemic response restrictions.
   - Collaborate across sectors and partners to increase support for determinants of mental health, including factors that foster mental health resilience.
2. Ensure early identification of mental health issues and timely access to mental health services.
   - Increase access to early screening and identification for those at risk.
   - Increase awareness of and provide access to timely mental health support services, including crisis support, as well as virtual care.
   - Increase availability of training and mental health consultation supports for care providers (such as primary care) across settings, including rural and remote communities.
3. Monitor mental health status as the pandemic continues, particularly among females, younger age groups, and racialized populations.
4. Develop a comprehensive mental health strategy for BC, including monitoring/ surveillance, expanding prevention initiatives, access to treatment, and addressing adverse conditions.
5. Investigate causes and propose solutions to address significant differences between men and women for self-reported mental health.

Appendix 10-A: Data Methodology Notes

1. Charts provided by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer.

For questions contact: HLTH.PHSE@gov.bc.ca.

2. Statistics Canada Survey on the Impacts of COVID-19 on Canadians

The Statistics Canada surveys on the Impacts of COVID-19 on Canadians are designed to assess the quality and viability of a more timely collection model using willing participants (voluntary) and web-only collection. In the context of this product, the term *crowdsourcing* refers to the process of collecting information via an online questionnaire. The crowdsourcing data was collected through a completely non-probabilistic approach which does not involve a random selection of respondents like other traditional Statistics Canada surveys. Consequently, results pertain only to the participants and cannot be used to draw conclusions about the larger population of Canadians. Standardized benchmarking factors have been applied to compensate for the over/underrepresentation of the participants resulting from the use of crowdsourcing data.

For this crowdsourcing initiative, a three-category gender variable was derived. Write-in responses to the gender questions were coded to "Male," "Female," or "Gender diverse" if the participant provided a valid write-in response. Participants with a missing or an invalid write-in response were considered out-of-scope and were removed from the file. While the three-category gender variable is retained on the analytical master file, a derived binary variable for gender was also created for inclusion on the Public Use Microdata File (PUMF). This was done in order to match available control totals for benchmarking, as well as to safeguard the confidentiality of participants due to the small number of write-in responses. This binary gender variable was derived by randomly assigning responses of "Gender diverse" to either "Male" or "Female." Figures 10.1 to 10.3 of this report is based on the PUMF data and therefore reports on the derived binary variable for gender.

3. BCCDC COVID-19 SPEAK Survey

Survey administration: The BC COVID-19 SPEAK Survey was primarily an online survey administered from May 12, 2020 to May 31, 2020 across British Columbia. A call centre was also created to support individuals who wished to take the survey with assistance. The survey was available in English and Simplified Chinese (online), with language guides in downloadable electronic format available for nine other languages (Arabic, American Sign Language, Farsi, French, Korean, Punjabi, Spanish, Traditional Chinese and Vietnamese). All other languages were available through the call centre from PHSA Provincial Language Services.

Sampling: The target population for the survey was residents of British Columbia who were 18 years of age or older. In order to achieve a large and representative sample, a response target of 2% of the urban population and 4% for rural/remote communities were set as determined by the Community Health Service Area (CHSA) density designation. Targets were also established for age, gender, income, education and ethnicity by each geographic area. Progress towards these targets was monitored daily and purposeful promotion and stakeholder outreach was done in order to better reach certain geographies and population demographics. Population targets were surpassed for each Regional Health Authority. However, not all sub-regions or demographic groups by geography did reach their target. Specifically, rural communities, populations with lower education, lower incomes, and some visible minorities were less reached and were prioritized for outreach. The final analytical dataset, which only included surveys where a Health Service Delivery Area geography, age, and gender were assigned and where the respondent must have completed at least 33% of the survey, contained 394,382 responses.

Weighting: Statistical weighting is often used in large surveys to ensure that the sample of collected responses reflects the overall target population. This type of weighting compensates for the fact that certain demographics are less likely to respond to a survey. By establishing detailed socio-demographic targets at the outset for each geographic area of interest within the survey area, it allowed for more focused participant recruitment with the ultimate benefit of applying smaller weights. The BC COVID-19 SPEAK results presented in this chapter were weighted using 2016 Canadian Census data by demographic and geographic variables, as appropriate (e.g., age, sex, ethnicity, education level, local health area), to account for residual differences in sample demographics and to ensure that the sample is as representative as possible of the overall geographic population that is being reported on. This set of survey weights is slightly different than those used to produce the public BC COVID-19 SPEAK Round 1 Dashboard, so the results in this report are not directly comparable to the public Dashboard.

Data Limitations: BC COVID-19 SPEAK Survey is a non-randomized voluntary survey subject to self selection bias among those who choose to respond to the survey. To adjust the sample to the population and enhance representativeness, quota-based sampling by geography and post collection weighting are used. Correction for unknown population characteristics is not possible. This limitation is not unique to non-randomized surveys as self selection bias is apparent in voluntary randomized surveys as well where a significant proportion of those offered to take a survey choose not to participate. Despite attempts for outreach to underrepresented communities and statistical weighting and the creation of multiple points of access, this survey may be limited in its ability to fully reflect the experiences of members of communities unable to complete the survey due to language or access barriers.

Note on disability status: Respondents included in the "At least 1 disability reported" population are those that selected one or more of the following responses to the question "Do you have a permanent or long-term disability? If so please indicate what type (check all that apply)": Vision; Hearing; Mobility (e.g. difficulty walking); Flexibility (e.g. difficulty bending down and picking up an object); Dexterity (e.g. difficulty in using hands or fingers); Pain-related; Learning (e.g. attention difficulties); Developmental (e.g. autism); Mental health-related (e.g. anxiety disorder); Memory (e.g. frequent episodes of confusion); or Other (please specify).

Notes on racialized groups: Figure 10.9 shows BC COVID-19 SPEAK responses disaggregated by non-Indigenous racialized groups. This report analyzes data by racialized groups "to reveal and address systemic inequalities in social determinants of health and access to health care," as per the report, *Disaggregated demographic data collection in British Columbia: The Grandmother Perspective*, by the BC Office of the Human Rights Commissioner.[a]

Some of the categories charted were abbreviated for space. The category "Filipinx" is a gender-neutral term used in place of "Filipino" and/or "Filipina." The question asked, "Do you consider yourself to be (check all that apply) …."

The options included "First Nations," "Métis," and "Inuit." Respondents who selected "First Nations," "Métis," or "Inuit" are not reported in these figures. In accordance with Indigenous Data Governance practices in BC, data from Indigenous respondents is provided to the First Nations Health Authority and Métis Nation British Columbia to determine how best to use the data in planning and engaging Indigenous communities across the province.

The options also included "White (European descent)," "Chinese," "South Asian (e.g., East Indian, Pakistani, Sri Lankan)," "Black (e.g., African or Caribbean)," "Filipino," "Latin American/Hispanic," "Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian)," "Arab," "West Asian (e.g., Iranian, Afghan)," "Korean," "Japanese," "Other, please specify," and "Prefer not to answer."

Respondents are reported in every category they selected.

[a] BC Office of the Human Rights Commissioner. Disaggregated demographic data collection in British Columbia: the grandmother perspective. Vancouver, BC: BC Office of the Human Rights Commissioner; 2020 Sep [cited 2022 Aug 23]. Available from: https://bchumanrights.ca/wp-content/uploads/BCOHRC_Sept2020_Disaggregated-Data-Report_FINAL.pdf.

Appendix 10-B: List of Virtual Mental Health Supports

Virtual mental health supports for everyone[29]

- **BounceBack –** Expanded access to free online, video, and phone-based coaching and skills-building program so that more seniors, adults, and youth who are experiencing low mood, mild to moderate depression, anxiety, stress or worry, can receive care.
- **Virtual counselling services –** Expanded access to virtual community counselling for individuals or groups at low or no cost.
- **Peer support and system navigation –** Expanded access to virtual mentoring and supports by increasing the number of peer support and system navigation workers.
- **Living Life to the Full –** Launched access to free virtual *Living Life to the Full* peer support and practical skills courses for coping with stress, problem solving, and boosting mood. The eight-week course is led by a trained facilitator.
- **B.C. COVID-19 mental health self-assessment tool** – Launched a set of mental health screening self-tests alongside the COVID-19 self-assessment tool.

Virtual support for frontline health-care workers

- **Mobile Response Team (MRT) –** In addition to supporting workers on the front lines of the overdose public health emergency, the MRT provides psychosocial support to frontline health-care workers, including long-term care and community-care workers, who are experiencing mental health issues in response to the pandemic.[30]
- **Free online mental health first aid (BC Psychological Association) –** New online psychological supports for frontline health-care workers.[31]
- **Online resource hub (Canadian Mental Health Association – BC Division) –** Online resources expanded to include information on psychological and social supports and provide mental health and well-being strategies for frontline workers.[29]
- **Virtual peer support service (Canadian Mental Health Association – BC Division, SafeCareBC, and other health partners) –** Phone and text-based peer support service that provides confidential support and referrals to other services. Staffed by former long-term care and home support workers.[29]

Virtual support for community clinicians

- **Compass – Child and Youth Mental Health, BC Children's Hospital, PHSA** – Virtual service delivered by an interprofessional team (psychiatry, nursing, social work) that provides information and resources to community care providers across BC servicing children and youth with mental health and substance use issues.[32]

Virtual mental health supports for youth

- **Foundry Virtual Clinic –** Nine existing virtual Foundry centres are providing virtual walk-in counselling. A new province-wide youth-focused virtual clinic with counselling, peer support, primary care, and family support for young people age 12–24 and their families will be available via voice, video, and chat.[33]
- **Kelty Mental Health –** Online BC mental health and substance use information, system navigation, resources, tools and peer support for youth, parents/caregivers, health-care professionals, and school professionals. Includes new resources for parenting during COVID-19.[34]

Virtual mental health supports for seniors

- **bc211 –** bc211, which is a province-wide information and referral service, matches seniors whose support network has been affected by the COVID-19 pandemic with volunteers.[35] This service will take calls from people who would like to volunteer to help seniors in their community with basic needs, including grocery shopping and pharmacy drop-offs and check-ins.

Virtual mental health supports for victims of family or sexual violence

- **VictimLink BC –** Immediate 24/7 crisis support for victims of family or sexual violence is available by phone through VictimLink BC's 24/7 telephone service.[36]

Appendix 10-C: List of Research Planned and/or Underway

Study Group	Research
General Population (Canada & BC)	• The Centre for Addiction and Mental Health is conducting multiple waves of research on mental health and substance use among Canadians.[37] • Emily Jenkins (University of British Columbia) is leading research with the Canadian Mental Health Association on COVID-19 mental health outcomes that will monitor mental health over 12 months (Assessing the Mental Health Impacts of COVID-19: A National Survey). Some results of this study have been highlighted in this report.[19] • Statistics Canada conducted a crowdsourcing survey, 'Impacts of COVID-19 on Canadians' (ICC), which included questions on mental health from April 24 to May 11, 2020.[38] In addition: • Topic: Mental Health and Covid-19: Knowledge Synthesis to Support and Promote Mental Wellness and Resilience [general population]; Researcher(s): Joseph Puyat, University of British Columbia; Funding: Canadian Institutes of Health Research. • Topic: Measuring Mental Well-being During a Pandemic Study [general population]; Researcher(s): Scott A. Lear, Simon Fraser University; Funding: Researcher's funds. • Topic: COVID+PA: Physical activity and well-being during a period of pandemic [general population]; Researcher(s): Guy Faulkner, University of British Columbia; Funding: Unspecified.
Indigenous Peoples	• Alanaise Goodwill (Simon Fraser University) is conducting research about the impacts of COVID-19 on the mental health of Indigenous communities. Funding: Canadian Institutes of Health Research Operating Grant, Knowledge Synthesis Grant: COVID-19 Rapid Research Funding Opportunity in Mental Health.[39]
Children & Youth & Families	• Joint research teams from UBC and the BC Children's Hospital (BCCH) are examining the impacts of COVID-19 and public health measures on the mental health of children and youth.[40] In addition: • Topic: Personal Impacts of COVID-19/Coronavirus Study (PICS) [mental health of families and children described as vulnerable]; Researcher(s): S. Evelyn Stewart, University of British Columbia; Funding: Unspecified. • Topic: NPW Survey; The Northern Pediatric Wellness (NPW) Survey [child wellness, NHA]; Researcher(s): Kathryn Leccese, University of British Columbia; Funder: Unfunded. • Topic: Children's Mental Health: Responding to COVID-19 [children's mental health]; Researcher(s): Charlotte Waddell, Simon Fraser University; Funding: BC Representative for Children and Youth. • Topic: Youth Mental Health and Substance Use in the Context of COVID-19 [youth]; Researcher(s): Skye Barbic, University of British Columbia; Funding: Canadian Institutes of Health Research. • Topic: Youth Health and COVID-19 Survey; Assessing the impact of the COVID-19 pandemic on social health [young adults, including mental health]; Researcher(s): Rodney Knight, PHC; Funding: Grant – Canadian Institutes of Health Research.
Asian-Canadians	• Topic: COVID-19 and Mental Health Resources for Asians in Canada [Asian ancestry]; Researcher(s): Fred Chou, University of Victoria; Funding: Faculty of Education COVID-19 Emergency Research Fund.

Study Group	Research
Sexual & Gender Minorities	• Topic: Service Provider Perspectives on Tools to Improve Access to Mental Health Supports for Sexual and Gender Minorities [MHSU services for sexual and gender minorities]; Researcher(s): Travis Salway, Simon Fraser University, BC Centre for Disease Control; Funding: BC SUPPORT Unit Fraser Centre, Canadian Institutes of Health Research – Strategy for Patient-Oriented Research – Knowledge Translation Award for Patient Oriented Research.
Health-care Workers	• Topic: COVID-19 Impact of General Surgeon Mental Health Survey; Psychological and Workplace-Related Effects [health-care workers]; Researcher(s): Morad Hameed, University of British Columbia; Funding: Unfunded. • Topic: COVID-19 Survey: Clinicians' Quality of Life and Moral Injury During the COVID-19 Pandemic [frontline clinicians and their spouses/partners; including mental health]; Researcher(s): David Barbic, Providence Health Care; Funding: Unfunded.
Men	• Topic: COVID-19 Study; Men's Experiences of the COVID-19 Pandemic [men's mental health]; Researcher(s): John Ogrodniczuk, University of British Columbia; Funding: Unfunded.
Employees	• Morneau Shepell is conducting monthly research on the mental health of Canadians who are employed or were employed in the last six months.[41] Disaggregated data for BC are being reported to the Ministry of Mental Health and Addictions. • Topic: COVID-19 Anxiety: Anxiety and Coping During COVID-19 Pandemic [employees] 'Organizational bad actors: What happens to them?'; Researcher(s): Sandra Robinson, University of British Columbia Sauder School of Business; Funding: Social Sciences and Humanities Research Council of Canada.

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Chapter 11

Social Isolation of Residents in Long-term Care & Assisted Living

(Reported July 2021)

Key Findings:

- Residents of care homes, including long-term care and assisted living residences, are at higher risk of serious illness, complications, and death due to COVID-19.
- Infection prevention measures in long-term care and assisted living residences have included restrictions on visitors, social gatherings, and activities. These measures have led to increased social isolation and decreased physical health, mental health, and quality of life for residents.
- When limited visits were allowed to resume, 61% of family members reported that their loved ones in care homes seemed worse than when they had last seen them, in terms of reduced cognitive function (58%), mood and emotional well-being (58%), and/or physical function (46%).

Situation

Since March 2020, COVID-19 response measures have included restrictions to visitors, social events, and other activities at long-term care (LTC)[a,1] and assisted living (AL)[b,2] facilities to help protect those at higher risk of serious illness and death from COVID-19.[3] Restrictions have protected many residents from contracting COVID-19, but have also increased social isolation and negatively impacted their mental and physical health and well-being.[4]

Background

LTC and AL residents are at higher risk of serious illness, complications, and death due to COVID-19 due to their older age, physical frailty, and/or chronic illness(es).[5,6] Residents often need help with personal care, and close physical contact with care aides who assist multiple residents increases the chance of COVID-19 infection and spread.[7]

Several changes were made to help prevent COVID-19 infections and protect these high risk residents from illness and death in BC's LTC and AL facilities (referred to collectively in this report as "care homes"). From March to June 2020, only essential visits were allowed.[c,3,8] After June 30, 2020, care homes had to develop safety protocols to allow limited family/social visits (one designated visitor per resident).[8] Many health authority

[a] LTC facilities provide 24-hour professional supervision and care for people who have complex care needs and can no longer be cared for in their own homes or in an AL residence.

[b] AL facilities provide housing, hospitality services, and personal care services for adults who can live independently and make decisions on their own behalf but require a supportive environment due to physical and functional health challenges. AL facilities can range from a unit in a high rise apartment complex to a private home.

[c] Essential visits include visits for critical illness, end-of-life, essential personal care/assistance, and decision-making. Health authority or facility staff are responsible for determining whether or not a visit is essential.

programs were discontinued, including adult day programs, respite services, and outings.[8] Care home operators cancelled group entertainment, group meals, and social events. The restrictions affected approximately 560 LTC and AL homes with approximately 40,000 beds.[9]

Social support from one's spouse, friends, and family has a positive effect on care home residents' health and well-being, and is a resource to help cope with stressful life events.[10] Secure social connections are linked with better mental health. Social isolation or disconnection is linked with worse anxiety, depression, and stress;[11] poor mood and sleep;[12] and decreased cognition and coping abilities.[13] Feelings of loneliness are linked with increased cortisol (a stress hormone), decreased immunity and increased body weight.[14] Social isolation was an issue for some care home residents before the COVID-19 pandemic. The restricted visits and canceled social activities have resulted in or exacerbated isolation and loneliness for many residents.[4,15] About 64% of BC LTC residents have dementia, and almost half of these have severe cognitive impairment.[16] The changes were particularly stressful for these residents, as dementia makes it more difficult to adapt to new routines and unfamiliar people.[17,18,19]

Across Canada, as of May 25, 2020, 81% of COVID-19 deaths had occurred among residents of LTC sector facilities.[d,20] As of June 1, 2020, the estimated case fatality rate among LTC sector residents with COVID-19 (that is, the proportion of residents with the virus who died) ranged from 20% in Alberta to 42% in Quebec.[e,21] In BC, the estimated case fatality rate was 32%.[21]

From the start of the pandemic until October 24, 2020, there were 111 COVID-19 outbreaks[f] in BC health-care facilities;[g] 93 of these were in LTC or AL facilities.[9,22] As of November 2, 2020, 866 residents and staff had been infected through care homes. This represented almost 90% of all health-care-associated COVID-19 infections, and 6.4% of all COVID-19 infections reported in BC.[9,22]

On April 1, 2021, new visitor guidelines for BC LTC and AL facilities came into effect, including relaxation of many of the previous visitor restrictions. For example, there are no longer limits to the duration or frequency of visits. LTC and AL residents are no longer limited to a single designated family/social visitor, and may have up to two adults and one child visit indoors at the same time. Outdoor visits with larger numbers are also possible, as long as they align with public health guidelines.[23]

Equity Considerations

Although physical distancing and increased social isolation affect all residents living in care homes, some have been more severely impacted.

- Residents who have greater frailty, require more complex care, suffer from cognitive decline, have fewer financial resources, and have less family support may experience greater physical and mental health impacts.
- Measures may exacerbate pre-existing mental illness for residents experiencing isolation and loneliness.
- Residents with poorer health, cognitive decline, lower income or education, or less familiarity with technology have more difficulty accessing Internet-based resources, such as virtual visits and activities.[24]
- Residents in smaller or more crowded care homes may have more limited outdoor or communal spaces for physically distanced visits.

[d] The source document from the Canadian Institute for Health Information defines the "LTC sector" as including "both residential facilities with 24-hour nursing care and facilities with fewer services, such as retirement homes and assisted-living facilities."
[e] Note that this is among six provinces only: as of June 1, 2020, no resident infections had been reported in New Brunswick, Prince Edward Island, or any of the territories, and there had been too few cases reported in Manitoba, Newfoundland and Labrador, and Saskatchewan to provide meaningful estimates for those provinces.
[f] A COVID-19 outbreak in a BC care facility is declared when one or more residents or staff have a laboratory-confirmed COVID-19 diagnosis.
[g] Care facilities include community care and acute care facilities. Community care includes LTC, AL, group homes (community living), independent living, and other residential facilities.

Truth and Reconciliation: Elders and Cultural Connectedness

For many Indigenous people and communities, Elders hold a special place as knowledge keepers and teachers of cultural practices. Physical barriers and restrictions to visiting Elders and others in LTC and AL facilities protected residents from COVID-19 but disrupted family and community connectedness. Policies that limit residents' self-determination in institutional settings may resurface traumas previously inflicted on Indigenous people who survived residential school. Indigenous Peoples must be engaged to inform institutional policies.

Findings

The BC Office of the Seniors Advocate report, *Staying Apart to Stay Safe: The Impact of Visit Restrictions on Long-Term Care and Assisted Living Survey*,[9] is based on a survey of BC care home residents and family members. The survey was conducted between August 26 and September 30, 2020, and found the following:

- At the time of the survey, only 25% of families visited several times a week—less than half as many as before the pandemic (55%). During the pandemic, one in three visits was 30 minutes or less, whereas before the pandemic only 4% of visits were 30 minutes or less.[9]
- When family visits increased, 61% of visitors reported that their family members in care facilities had worsened cognitive function (58%), mood and emotional wellbeing (58%), and/or physical functioning (46%) since the restrictions began.[9]
- Only 40% of LTC residents had access to a personal phone, and almost three-quarters of the residents required help to make a telephone or video call.[9]

A scan of provincial news media conducted before the restrictions were eased revealed six main themes related to social isolation of seniors in care homes:

1. ***Some care home residents were not receiving adequate levels of care.***

   The pandemic revealed pre-existing issues in many care homes, where there were gaps in capacity for resident care. Before the visitor restrictions came into force, the contributions of family caregivers allowed care home staff more time to focus on other residents. The removal of family caregivers revealed the inability of some facilities to provide adequate levels of care to all residents—particularly those with issues such as dementia.[19] This was worsened by increased demands on staff due to COVID-19 restrictions, protocols, outbreaks, and staff shortages—including restricting staff to working at a single LTC/AL facility[25] and the added workload of monitoring virtual and in-person family visits.[18] It has become increasingly clear that the mental, emotional, and physical supports provided by family caregivers are an essential part of the caregiving continuum, and a critical supplement to services provided by care home staff.

2. ***Families felt frustrated and helpless.***

   Family members felt frustrated and helpless when COVID-19 restrictions prevented them from providing the usual mental and physical supports to loved ones in care homes. In some cases, care homes did not approve family caregivers as "essential visitors," so they were unable to provide care, even when their family member's health was in decline.[19,26,27] Although visiting restrictions were eased slightly in June 2020, the ability for family members to provide direct care was still limited.[28] Some family caregivers demanded further changes to the visitor policy and more opportunities to care for their loved ones.[26,28]

3. *Social isolation is particularly challenging for seniors with dementia.*

COVID-19 response measures such as visitor restrictions reduced important social and family support and connections for residents with dementia, and substantially reduced their quality of life.[17] Technological options such as virtual visits (e.g., video chat) often do not benefit seniors with dementia, and may even increase their confusion or delirium.[29]

4. *Families and care homes are making extra efforts to keep residents connected to loved ones.*

Friends, family members, and care home staff are finding safe and sometimes creative alternatives to traditional visits. These include telephone and virtual (online) visits,[19,30] and visiting or playing music from outside the resident's window.[18,31,32,33]

5. *Mental health and quality of life have decreased for many seniors.*

Many seniors have experienced increased loneliness, depression, and anxiety during the pandemic.[34] The reductions in family visits, social support, and levels of care, as well as disruption to routines, have contributed to reduced quality of life and mental health for care home residents.[18,34] Some couples were separated and unable to see each other for many weeks because one spouse was living in LTC or AL.[19] Familiarity and feelings of connectedness help residents, especially those with dementia, to make sense of the world around them.[19,26,27] The appearance of staff and visitors in masks and other personal protective equipment has been alarming to many residents, and can also add to feelings of isolation.[17]

6. *Many seniors experienced deterioration of their physical health.*

For many residents reduced visits and activities led to more sitting or laying down. Decreased physical activity can decrease one's ability to perform basic daily tasks and increase the risk of falling.[35] Due to social isolation, fewer group activities, and lack of attention and care normally provided by family caregivers, many LTC residents lost weight, experienced mood swings, and were more likely to fall.[19,26]

Actions Initiated or Planned to Address Unintended Consequence

This list provides examples of actions taken or initiated and is not a comprehensive list. Readers are encouraged to visit the websites of ministries involved in this work to find the latest information.

- ***BC Ministry of Health*** (BC MoH):
  - In March 2020, the work of the COVID-19 Seniors Working Group co-chaired by the BC MoH and BC Seniors Advocate led to increased funding for the bc211 information and referral service. The funding expands bc211 services to the entire province and helps connect volunteers with seniors who require assistance with basic needs like grocery shopping.[36]
  - In June 2020, the BC MoH allocated $160 million to increase staffing and ensure adequate infection prevention and control measures for safer care home visits.[37]
  - In January 2021, the BC MoH and BC Centre for Disease Control developed guidelines for safer LTC and AL visits during COVID-19.[38]
- ***BC Ministry of Mental Health and Addictions*** (BC MMHA): In June 2020, the BC MMHA committed $5 million for virtual mental health supports for targeted populations, including isolated seniors. Programs will include skill-building tools, virtual counselling services, peer support, and system navigation for managing stress during COVID-19.[39] The 2021 provincial budget contained additional funding to expand mental health supports, including $61 million over three years to improve access and quality of mental health services.[41]
- ***BC Care Providers Association*** (BCCPA): In April 2020, BCCPA and the BC MoH launched EquipCare BC, a $10 million program providing funding to LTC and AL facilities for enhanced safety and infection control equipment and supplies.[40] In addition, the BC MoH engages with BCCPA to promote services and policy alignment when delivering seniors' services during the COVID-19 pandemic.

- ***Alzheimer Society BC and other senior-centred non-profit societies:*** These societies provide COVID-19 information and support to individuals, families, and caregivers to help them cope with isolation, and provide alternative ways for staying connected.
- ***Current research underway in BC:*** Dr. Farinaz Havaei (UBC) is conducting an evaluation study of rapid redesign and resource deployment in LTC facilities during COVID-19.

Considerations for Further Action

This section provides considerations for action based on the findings of this report. These are not formal recommendations, but rather ideas to consider when shaping recommendations and actions related to this topic.

1. Through ongoing stakeholder consultation, monitoring, and research, continue to gain understanding of the short- and long-term impacts of social isolation due to COVID-19 measures on the health of seniors and other residents living in LTC and AL facilities.
2. Consult stakeholders to balance the risks of COVID-19 and other mental and physical health needs of seniors during the pandemic and as BC recovers from the pandemic, including public health, health professionals, seniors' advocates, patients, families, and other caregivers.
3. Increase access to user-friendly technologies that support virtual connection of seniors with their family, friends, and communities inside and outside of care homes.
4. Support LTC and AL operators to innovate and develop new ways to increase social connectedness. A survey of LTC service providers in Interior Health found some preferred strategies, such as hallway activities (residents participate in games or social activities from their doorways), one-on-one activities with recreational staff, and contactless care package delivery systems.

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Chapter 12

Self-harm & Suicide

(Reported June 2021)

Key Findings:

- COVID-19 response measures have increased social isolation and stress and made it harder to access mental health care. These factors may exacerbate existing mental illness and contribute to heightened risk of self-harm and suicide.
- Self-harm occurs most frequently among young females and non-binary individuals, while the suicide rate is highest among middle-aged males. Populations who have been subject to marginalization, such as transgender and non-binary individuals, people with low income, and people with mental illness are disproportionately affected by both. As a result of cultural genocide, intergenerational trauma, and structural racism, Indigenous Peoples are also disproportionately affected by both self-harm and suicide. These patterns apply both before and during the pandemic.
- Self-harm hospitalization and suicide rates in BC both decreased slightly during the initial months of the pandemic, then increased to levels similar to those seen prior to the pandemic. These findings should be interpreted with caution, however, given data limitations and delays in reporting.

Situation

The public health response to COVID-19 has included safety measures such as physical distancing, self-isolation, and temporarily closing businesses and suspending in-class education. These measures have reduced social connection and led to unemployment and loss of income for many people. As a result, many people are experiencing increased stress and poorer mental health, which increases the potential for mental illness (e.g., depression and anxiety) and the risk of self-harm and suicide. Barriers to accessing mental health care include stigma and the reduced capacity of mental health services to respond to the needs of the population (e.g., staffing shortages, physical distancing, and other measures during COVID-19). However, an increase in the availability of virtual mental health services may be helping to meet demand.[1,2]

Background

Self-harm (also known as *non-suicidal self injury*) describes a self-inflicted injury or injuries typically caused *without* the intent to end one's life.[3] Self-harm is often a repeated pattern of behaviour rather than a one-time event, and may be used to cope with or communicate feelings of anxiety, anger, or emotional pain;[4] to exert control; or to punish oneself.[5] Low self-esteem, abuse, neglect, childhood trauma, and mental illness are all risk factors for self-harm.[5] Self-harm, in turn, can be a risk factor for suicide, though it is not necessarily linked to suicidal intent.[5] The most common forms of self-harm are cutting one's skin, burning one's skin, and self-hitting, often causing bruises and sometimes breaking bones.[5] Most self-harm behaviours begin between the ages of 12 and 15.[5] In 2013 and 2014 in Canada, 2,500 youth age 10–17 were hospitalized for self-harm.[5] Self-harm and associated hospitalization is higher among females, especially younger females.[6] Across

Canada, females account for 72% of self-harm hospitalizations among those age 10–19.[7] Transgender and gender dysphoric children[a,8] and youth[9] are also more likely to self-harm. The 2018 BC Adolescent Health Survey indicated that 17% of BC students age 12–19 had self-harmed in the previous year, up from 15% in 2013.[10] Those most likely to self-harm included students age 13 to 15, non-binary youth (47%), and females (23%), compared to 11% of males.[10]

Suicide is death caused by self-inflicted injury with the intent to end one's life.[11] Suicide is the ninth leading cause of death in Canada, resulting in about 4,000 deaths each year.[b,12] Women are three to four times more likely than men to *attempt* suicide,[13] but suicide rates in Canada are three times higher among males: almost 30% of suicide deaths are middle-aged and older males age 45–64.[14] Recent data indicate that 11.8% of Canadians report having had suicidal thoughts, 4.0% report having made suicide plans, and 3.1% report at least one prior suicide attempt in their lifetime.[c,12] Mental illness and feelings of hopelessness make people more likely to consider or attempt suicide.[15,16] According to the Public Health Agency of Canada, 90% of Canadians who die by suicide lived with a mental health problem or illness.[7] There were more than 575 suicide deaths in BC in 2018,[17] and suicide is the second-leading cause of death among BC youth age 15 to 24.[18]

Large-scale traumatic events, such as pandemics and natural disasters, can negatively affect mental health, both during the event and long after. These types of events may lead to increased incidence of psychiatric disorders,[19] which may in turn increase the risk of self-harm and suicide.[20] Effects on population mental health and wellness cannot be measured in the short term as they may not begin to manifest until years after the traumatic event.[19,21]

COVID-19 response measures have aggravated many of the factors that increase an individual's risk of self-harm, suicidal ideation (thinking about suicide), and attempting or committing suicide. These include living alone and feeling lonely[22]; poor health, disability,[23] and chronic pain[24,25]; mental distress and mental illness[20,26]; having self-harmed or attempted suicide in the past[24,25]; financial stress[23,27]; risk of domestic/intimate partner violence[28,29,30]; and substance use.[20,31] Many of these factors are interrelated. For example, an active social network is associated with lower rates of self-harm and suicide.[32]

COVID-19 response measures may reduce an individual's actual or perceived access to support, making feelings of loneliness and isolation worse.[33] Mental illness (e.g., depression, anxiety, post-traumatic stress) may develop or worsen due to social isolation and fear, resulting in increased symptoms of mental distress,[34] which may be linked to increased use of alcohol and other substances.[31] Increased time at home, greater financial stress, and increased substance use may increase the risk of domestic/intimate partner violence. Domestic/intimate partner violence, in turn, can negatively affect mental health and worsen depression, which is both a short- and long-term risk factor for self-harm and suicide.[28,29,30] People quarantined due to COVID-19 exposure or infection may also experience stigma (intolerance and avoidance), fear, and frustration.[35] Meanwhile, reduced mental health, emergency, and social services, especially in rural/remote regions, has made accessing support more difficult.[26] Mental health,[36] violence,[37] and suicide[38] crisis lines in BC and Canada have reported significantly higher call volumes since the pandemic began, and many lack the capacity to respond to the increased demand.[36]

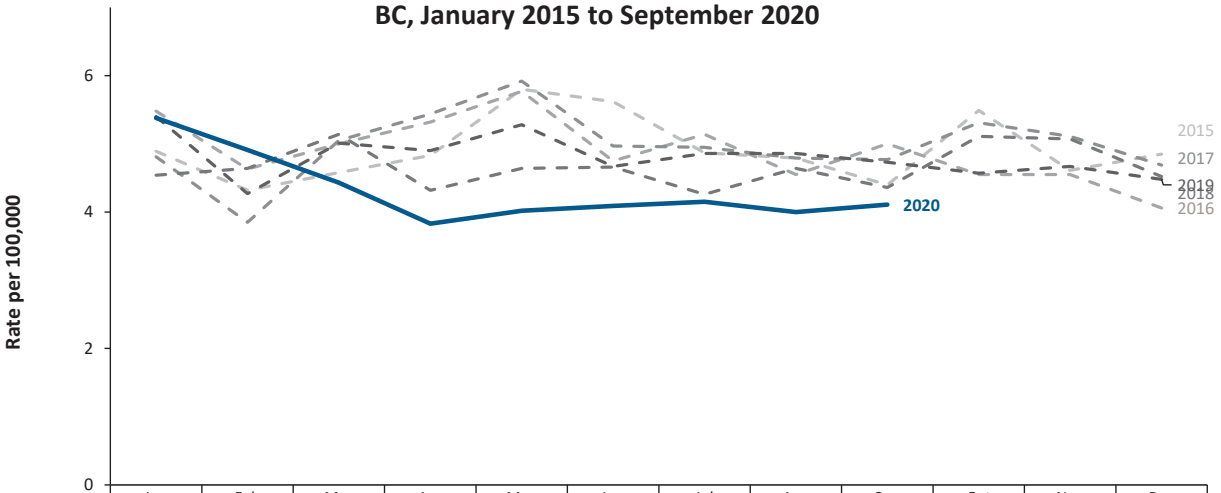
[a] "Gender dysphoria" refers to extreme discomfort and mental distress caused by the feeling that one's assigned sex does not match their gender.
[b] Numbers are known to be underreported due to associated stigma and additional factors, as discussed in the following section of this report.
[c] These data are based on the Canadian Institute of Health Information's Discharge Abstract Database, Statistics Canada's Vital Statistics Database, and the 2016 Canadian Community Health Survey.

Findings

More than half of BC respondents to a Statistics Canada Crowdsourcing survey on the impact of COVID-19 reported worse mental health compared to before the COVID-19 pandemic. People age 15 to 44 were most affected, and Indigenous people were more affected than non-Indigenous people.[39] In another Canadian survey, 2% of respondents reported having tried to harm themselves in response to COVID-19.[40] As the pandemic progressed, the proportion of respondents reporting deliberate self-harm and/or suicidal thoughts or feelings increased, particularly among populations experiencing marginalization or social exclusion (e.g., people with a pre-existing mental illness, Indigenous Peoples, people with a disability, and people who identify as LGBTQ+).[23,41]

This section includes eight charts (Figures 12.1–12.8) presenting data on self-harm hospitalizations and suicides in BC, both before and during the COVID-19 pandemic, which was declared in March 2020. These data should be interpreted with caution due to many factors limiting data, such as difficulty classifying some injuries and deaths, underreporting of self-harm and suicide resulting from stigma,[12] and other factors.[6] It is not always clear whether a death or injury is accidental or intentional, so some suicides may incorrectly be recorded as accidental deaths. Individuals who self-harm or survive a suicide attempt may not disclose to health-care providers that the resulting injury was self-inflicted, so these incidents may also be recorded as accidental. When someone receives medical attention for a suicide attempt, the incident may erroneously be recorded as self-harm rather than attempted suicide. Cases of self-harm and attempted suicide may not always receive medical attention, so these incidents may never be reflected in self-harm and suicide data at all. This may be particularly true during the pandemic, when many people have had difficulty accessing, or have been actively avoiding, health-care institutions.[42] Finally, suicide rates in BC are based on BC Coroners Service data, which are considered preliminary and may change subject to further investigation into individual deaths.[43]

FIGURE 12.1



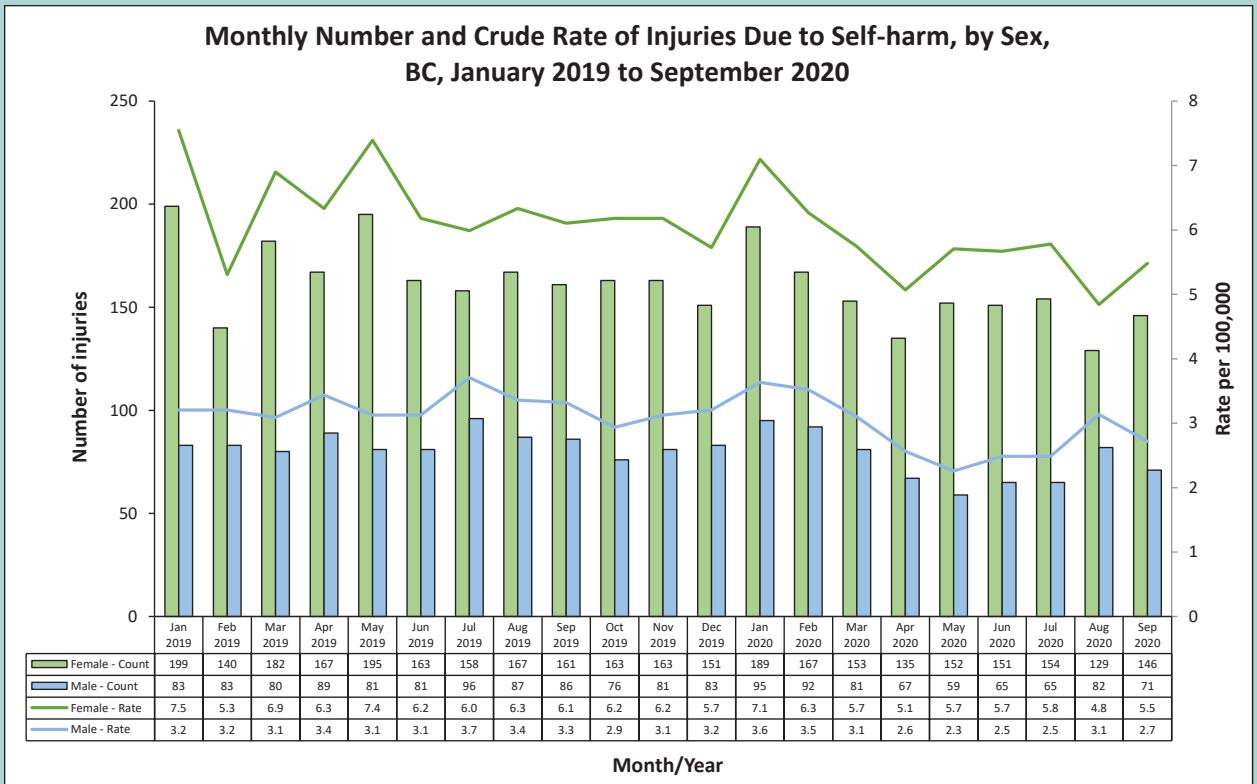
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	4.89	4.32	4.58	4.83	5.80	5.62	4.87	4.79	4.40	5.49	4.61	4.85
2016	5.48	4.63	5.00	5.32	5.77	4.75	5.14	4.55	5.00	4.55	4.55	4.06
2017	4.81	3.85	5.05	5.44	5.92	4.97	4.95	4.79	4.77	5.31	5.11	4.69
2018	4.54	4.64	5.14	4.32	4.64	4.66	4.26	4.64	4.36	5.11	5.07	4.52
2019	5.40	4.27	5.01	4.90	5.28	4.67	4.86	4.86	4.73	4.57	4.67	4.48
2020	5.38	4.91	4.43	3.83	4.02	4.09	4.15	4.00	4.11			

Month

Notes: Self-harm injuries are identified as hospital inpatient admissions with an external cause of injury along with a diagnosis of self-harm injury code (ICD-10-CA X60-X84, Y87.0). External cause of injuries due to complication of medical intervention or sequelae of external cause were excluded.
Source: Discharge Abstract Database; populations from Client Roster. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, March 2021.

Figure 12.1 shows injury hospitalizations due to self-harm in BC from January 2015 to September 2020. It indicates there has been an overall decline in self-harm injury hospitalizations in BC from April to September 2020 compared to this period in previous years. This is particularly noteworthy for May, because in some previous years, May shows a seasonal peak. Due to the overall increase in population stress and mental health concerns, this trend may reflect a decline in people accessing hospital services for self-injury, and/or a decrease in patients disclosing the cause of injury in hospital.

FIGURE 12.2

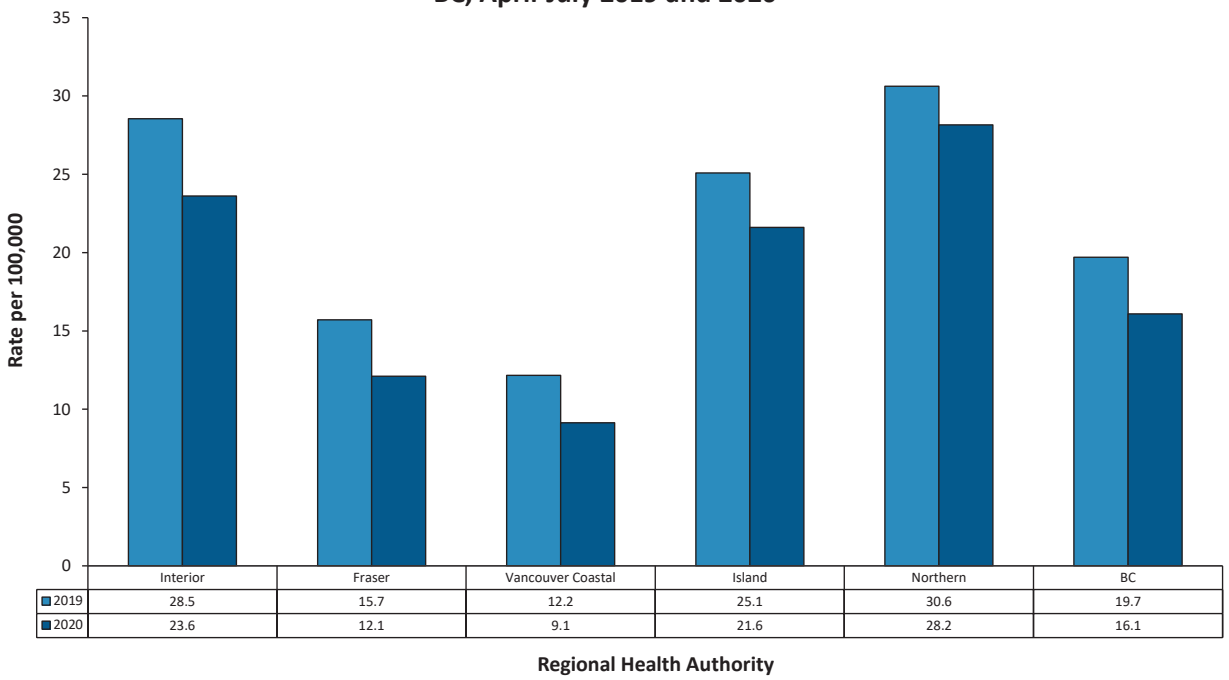


	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Female - Count	199	140	182	167	195	163	158	167	161	163	163	151	189	167	153	135	152	151	154	129	146
Male - Count	83	83	80	89	81	81	96	87	86	76	81	83	95	92	81	67	59	65	65	82	71
Female - Rate	7.5	5.3	6.9	6.3	7.4	6.2	6.0	6.3	6.1	6.2	6.2	5.7	7.1	6.3	5.7	5.1	5.7	5.7	5.8	4.8	5.5
Male - Rate	3.2	3.2	3.1	3.4	3.1	3.1	3.7	3.4	3.3	2.9	3.1	3.2	3.6	3.5	3.1	2.6	2.3	2.5	2.5	3.1	2.7

Notes: Self-harm injuries are identified as hospital inpatient admissions with an external cause of injury along with a diagnosis of self-harm injury code (ICD-10-CA X60-X84, Y87.0). External cause of injuries due to complication of medical intervention or sequelae of external cause were excluded.
Source: Discharge Abstract Database; populations from Client Roster. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, March 2021.

Figure 12.2 shows injury hospitalizations due to self-harm in BC, by sex, from January 2019 to September 2020. It indicates that self-harm injury hospitalizations in BC are consistently higher among females than males. This is in contrast to Figure 12.6, which shows an opposite pattern for suicide deaths in BC.

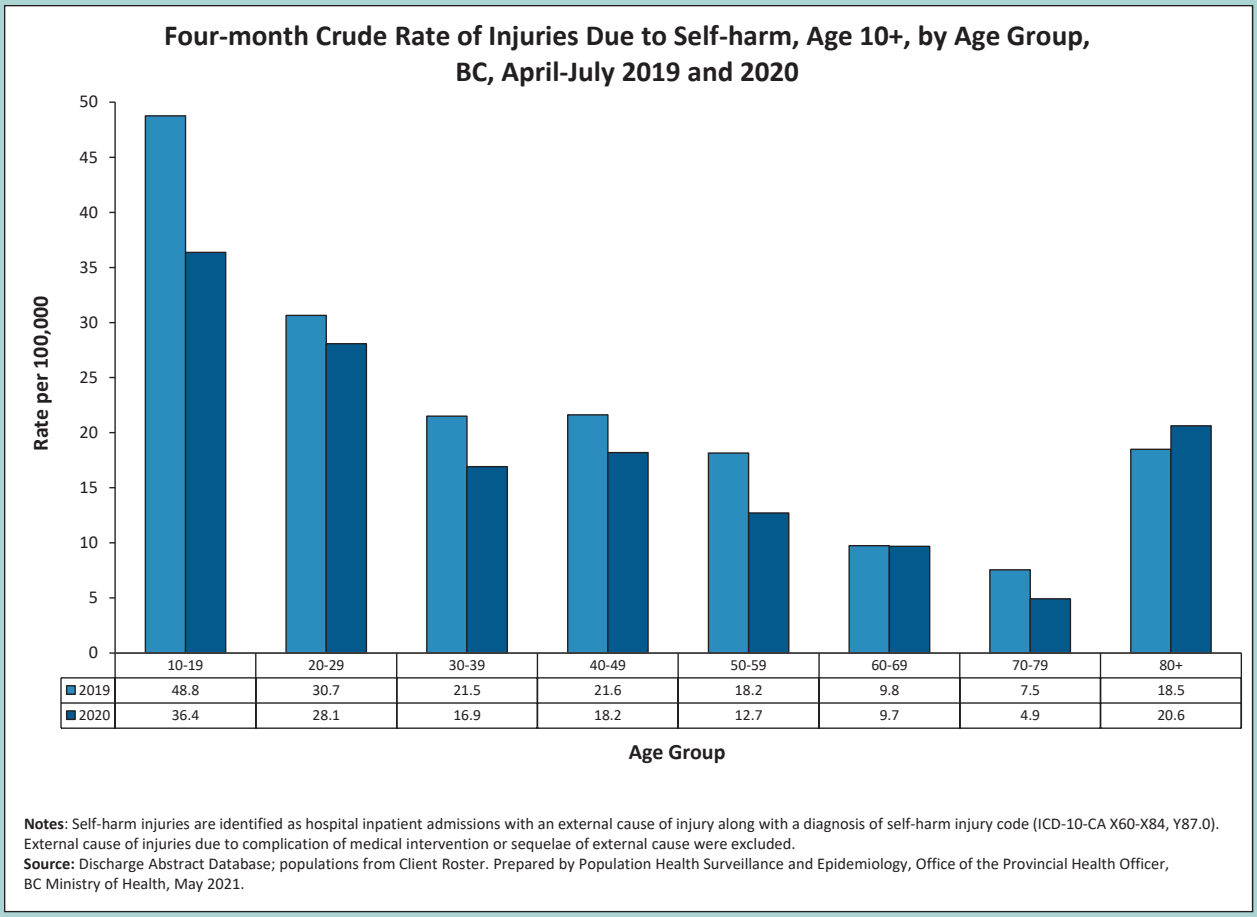
FIGURE 12.3



Notes: Self-harm injuries are identified as hospital inpatient admissions with an external cause of injury along with a diagnosis of self-harm injury code (ICD-10-CA X60-X84, Y87.0). External cause of injuries due to complication of medical intervention or sequelae of external cause were excluded.
Source: Discharge Abstract Database; populations from Client Roster. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, May 2021.

Figure 12.3 shows injury hospitalizations due to self-harm in BC by health authority for April–July 2019 and April–July 2020. Rates for April–July of each year are highest in Northern Health and Interior Health, followed by Island Health. Rates are lowest in Vancouver Coastal Health. In April–July 2020, the first four-month period since the pandemic was declared, rates of self-harm injury hospitalization showed a decrease in all health authorities over the same period in 2019.

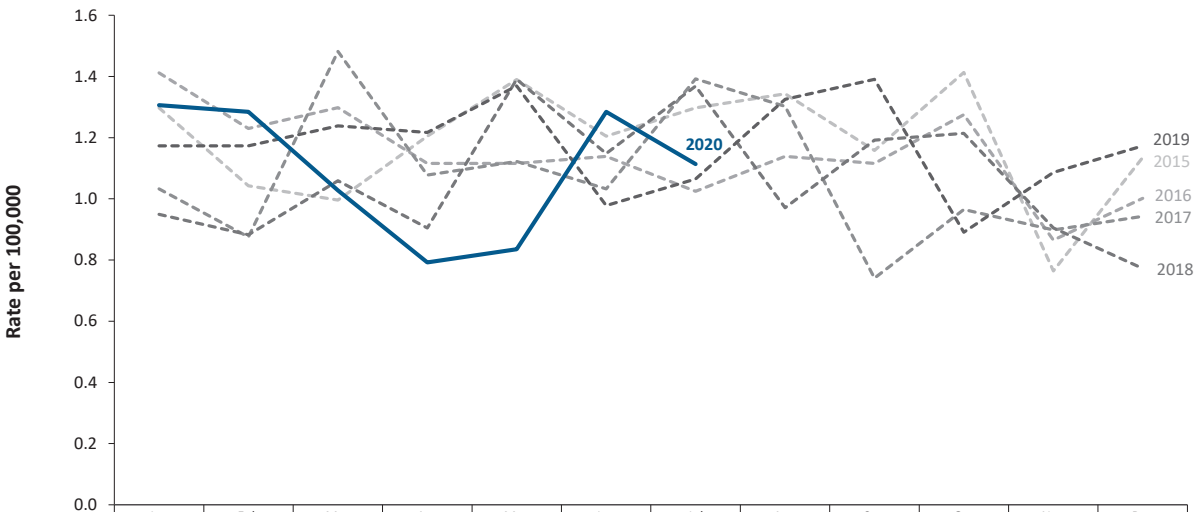
FIGURE 12.4



Notes: Self-harm injuries are identified as hospital inpatient admissions with an external cause of injury along with a diagnosis of self-harm injury code (ICD-10-CA X60-X84, Y87.0). External cause of injuries due to complication of medical intervention or sequelae of external cause were excluded.
Source: Discharge Abstract Database; populations from Client Roster. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, May 2021.

Figure 12.4 shows injury hospitalizations due to self-harm in BC, by age group, for April–July 2019 and April–July 2020. These data illustrate that self-harm injury hospitalizations in BC are highest among younger age groups (age 10–19 and 20–29). In April–July 2020, the first four-month period since the pandemic was declared, self-harm injury hospitalizations decreased among almost all age groups compared to the same period in 2019 (the exceptions were those age 80+, among whom there was an increase, and age 60–69, whose rate of self-harm injury hospitalizations remained virtually the same).

FIGURE 12.5

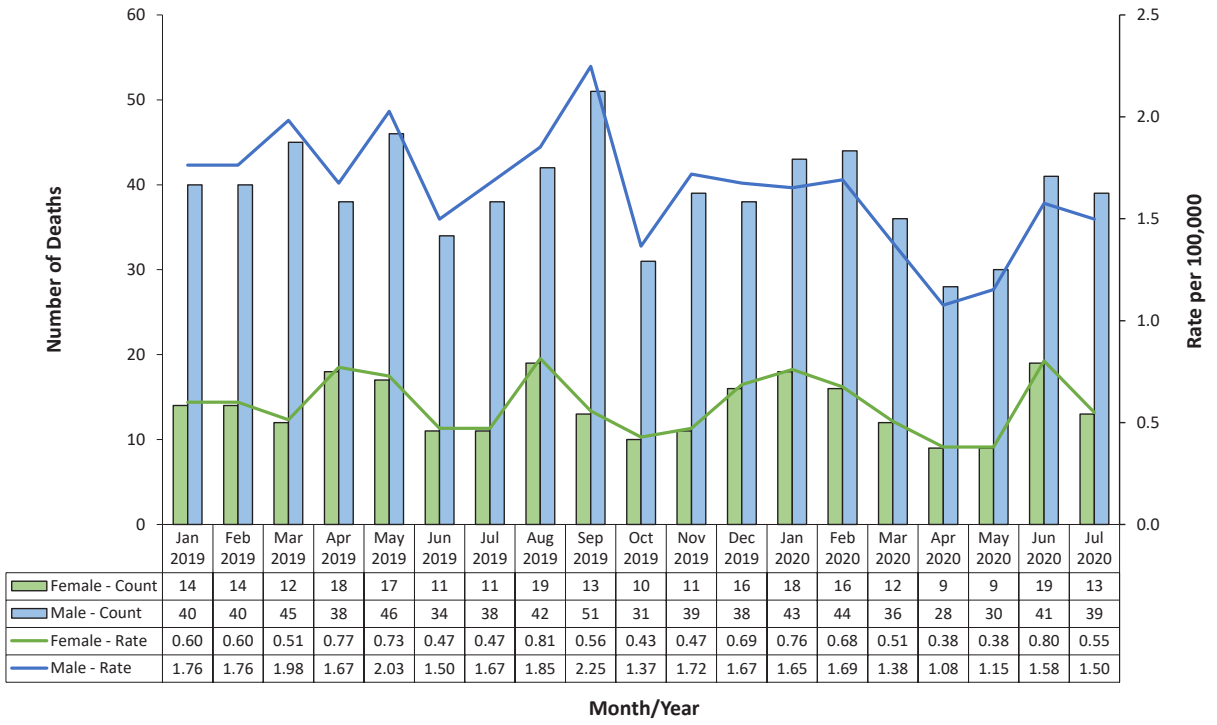


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	1.30	1.04	1.00	1.20	1.39	1.20	1.30	1.34	1.16	1.41	0.76	1.14
2016	1.41	1.23	1.30	1.12	1.12	1.14	1.02	1.14	1.12	1.28	0.87	1.00
2017	1.03	0.88	1.48	1.08	1.12	1.03	1.39	1.30	0.74	0.97	0.90	0.94
2018	0.95	0.88	1.06	0.90	1.39	1.15	1.37	0.97	1.19	1.21	0.90	0.77
2019	1.17	1.17	1.24	1.22	1.37	0.98	1.06	1.33	1.39	0.89	1.09	1.17
2020	1.31	1.28	1.03	0.79	0.84	1.28	1.11					

Notes: Suicide is defined as a death resulting from self-inflicted injury, with the intent to cause death. Recent suicide data are preliminary and subject to change, and should be interpreted with caution. There is up to a two-year delay in the reporting of deaths by suicide in BC; suicide deaths may therefore be underrepresented in the 2019 and 2020 data because deaths from these years may still have been under investigation at the time of reporting. Rates calculated using mid-year population from each year.
Sources: BC Coroners Service; mid-year populations from PEOPLE2020. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, January 2021.

Figure 12.5 shows the monthly rate of suicide deaths in BC from January 2015 to July 2020. From March through May 2020 (the period with the strictest social/physical distancing measures), suicide deaths decreased in BC. This is consistent with findings from other jurisdictions experiencing disasters, where suicide deaths stayed the same or decreased in the period following the disaster. This may reflect a "coming together" effect,[44] where some people gain a renewed sense of purpose from societal efforts to respond to a large-scale traumatic event.[45,46,47] As Figure 12.5 also shows, suicide deaths increased substantially in June 2020, up to a level similar to the pre-pandemic period (for death counts for Figure 12.5, see Appendix 12-A). In May 2021, the Government of BC issued a news release confirming that there had not been an overall increase in suicide deaths in BC during the COVID-19 pandemic.[48]

FIGURE 12.6

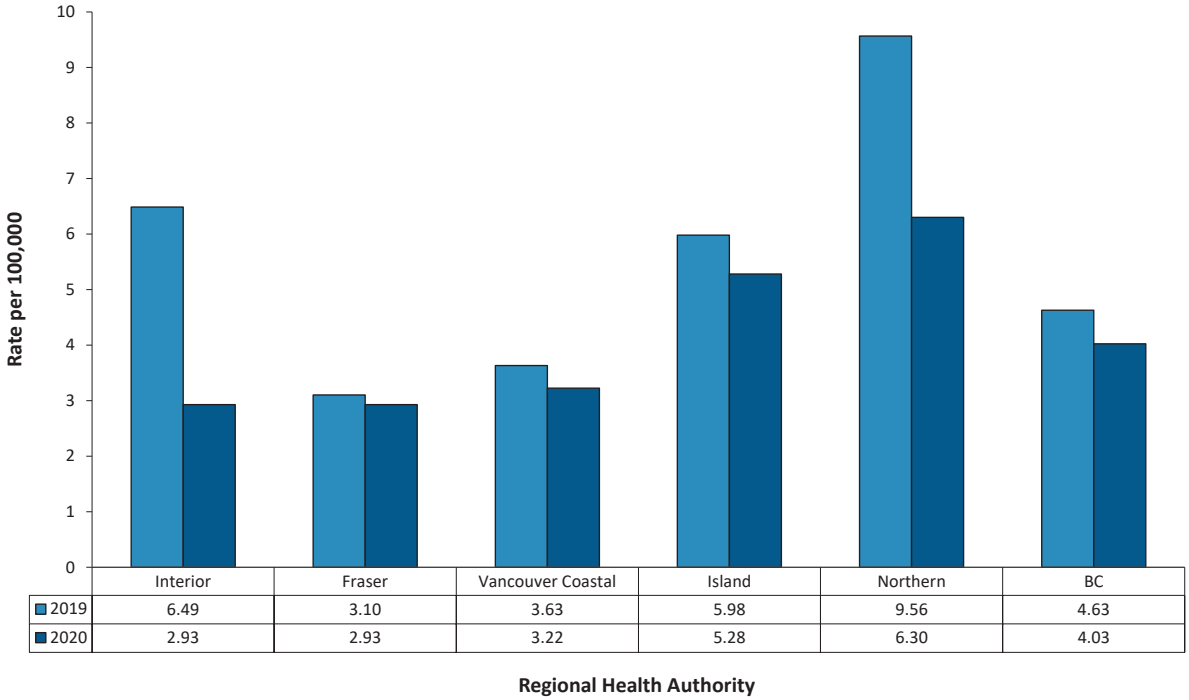


	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020
Female - Count	14	14	12	18	17	11	11	19	13	10	11	16	18	16	12	9	9	19	13
Male - Count	40	40	45	38	46	34	38	42	51	31	39	38	43	44	36	28	30	41	39
Female - Rate	0.60	0.60	0.51	0.77	0.73	0.47	0.47	0.81	0.56	0.43	0.47	0.69	0.76	0.68	0.51	0.38	0.38	0.80	0.55
Male - Rate	1.76	1.76	1.98	1.67	2.03	1.50	1.67	1.85	2.25	1.37	1.72	1.67	1.65	1.69	1.38	1.08	1.15	1.58	1.50

Notes: Suicide is defined as a death resulting from self-inflicted injury, with the intent to cause death. Recent suicide data are preliminary and subject to change, and should be interpreted with caution. There is up to a two-year delay in the reporting of deaths by suicide in BC; suicide deaths may therefore be underrepresented in the 2019 and 2020 data because deaths from these years may still have been under investigation at the time of reporting. Rates calculated using mid-year population from each year.
Sources: BC Coroners Service; mid-year populations from PEOPLE2020. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, November 2020.

Figure 12.6 shows the monthly number and rate of suicide deaths in BC, by sex, from January 2019 to July 2020. The male rate was from two to four times higher than the rate for females, which is consistent with longer-term analyses by sex.[6]

FIGURE 12.7

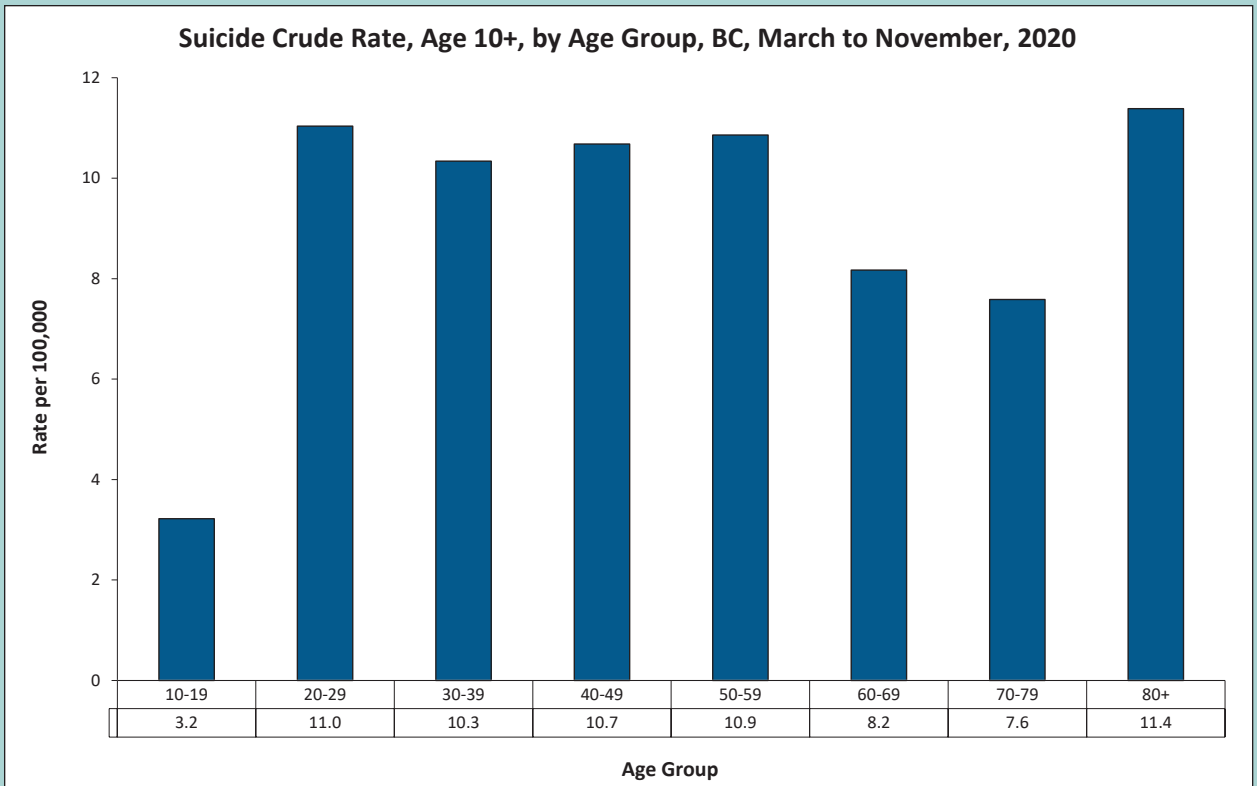


	Interior	Fraser	Vancouver Coastal	Island	Northern	BC
2019	6.49	3.10	3.63	5.98	9.56	4.63
2020	2.93	2.93	3.22	5.28	6.30	4.03

Notes: Suicide is defined as a death resulting from self-inflicted injury, with the intent to cause death. Recent suicide data are preliminary and subject to change, and should be interpreted with caution. There is up to a two-year delay in the reporting of deaths by suicide in BC; suicide deaths may therefore be underrepresented in the 2019 and 2020 data because deaths from these years may still have been under investigation at the time of reporting. Rates calculated using mid-year population from each year.
Sources: BC Coroners Service; mid-year populations from PEOPLE2020. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, May 2020.

Figure 12.7 shows the four-month suicide rate in BC, by health authority, for April–July 2019 and April–July 2020. Overall, suicide rates were lower in Fraser Health and Vancouver Coastal Health. However, given their higher populations, these health authorities had the highest *numbers* of suicide deaths—almost half (48.2%) of all suicide deaths in BC during this period.[49] The regional distribution of suicide deaths is consistent with patterns observed since 2008.[17] Also consistent with patterns observed in BC's overall population, the rate of suicide decreased in each health authority in April–July 2020, the first four-month period after the start of the COVID-19 pandemic, compared to the same period in 2019.

FIGURE 12.8



Notes: Suicide is defined as a death resulting from self-inflicted injury, with the intent to cause death. Recent suicide data are preliminary and subject to change, and should be interpreted with caution. There is up to a two-year delay in the reporting of deaths by suicide in BC; suicide deaths may therefore be underrepresented in the 2019 and 2020 data because deaths from these years may still have been under investigation at the time of reporting. Rates calculated using mid-year population from each year.
Sources: BC Coroners Service; mid-year populations from PEOPLE2020, provided by BC STATS. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, May 2021.

Figure 12.8 shows the nine-month suicide rate in BC for March to November 2020, by age group. Suicide rates among youth (age 10–19) were lower than for all other age groups. The March to November 2020 suicide rate for those age 80+ (11.4 per 100,000 population) was the highest among all age groups for this period. This may reflect increased illness and social isolation and reduced physical and social support due to physical distancing measures. Similarly elevated rates among all working-age groups (age 20–59) may reflect stressors such as lost income, loss of employment, missed educational opportunities, increased demands for child and elder care, and difficulty accessing mental health care during the pandemic.

Equity Considerations

As described in this report, COVID-19 response measures may worsen existing inequities and exacerbate mental illness, thus increasing the risk of self-harm and/or suicide among already high-risk and/or marginalized populations. These include the following:

- People with a pre-existing mental health condition or illness[50] and/or substance use disorder.[51]
- Indigenous people (especially youth).[52]
- People (especially youth) who identify as trans, gender non-conforming, non-binary, LGBTQ+, and/or Two-Spirit.[8,9,10,53]
- Youth. A larger percentage of young adults had suicidal thoughts than other age groups (19% of those age 18–24 and 21% of those age 25–34).[41]
- Parents of young children who lack access to childcare. During COVID-19, 13% of parents surveyed reported suicidal thoughts due to stress associated with increased childcare burden.[41] This may affect females disproportionately.
- People (especially older adults[54,55]) living with poor health, disability,[23] and chronic pain.[24,25]
- Frontline workers (including nurses[56]) and people who have had COVID-19.[26,57]
- People at risk of domestic/intimate partner violence, who are disproportionately female.[29,30]
- People with lower socio-economic status (e.g., lower income, lower levels of education, unemployed or at risk of unemployment or homelessness, living in poverty).[23,27,58,59] Loss of employment has increased for all working-age groups in BC since the start of the pandemic, but is most severe among youth (15–24 years) and females.[60] Research suggests that increased unemployment could increase suicide risk by 20% to 30% worldwide.[61,62]
- Residents of rural/remote communities who may have reduced access to mental health, social, and emergency services.[26]

Data presented here also show that males (especially youth and middle-aged/older men) are more likely to commit suicide, while females (especially young women and girls) and non-binary/transgender youth and adults are at higher risk of hospitalization due to attempted suicide and/or self-harm.

Suicidal thoughts were more commonly reported during the pandemic and escalated as the pandemic progressed. Before the pandemic, 2.5% of Canadians reported having had suicidal thoughts in the previous year.[12] During the pandemic, a repeated survey of 3,000 people found that the proportion of Canadians who reported suicidal thoughts increased from 6% in May 2020 to 10% in September 2020.[63] According to this survey, between May and September 2020, suicidal thoughts increased substantially among the following groups:

- LGBTQ2+ (from 14% to 28%);
- People with a pre-existing mental health condition (from 18% to 27%);
- People with a disability (from 15% to 24%);
- Indigenous Peoples (from 16% to 20%); and
- Parents of children under age 18 (from 9% to 13%).[41]

Truth and Reconciliation: Colonial Trauma

Indigenous Peoples' diverse ancestral knowledge systems of health and wellness have enabled them to survive multiple pandemics since contact with European settlers; however, Indigenous Peoples did not come into the pandemic on an equal footing. Due to the ongoing harms of historic and current colonialism, institutional racism, and systemic violence, self-harm and suicide were already disproportionately high for Indigenous Peoples and communities.[52,64] There are reports of COVID-19 contributing to a rise in Indigenous Peoples' distress and increase in accessing mental health crisis services for support related to anxiety, loneliness, and substance use.[65]

Actions Initiated or Planned to Address Unintended Consequence

- **Province of BC:** offers a website with information for accessing support services for self-harm and suicide (https://www2.gov.bc.ca/gov/content/mental-health-support-in-bc/suicide-and-self-harm).
- **BC Ministry of Mental Health and Addictions**: $5 million for virtual mental health supports, with a focus on frontline health-care workers, youth and families, and isolated seniors. Programs include virtual counselling services, peer support, and stress management during COVID-19.[2] In December 2020, the Ministry invested $2.3 million in suicide prevention programs for Indigenous youth and post-secondary students.[66]
- **BC Ministry of Social Development and Poverty Reduction**: emergency financial support for people on income or disability assistance and low-income seniors, and COVID-19 resources for Community Living BC clients and families.[67]
- **BC Ministry of Municipal Affairs and Housing**: temporary rental supplements and amended Tenancy Policy Guidelines to increase protection for renters.[68]
- **Canadian Mental Health Association**: developing a report with the University of British Columbia on the effects of COVID-19 on vulnerable populations.[69]
- **Current Research in BC:** John Ogrodniczuk (UBC) is researching men's experiences, including men's health and suicide, during the COVID-19 pandemic.[70]

Considerations for Further Action

Although immediate increases in self-harm and suicide due to the pandemic and associated response measures have not been seen, as this report indicates, risk has increased among several populations. It is therefore important to monitor trends in risk factors such as depression and substance use and ensure there are ample mental health and crisis intervention supports available to prevent a delayed surge.

Repercussions of COVID-19 and the response measures may still have an impact on self-harm, suicidal ideation, and suicide deaths in the longer term.[44]

- Continue to monitor suicide rates and risk and protective factors, particularly for at-risk populations (e.g., non-binary, female, and Indigenous youth).
- Implement a coordinated cross-ministry campaign to raise awareness of self-harm and suicide and promote resilience. Include a focus on existing peer and community supports.[71]
- Develop strategies to promote population mental health and wellness[72] and reduce the risk of self-harm and suicide, including but not limited to the following:
  - Refresh and expand the provincial Suicide PIP Framework for BC (https://suicidepipinitiative.wordpress.com/framework-and-planning-template/).
  - Promote best practices from the Provincial Suicide Prevention Clinical Framework (http://www.bcmhsus.ca/Documents/the-provincial-suicide-clinical-framework.pdf).
  - Expand access to mental health and substance use services.[26,73]
  - Update provincial mental health strategies in BC such as *A Pathway to Hope: a roadmap for making mental health and addictions care better for people in British Columbia*[18] to reflect the increased and changed need for services that COVID-19 is creating, including monitoring, expanding prevention and treatment, and addressing challenges to accessing services.
  - Reduce wait-times for mental health services.
  - Work to reduce stigma and emphasize the importance of seeking help if experiencing suicidal thoughts.
  - Enhance social connectedness and cohesion, and other protective factors.
  - Facilitate active coping strategies and health promoting behaviours including stress management, substance use reduction, physical activity, and sleep hygiene.
  - Develop evidence-based resources for parents and caregivers to support youth and young adults at risk of suicide.
  - Support curricula for social and emotional learning and resilience, and enhance access to counselling in school settings.
- Address the impact of school closures on children and youth and their mental health and wellness. This includes addressing their increased stress and anxiety regarding the pandemic, as well as addressing the lost months of social, peer and teacher/mentor supports and services for mental health, self-harm and suicidal ideation/completion.
- Work in meaningful partnership with Indigenous rightsholders and Indigenous organizations to implement culturally safe and appropriate mental health services that arrest racism and address experiences of colonialism, collective trauma and genocide, and current pandemic fears and stress.

Appendix 12-A: Data Methodology Notes

1. Charts provided by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer.

For questions contact: HLTH.PHSE@gov.bc.ca.

2. Data table for Figure 12.5: Monthly suicide death counts, Age 10+, BC, January 2015 to July 2020

Month \ Year	2015	2016	2017	2018	2019	2020
Jan	56	62	46	43	54	61
Feb	45	54	39	40	54	60
Mar	43	57	66	48	57	48
Apr	52	49	48	41	56	37
May	60	49	50	63	63	39
Jun	52	50	46	52	45	60
Jul	56	45	62	62	49	52
Aug	58	50	58	44	61	
Sep	50	49	33	54	64	
Oct	61	56	43	55	41	
Nov	33	38	40	41	50	
Dec	49	44	42	35	54	

Notes: Suicide is defined as a death resulting from self-inflicted injury, with the intent to cause death. Recent suicide data are preliminary and subject to change, and should be interpreted with caution. Causes are still under coroner's investigation and are considered suspect cases. Rates calculated using mid-year population from each year.

Source: BC Coroners Service, Mid-year populations from PEOPLE2020. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, January 2021.

3. Methodology

Figures 12.1 to 12.4 report on hospitalizations (i.e., number of hospital inpatient admissions) due to injuries determined to be caused by self-harm. Case ascertainment follows the framework of the BC Injury Surveillance Working Group, which is briefly summarized here. This methodology excludes patients admitted for day surgery, records without an external cause of injury ICD-10 code **and** a diagnosis of injury ICD-10 code. Secondary diagnosis (type 3) are excluded from case ascertainment. Complications due to medical and surgical care are excluded from case ascertainment. Sequelae of injury are excluded from case ascertainment. Direct transfers of inpatients between acute care facilities generate multiple records but are only counted as one hospitalization. After considering these inclusion and exclusion criteria, hospital admissions with an external cause of injury along with a diagnosis of self-harm (ICD-10-CA codes X60-X84 and Y87.0) are identified as self-harm injury hospitalizations.

Figures 12.5 to 12.8 report on suicide deaths, which are defined as a death resulting from self-inflicted injury, with the intent to cause death, based on the coroner's investigation. The BC Coroners Service states that data and trends for 2020 and 2021 should be interpreted with caution as the data require time to settle. Cases that are currently classified as undetermined may be updated and those classified as suicide may also change as the coroner's investigation concludes.

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Chapter 13

Problematic Alcohol Use

(Reported June 2021)

Key Findings:

- Population survey and alcohol sales suggest that the COVID-19 pandemic has led to increased alcohol consumption among youth and adults in BC.
- Since the start of the pandemic, the self-reported consumption and alcohol sales across BC have increased, but support systems and treatment programs for alcohol use disorders became more difficult to access during COVID-19 due to public health measures to prevent transmission.
- The BC COVID-19 SPEAK results show alcohol consumption during COVID-19 in BC is much higher than what has been reported nationally. The increase in alcohol consumption in BC shows high rates among those age 18 to 49 years, and those with higher levels of education and household income.

Situation

Public health and other response measures introduced to reduce the spread of COVID-19 have impacted the general population, including increased stress, increased social isolation, less income and/or economic stability, disruptions to daily routines, and boredom. These factors may contribute to increased use of alcohol and other substances, and a potential corresponding decline in mental health.

Background

There is a continuum of alcohol use, from low-risk drinking where consumption is safer (though not risk-free),[1] to at-risk drinking, problematic use, and finally to dependence.[2] *Alcohol use disorders* (AUD) are clinically diagnosed conditions related to high-risk alcohol consumption (e.g., dependence) that are often underreported but can cause considerable harm to the individual and those around them (e.g., health outcomes like cancer and injuries; premature death and disability; economic, health, and social costs; and intimate partner violence).[3,4] There are additional risks for women in their childbearing years, as well as those who are pregnant (e.g., fetal alcohol spectrum disorder [FASD], stillbirth).[5]

In the years leading up to the COVID-19 pandemic, alcohol consumption was increasing more in BC than in the rest of Canada: it has continued to increase since 2013, whereas other Canadian jurisdictions report stable or declining rates. In BC in 2017/2018, the volume of pure ethanol consumed per person on a yearly basis among those 15 years and over rose to 9.44L. This is the highest rate of consumption in 16 years and is higher than the national average of 8.2L.[6] Additionally, in 2017, revised liquor legislation came into effect in BC, expanding alcohol availability.[7]

Youth in BC reported high levels of alcohol use before COVID-19. According to the 2018 BC Adolescent Health Survey (BCAHS), among youth age 12–17 who drank alcohol the Saturday prior

to the survey, 61% reported binge drinking.[a] The 2018 BCAHS also found that females were more likely to binge drink than males (63% compared to 59%, respectively).[8]

The World Health Organization reports that alcohol use may increase susceptibility to COVID-19 because it is associated with risk-taking behaviours and can weaken the immune system.[9] If someone with AUD contracts COVID-19, they may be at a higher risk for infection, severe illness, and worse health outcomes.[10,11,12]

During COVID-19, new changes in the Liquor Control and Licensing Regulations were introduced. These changes were expected to ease financial burdens in the hospitality sector, as well as to ensure an available supply of alcohol to minimize withdrawal risks for those with AUD. Some examples have included:

- Allowing licensed establishments (e.g., restaurants) to sell and deliver packaged liquor for off-site consumption with a purchased meal;
- Extending store hours and delivery services for buying alcohol from 7 a.m. to 7 p.m.; and
- Approving a temporary wholesale pricing model that allows liquor licensees to buy beer, wine, and spirits at lower cost.

Some COVID-19 response measures (e.g., limiting availability of in-person community services) have reduced or discouraged access to related health-care and addiction services (including clinical treatment and social supports) for those with AUD, which may lead to worsened AUD and/or harmful effects on health.[13] However, some support services continued to be available through explicit exemptions in the public health orders to allow support groups (e.g., Alcoholics and Narcotics Anonymous) to continue in-person meetings where safe to do so.[14] Additionally, some community-based services transitioned to holding online meetings.[15,16]

An increase in problematic alcohol use in BC will likely lead to increased health concerns during and after the pandemic, if trends continue. This could include: increased mental health concerns;[17] increased intentional and unintentional injury including self-harm, suicide[18] and gender-based violence or intimate partner violence;[12,19] perinatal health impacts for pregnant/new parents and infants;[20] more children and youth experiencing or witnessing alcohol/substance use; child abuse or neglect;[21] and poor long-term physical health outcomes (e.g., cancers, damage to liver, heart, pancreas).[22]

Findings

Alcohol consumption may be associated with declining mental health during COVID-19. During the pandemic, several sources show deteriorating mental health (e.g., increased anxiety, stress, depression, loneliness[23]) as well as an increase in alcohol consumption.[24,25,26] Those experiencing increased mental distress and overall stress during the pandemic (see Chapter 8: Mental Health) may increase their consumption and/or reliance on substances, including alcohol, to cope. For example, in the Canadian Perspectives Survey Series (CPSS, Series 1) conducted March 29 to April 3, 2020, 14.0% of Canadians 15 years and older reported having increased their weekly alcohol consumption during the initial weeks of COVID-19 public health measures.[27] The same survey found that Canadians reporting poorer mental health are more likely to have increased their use of alcohol during COVID-19, compared to those reporting "excellent," "very good," or "good" self-perceived mental health.[27]

The CPSS also found that nearly 30% of respondents reported having "fair" or "poor" mental health and having increased their alcohol consumption, while only 10% of those reporting better mental health reported increased alcohol consumption.[27] A subsequent CPSS survey conducted January 25–31, 2021, found similar results.[28] It is important to note that there are also other factors that are related to increased alcohol use during the pandemic that are not necessarily directly linked to mental health. The Canadian Centre on Substance Use and Addiction reported that survey respondents cited stress (38%),

[a] "Binge drinking" is when males consume four or more alcoholic drinks within a couple of hours and females consume three or more.

boredom (44%), lack of regular schedule (48%), and loneliness (17%) as the top four reasons for increased alcohol use since the start of May 2020 compared to pre-pandemic times.[29]

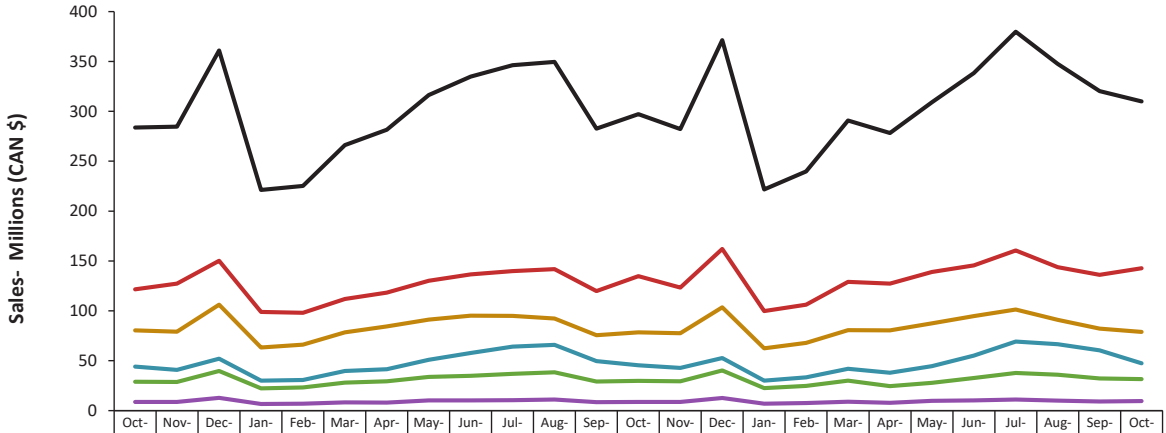
In 2020, alcohol sales (a measure for alcohol consumption) were higher than recorded in 2019. Table 13.1 shows the comparison of sales in 2019 and 2020. It shows the percentage change were particularly high in March (10.2%), July (9.1%), and September (12.9%). Sales slightly decreased for the months of April (-1.1%), May (-2.0%) and August (-0.6%) as compared to the same months in 2019.[30] The increases seen in February and March may be partially due to panic-buying and stocking up in fear that stores would run out or close. Alcohol sales were highest at private liquor stores and government stores from February to April, while sales at bars and restaurants were significantly lower during the same time period in comparison to 2019 sales.[31] The increases in July and September may be related to the easing of public health measures.

Table 13.1 Comparison of Annual Alcohol Sales ($ million) and Average per cent Increase in BC during the First Ten Months of 2019 and 2020

	2019 ($ million)	2020 ($ million)	$ Change ($ million)	% Change
January	228.04	228.99	0.94	+0.4%
February	232.51	247.66	15.14	+6.5%
March	274.45	302.40	27.96	+10.2%
April	291.90	288.67	-3.23	-1.1%
May	325.18	318.67	-6.51	-2.0%
June	343.98	348.92	4.94	+1.4%
July	357.36	390.05	32.69	+9.1%
August	358.43	356.41	-2.02	-0.6%
September	291.83	329.45	37.62	+12.9%
October	306.85	319.26	12.41	+4.0%

FIGURE 13.1

Total Monthly Alcohol Sales, by Regional Health Authority, BC, October 2018 to October 2020



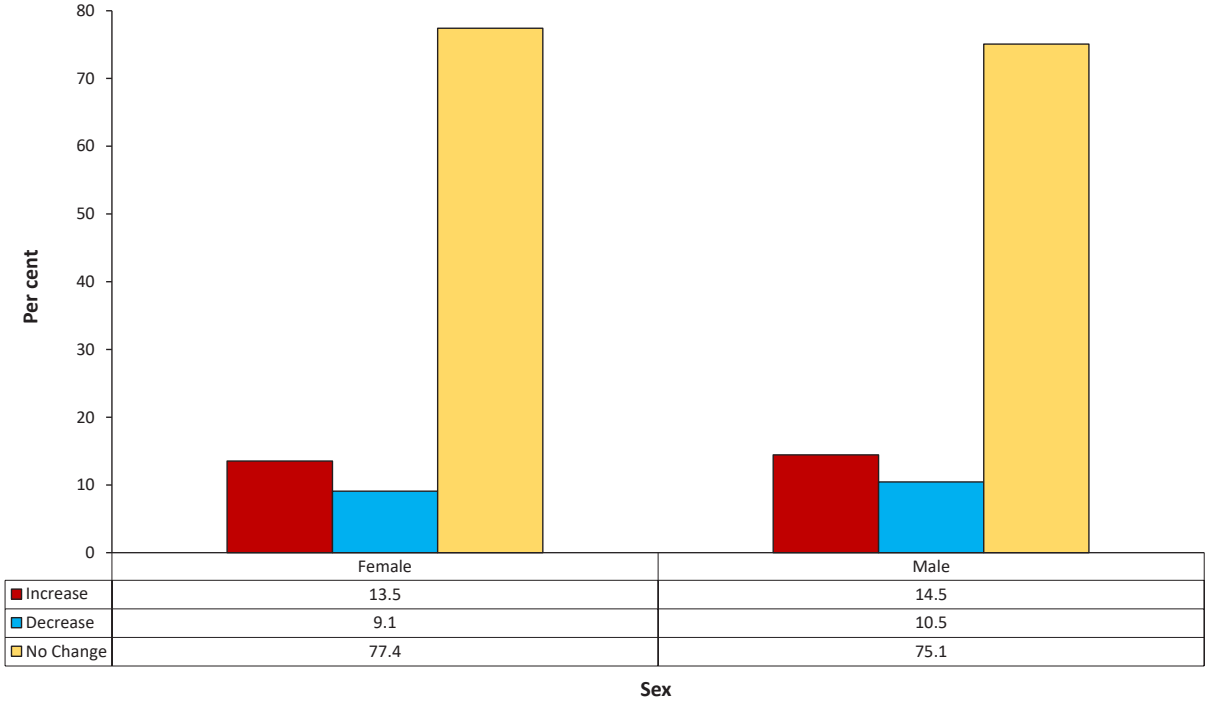
	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20
Interior	44.0	40.8	52.1	30.0	30.6	39.7	41.6	51.0	57.8	64.1	65.9	49.6	45.5	42.8	52.7	30.1	33.4	41.9	38.1	44.7	55.1	69.2	66.5	60.4	47.3
Fraser	80.5	79.2	106.2	63.2	66.3	78.4	84.3	91.1	95.3	94.9	92.4	75.6	78.4	77.7	103.5	62.5	67.8	80.7	80.5	87.6	94.8	101.3	91.1	82.3	79.0
Vancouver Coastal	121.6	127.2	150.3	99.0	98.1	111.9	118.3	130.2	136.5	139.9	141.9	119.9	134.8	123.5	162.0	99.7	106.2	129.0	127.4	139.0	145.6	160.4	143.8	136.2	142.6
Island	28.9	28.7	39.7	22.3	23.3	28.0	29.3	33.8	35.0	36.9	38.4	29.1	29.9	29.5	40.3	22.5	24.7	30.1	24.7	27.9	32.7	37.7	36.1	32.2	31.5
Northern	8.7	8.7	12.8	6.7	7.0	8.2	8.1	10.2	10.3	10.4	11.0	8.5	8.7	8.8	12.8	6.9	7.6	9.0	7.8	9.8	10.2	11.1	10.0	9.2	9.5
BC	283.7	284.7	361.1	221.2	225.3	266.1	281.7	316.4	334.9	346.2	349.6	282.7	297.3	282.2	371.3	221.7	239.7	290.7	278.3	309.1	338.5	379.8	347.5	320.4	310.0

Month/Year

Notes: Total sales are combined BC Liquor Distribution Branch (BCLDB) alcohol retail sales and BCLDB alcohol wholesale to private liquor retail outlets. Please note that for wholesale to private retail outlets, there is a reporting time lag in recent months plus the reported sales numbers can change retroactively up to several months (higher or lower). The differences are more significant in recent months. For this reason, caution should be exercised when comparing recent months of sales data to the same months in previous years.
Source: 2018-2020 Alcohol Sales Data File. Provided by the BC Liquor Distribution Branch. Prepared by Population Health Surveillance and Epidemiology, BC Office of the Provincial Health Officer, BC Ministry of Health, November 2020.

Figure 13.1 shows alcohol sales by health authority in millions of Canadian dollars ($Millions) and shows similar patterns across the regions of BC. All health authority regions saw an overall increase in sales from January 2020 to July 2020, followed by slight declines afterwards; this is consistent with the pattern seen in 2019. Sales were highest across Vancouver Coastal health region with lowest sales in the Northern and Island regions.

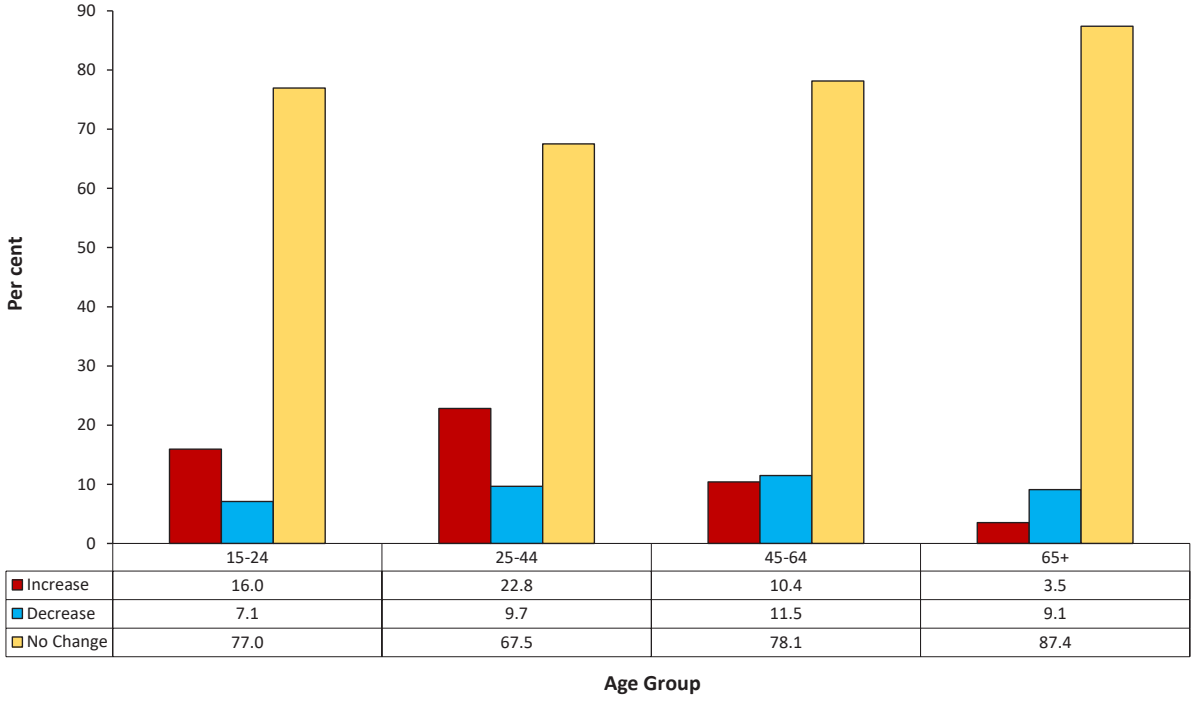
FIGURE 13.2



Note: Non-response has been excluded.
Source: Statistics Canada, The Canadian Perspective Survey Series 1, Public Use Microdata File. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, July 2020.

Figures 13.2 and 13.3 show the percentage of respondents of the same national survey who reported their alcohol consumption increased, decreased, or did not change. Figure 13.2 shows that Canadian males and females reported similar patterns.

FIGURE 13.3

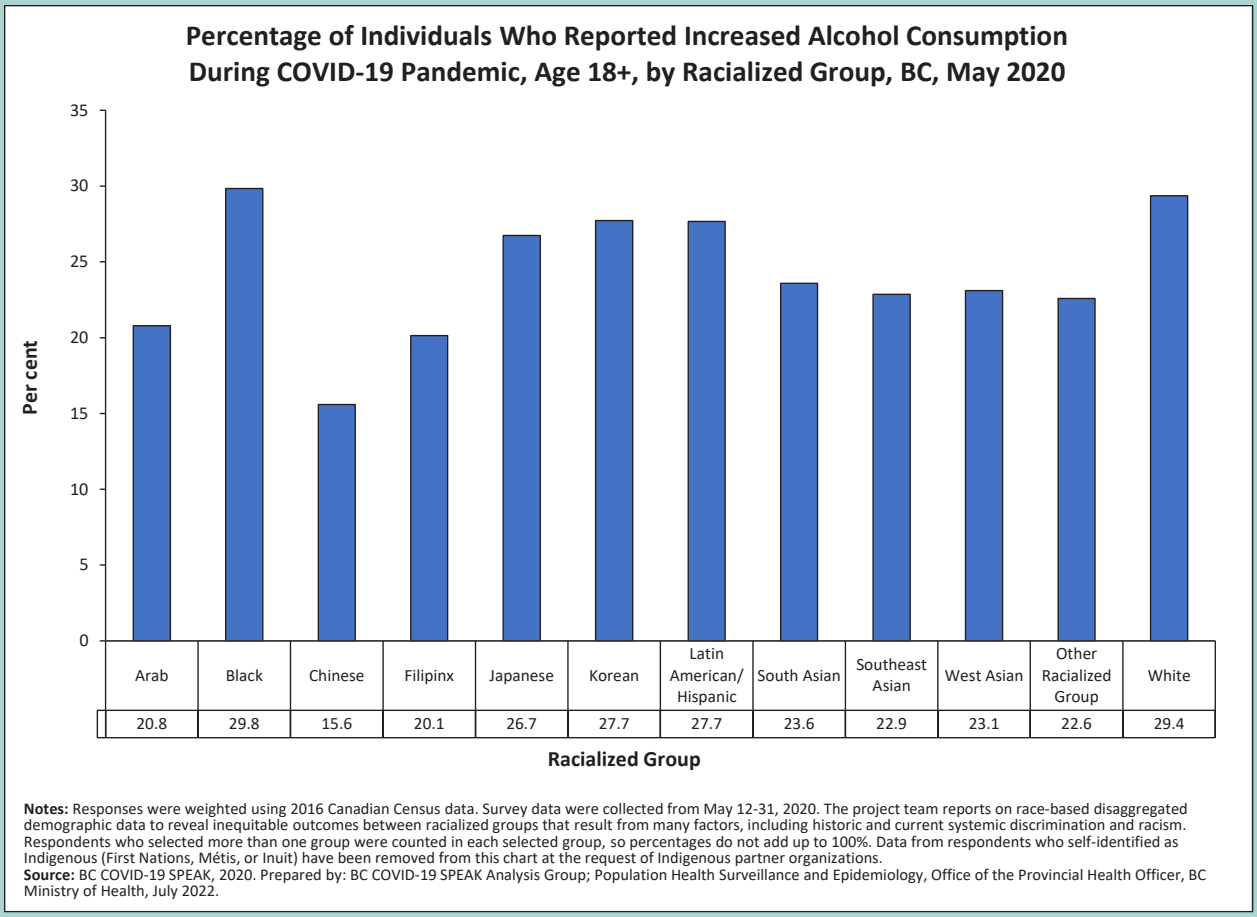


	15-24	25-44	45-64	65+
Increase	16.0	22.8	10.4	3.5
Decrease	7.1	9.7	11.5	9.1
No Change	77.0	67.5	78.1	87.4

Note: Non-response has been excluded.
Source: Statistics Canada, The Canadian Perspective Survey Series 1, Public Use Microdata File. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, July 2020.

Analyses by age (Figure 13.3) shows that the highest increases in alcohol consumption were reported by those age 15–24 years (16.0%) and 25–44 years (22.8%).

FIGURE 13.4

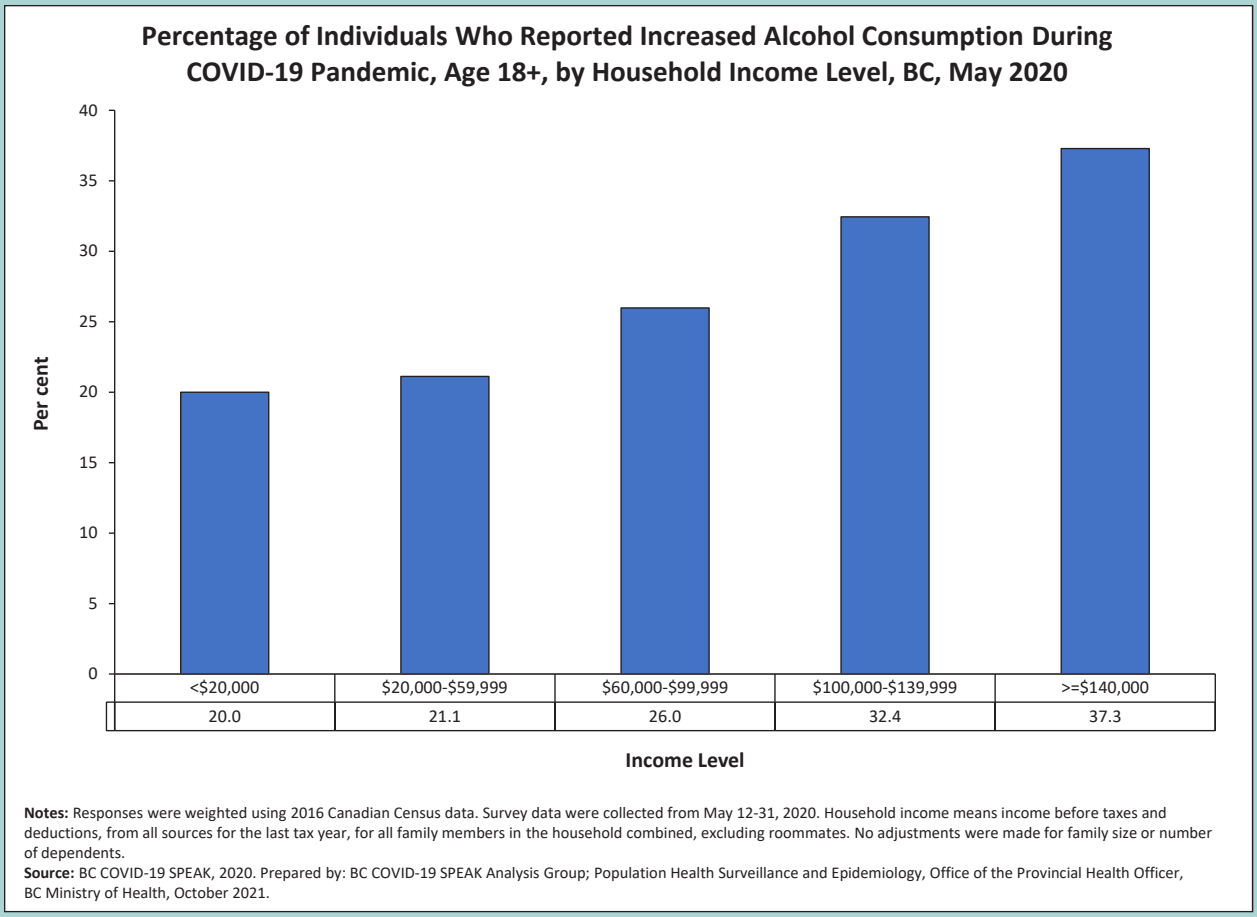


Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020. The project team reports on race-based disaggregated demographic data to reveal inequitable outcomes between racialized groups that result from many factors, including historic and current systemic discrimination and racism. Respondents who selected more than one group were counted in each selected group, so percentages do not add up to 100%. Data from respondents who self-identified as Indigenous (First Nations, Métis, or Inuit) have been removed from this chart at the request of Indigenous partner organizations.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, July 2022.

Figures 13.4 to 13.7 show results from BC COVID-19 SPEAK, including analyses of alcohol consumption by racialized group (Figure 13.4), household income (Figure 13.5), education level (Figure 13.6), and population density (Figure 13.7).

Figure 13.4 shows differences in self-reported alcohol use across racialized groups in BC. Increased alcohol consumption was reported at higher rates by survey respondents who identify as Black (29.8%), white (29.4%), Korean (27.7%), Latin American/Hispanic (27.7%), and Japanese (26.7%). Increased alcohol consumption was reported at lower rates by Chinese (15.6%), Filipinx (20.1%), and Arab (20.8%) populations.

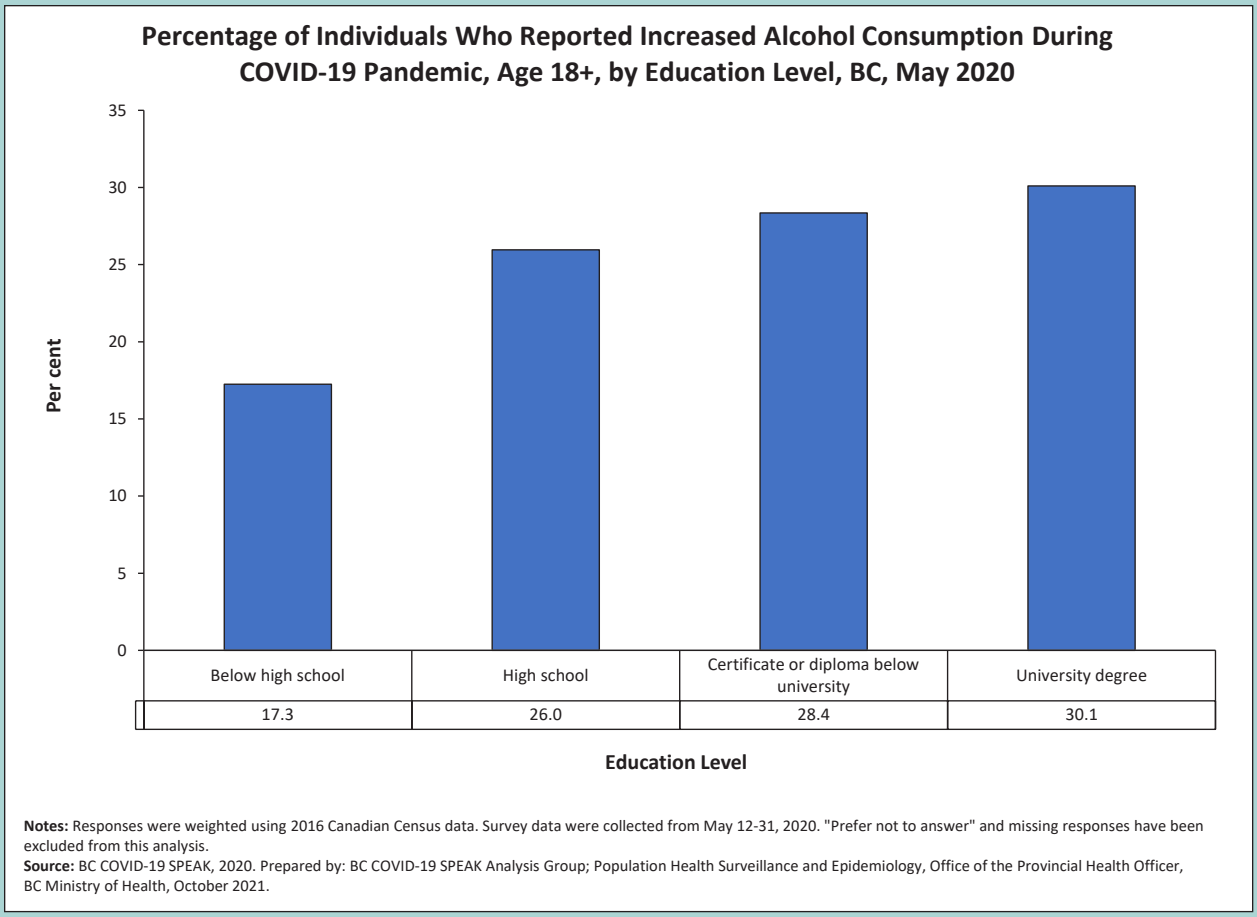
FIGURE 13.5



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020. Household income means income before taxes and deductions, from all sources for the last tax year, for all family members in the household combined, excluding roommates. No adjustments were made for family size or number of dependents.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, October 2021.

Figure 13.5 shows BC COVID-19 SPEAK respondents who reported increased alcohol consumption, with analyses by household income level. It illustrates that a higher proportion of households who reported higher household incomes reported increased alcohol consumption. This ranged from 20% in the lowest household income group (reporting <$20,000) to 37.3%, in the highest income group (≥ $140,000).

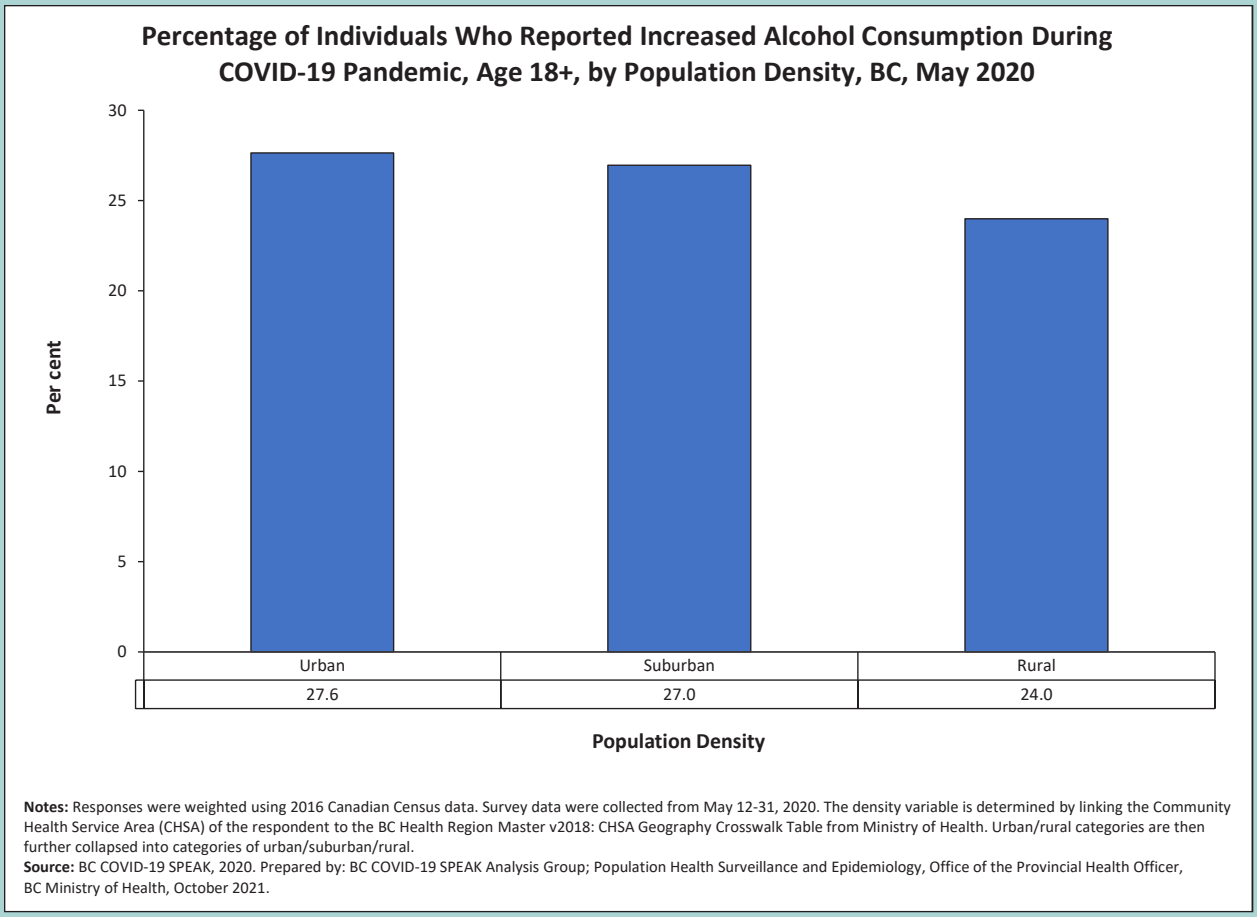
FIGURE 13.6



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020. "Prefer not to answer" and missing responses have been excluded from this analysis.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, October 2021.

Figure 13.6 shows BC COVID-19 SPEAK respondents who reported increased alcohol consumption, with analyses by education level. It reveals a pattern of increasing self-reported alcohol use as level of education increased: 30.1% of those with university degrees reported increased alcohol consumption, whereas only 17.3% of those not having completed high school reported an increase in consumption.

FIGURE 13.7



Notes: Responses were weighted using 2016 Canadian Census data. Survey data were collected from May 12-31, 2020. The density variable is determined by linking the Community Health Service Area (CHSA) of the respondent to the BC Health Region Master v2018: CHSA Geography Crosswalk Table from Ministry of Health. Urban/rural categories are then further collapsed into categories of urban/suburban/rural.
Source: BC COVID-19 SPEAK, 2020. Prepared by: BC COVID-19 SPEAK Analysis Group; Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, October 2021.

Figure 13.7 shows BC COVID-19 SPEAK respondents who reported increased alcohol consumption, with analyses by population density. It shows almost no difference in self-reported alcohol consumption between those living in urban and suburban areas (27.6% and 27.0%, respectively), during the first months of the pandemic. Slightly fewer respondents in rural areas reported increased alcohol consumption (24%).

A national survey found that 20.5% of Canadians who drink alcohol and have been staying home more due to COVID-19, drink alcohol *more often* than before the pandemic.[29] This suggests that (when combined with results and sales data discussed above), the issue of alcohol consumption during the pandemic reflects the population drinking both more frequently and in greater amounts.

Equity Considerations

As described above, youth, females, and those with poorer mental health or with AUD may be especially vulnerable for alcohol-related risks during COVID-19.[32,33,34] People with AUD are vulnerable both to increased alcohol consumption as well as increased risk of poor health outcomes due to COVID-19.[12] Many of the clinical and social supports for those with AUD have been closed or have moved to a virtual care model, which creates inequitable barriers for those without access to related technologies (e.g., financial barriers to technology, rural and remote with no access to in-person or virtual care).[12]

Truth and Reconciliation: Alcohol Use

Due to deeply rooted ideologies of settler supremacy and historical and contemporary colonial practices, many Indigenous Peoples did not enter the COVID-19 pandemic on an equal footing with other residents. As a result, they sometimes experienced disproportionate impacts from COVID-19 and associated public health measures. Indigenous Peoples and communities faced a sudden increase in pre-existing stigma, racism, and systemic barriers, which can influence patterns of alcohol consumption. In rural or remote areas, or on reserve, there may be a sudden or unexpected shortage of safe alcohol supply, as well as a reduction in available treatment options; consequently, those who regularly consume alcohol face the potential risk of withdrawal. Meanwhile, more people may use alcohol and other substances to cope with the compounding stressors of living during the COVID-19 pandemic.

Actions Initiated or Planned to Address Unintended Consequence

Initiated actions:

- Ministry of Mental Health and Addictions (MMHA): MMHA has made new funding available for substance use treatment and supportive recovery services which have experienced financial hardship due to COVID-19 "*Substance Use: Treatment and Recovery COVID-19 Support Grant Program.*"[35]
- BC Centre on Substance Use (BCCSU): in April 2020, the BCCSU released new guidance on AUD management during COVID-19, "*COVID-19: Information for Health Care Providers Regarding Alcohol Use Disorder and Withdrawal Management.*"[36]
- Canadian Institute for Substance Use Research (CISUR): The CISUR has released new guidelines "*Safer Drinking Tips during COVID-19.*"[37]
- In January 2021, the federal government announced an investment of $1.5 million over three years awarded to the BCCSU to develop the "*National Guideline for the Clinical Management of High-Risk Drinking and Alcohol Use Disorder.*"[38]
- Recent and currently ongoing research related to alcohol consumption during COVID-19 is listed in Appendix 13-B.

Considerations for Action

More work is needed to understand the short- and long-term impacts of increased alcohol consumption in BC, including the impacts on mental and physical health, links to other unintended consequences (e.g., violence, injuries), and the altered or increased need for support services.

1. British Columbians will continue to be vulnerable, now and into the future, to the impacts of policy changes that have increased access to and availability of alcohol.
2. Re-assess alcohol policy and legislation changes, and revise changes introduced in 2017-2020 to support less hazardous drinking. Understanding the full impact of ongoing policy changes on access to and availability of alcohol will be critical in building BC back better.
3. Consider other health-care actions, including health education and other prevention campaigns; broadening screening and brief intervention in primary care for the population for at-risk drinking, with additional supports for people living with AUD; improving access to virtual supports for those requiring alcohol treatment services.[39]
4. Conduct ongoing comprehensive monitoring of COVID-19 impacts on alcohol consumption in BC, including longer term effects resulting from increased consumption.
5. Pursue action to implement the pricing policies of alcohol and its economic availability as recommended in the 2008 BC Provincial Health Officer report "*Public Health Approach to Alcohol Policy.*"[40] These recommendations can help to reduce the already high rates of alcohol use in BC and curb the increases seen since March 2020.

Alcohol Policy

Alcohol policy influences the amount of alcohol consumed, which impacts public health. Policies that increase access to, and the availability of. alcohol, or decrease the price of alcohol, lead to increased alcohol consumption. Increased alcohol consumption leads to greater likelihood of associated harms.

Several alcohol policy changes implemented in BC during the COVID-19 pandemic, including the following, have served to relax controls and increase access to alcohol:

- Designating liquor outlets an essential service, which allowed continued operation and extended hours of service throughout the pandemic;
- Providing wholesale pricing to "liquor primary licensees" (restaurants, pubs, and bars), which has enabled them to offer lower-priced alcohol to customers;
- Allowing the sale and delivery of alcohol from liquor retail outlets and liquor primary licensees; and
- Extending the hours of service of liquor retail stores.
- Several communities in BC have also allowed alcohol consumption on public properties such as parks, beaches, and squares.

Although implemented to address critical issues related to the pandemic, some changes that were originally implemented on a temporary basis have been made permanent. As such, these policies are expected to increase pressure on the health-care and criminal justice systems, and to have cumulative and ongoing negative impacts on the health and well-being of British Columbians.

Appendix 13-A: Data Methodology Notes

1. Charts provided by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer.

For questions contact: HLTH.PHSE@gov.bc.ca.

2. Statistics Canada The Canadian Perspective Survey Series 1

The frame for surveys of the Canadian Perspective Survey Series (CPSS) is Statistics Canada's pilot probability panel. The counts represent population estimates of the number of people within each age group/sex. The probability panel was created by randomly selecting a subset of the Labour Force Survey (LFS) respondents. Therefore, the survey population is that of the LFS, with the exception that full-time members of the Canadian Armed Forces are included. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; the institutionalized population, and households in extremely remote areas with very low population density. Data collection occurred between March 29, 2020 and April 3, 2020.

The LFS is a household survey carried out monthly by Statistics Canada. The survey is conducted in 54,000 households across Canada. Information is obtained from all members of the selected household who are 15 years old and older, whether they work or not.

3. BC COVID-19 SPEAK Survey

Survey administration details: The BC COVID-19 SPEAK Survey was primarily an online survey administered from May 12, 2020 to May 31, 2020 across British Columbia. A call centre was also created to support individuals who wished to take the survey with assistance. The survey was available in English and Simplified Chinese (online), with language guides in downloadable electronic format available for 9 other languages (Arabic, American Sign Language, Farsi, French, Korean, Punjabi, Spanish, Traditional Chinese and Vietnamese). All other languages were available through the call centre from PHSA Provincial Language Services.

Sampling details: The target population for the survey was residents of British Columbia who were 18 years of age or older. In order to achieve a large and representative sample, a response target of 2% of the urban population and 4% for rural/remote communities were set as determined by the Community Health Service Area (CHSA) density designation. Targets were also established for age, gender, income, education and ethnicity by each geographic area. Progress towards these targets was monitored daily and purposeful promotion and stakeholder outreach was done in order to better reach certain geographies and population demographics. Population targets were surpassed for each Regional Health Authority. However, not all sub-regions or demographic groups by geography did reach their target. Specifically, rural communities, populations with lower education, lower incomes, and some visible minorities were less reached and were prioritized for outreach. The final analytical dataset, which only included surveys where a Health Service Delivery Area geography, age, and gender were assigned and where the respondent must have completed at least 33% of the survey, contained 394,382 responses.

Weighting details: Statistical weighting is often used in large surveys to ensure that the sample of collected responses reflects the overall target population. This type of weighting compensates for the fact that certain demographics are less likely to respond to a survey. By establishing detailed socio-demographic targets at the outset for each geographic area of interest within the survey area, it allowed for more focused participant recruitment with the ultimate benefit of applying smaller weights. The BC COVID-19 SPEAK results presented in this chapter were weighted using 2016 Canadian Census data by demographic and geographic variables, as appropriate (e.g., age, sex, ethnicity, education level, local health area), to account for residual differences in sample demographics and to ensure that the sample is as representative as possible of the overall geographic population that is being reported on. This set of survey weights is slightly different than those used to produce the public BC COVID-19 SPEAK Round 1 Dashboard, so the results in this report are not directly comparable to the public Dashboard.

Limitations: BC COVID-19 SPEAK Survey is a non-randomized voluntary survey subject to self selection bias among those who choose to respond to the survey. To adjust the sample to the population and enhance representativeness, quota-based sampling by geography and post collection weighting are used. Correction for unknown population characteristics is not possible. This limitation is not unique to non-randomized surveys as self selection bias is apparent in voluntary randomized surveys as well where a significant proportion of those offered to take a survey choose not to participate. Despite attempts for outreach to underrepresented communities and statistical weighting and the creation of multiple points of access, this survey may be limited in its ability to fully reflect the experiences of members of communities unable to complete the survey due to language or access barriers.

Notes on racialized groups: Figure 13.4 shows BC COVID-19 SPEAK responses disaggregated by non-Indigenous racialized groups. This report analyzes data by racialized groups "to reveal and address systemic inequalities in social determinants of health and access to health care," as per the report, *Disaggregated demographic data collection in British Columbia: The Grandmother Perspective*, by the BC Office of the Human Rights Commissioner.[b]

Some of the categories charted were abbreviated for space. The category "Filipinx" is a gender-neutral term used in place of "Filipino" and/or "Filipina." The question asked, "Do you consider yourself to be (check all that apply) …."

The options included "First Nations," "Métis," and "Inuit." Respondents who selected "First Nations," "Métis," or "Inuit" are not reported in these figures. In accordance with Indigenous Data Governance practices in BC, data from Indigenous respondents is provided to the First Nations Health Authority and Métis Nation British Columbia to determine how best to use the data in planning and engaging Indigenous communities across the province.

The options also included "White (European descent)," "Chinese," "South Asian (e.g., East Indian, Pakistani, Sri Lankan)," "Black (e.g., African or Caribbean)," "Filipino," "Latin American/Hispanic," "Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian)," "Arab," "West Asian (e.g., Iranian, Afghan)," "Korean," "Japanese," "Other, please specify," and "Prefer not to answer."

Respondents are reported in every category they selected.

[b] BC Office of the Human Rights Commissioner. Disaggregated demographic data collection in British Columbia: the grandmother perspective. Vancouver, BC: BC Office of the Human Rights Commissioner; 2020 Sep [cited 2022 Aug 23]. Available from: https://bchumanrights.ca/wp-content/uploads/BCOHRC_Sept2020_Disaggregated-Data-Report_FINAL.pdf.

Appendix 13-B: Research Initiated to Examine Alcohol Use and COVID-19

Study	Lead	Funder
Youth mental health and substance use in the context of COVID-19: A rapid response multi-component	Skye Barbic, University of BC (UBC)	Canadian Institutes of Health Research (CIHR)
Confidential Virtual Addiction Treatment for Healthcare Workers	Lesley Lutes, Zach Walsh, UBC-Okanagan	Canada's Digital Technology Supercluster COVID-19 program
Pandemic experiences and impacts of COVID-19 on the mental health of Indigenous communities	Alanaise Goodwill, Simon Fraser University (SFU)	CIHR Operating Grant: Knowledge Synthesis Grant: COVID-19 Rapid Research Funding Opportunity in Mental Health
Youth Health and COVID-19 Survey; Assessing the impact of the COVID-19 pandemic on social and health	Rodney Knight, Providence Health Care Institute	CIHR
Service provider perspectives on tools to improve access to mental health supports for sexual and gender	Travis Salway, SFU	BC SUPPORT Unit Fraser Centre, CIHR Strategy for Patient-Oriented Research (SPOR)'s Knowledge Translation Award for Patient Oriented Research
Evaluating risk mitigation measures to address the dual public health crisis of COVID-19	Amanda Kathleen Slaunwhite, UBC	CIHR

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Chapter 14

Increased Overdose Harms and Deaths

(Reported July 2021)

For more information on overdose prevention and response in BC, please visit: https://www2.gov.bc.ca/gov/content/overdose.

To view harm reduction reports, publications, case studies, and program evaluations, please visit: http://www.bccdc.ca/health-professionals/data-reports/harm-reduction-reports#Substance--Use--&--Overdose.

Situation

The COVID-19 pandemic and response measures are compounding the existing overdose public health emergency and increasing the risk of overdose, illness, and death for people who use drugs. Since late March 2020, fatal and non-fatal overdoses have increased in BC and are both at all-time highs.

Background

In BC, the COVID-19 pandemic is compounding the existing overdose public health emergency declared in April 2016. The provincial response to the overdose emergency has been based on evidence-informed interventions and a coordinated response effort to prevent overdoses from happening and to respond effectively when they occur.[1] Many of the strategies used to address the overdose emergency have been overturned or set-back by the COVID-19 pandemic and related response measures introduced to prevent transmission of COVID-19.

Since COVID-19 response measures were introduced in March 2020, overdose prevention services (OPS), supervised consumption sites (SCS), and other services that prevent overdose are less available because of closures and/or reduced hours of service. Similarly, there has been less access to community drug checking services (e.g., reduced hours/services, decreased accessibility due to fear about using public transportation). Physical distancing measures and fears of contracting COVID-19 have made it difficult for people to use the buddy system, so more people have been using drugs alone. The pandemic response disrupted the drug supply chain, which has resulted in growing toxicity and unpredictability of street drugs since March 2020. Multiple drug monitoring sources across the province have found higher fentanyl concentrations and an increase in unexpected, dangerous combinations of drugs (e.g., benzodiazepines).[4,2]

The increased risk of overdose since March 2020 has occurred in the context of increased social isolation, stress, and anxiety, as well as loss of employment. Some people have benefitted from interventions for marginalized and vulnerable people, including increased income support, safer housing, supportive prescribing options and increased outreach services, while others have faced greater hardships. The March 2020 interim clinical guidance[3] continues to be in place to reduce the risk of withdrawal from substances and support clients to follow COVID-19 prevention advice. Client access to safer pharmaceutical alternatives to the toxic drug supply currently varies considerably across BC and is reaching some, but not all who need it. Prescribing is not effective in entirely removing the need to access the unpredictable and highly toxic street drug

supply. Without effective measures to eliminate or reduce the current toxic drug supply in BC, high overdose death rates will continue.

BC is experiencing all-time highs for both fatal and non-fatal overdose events as a result of the combination of these factors. From late March 2020 to the end of April 2021, the number and severity of non-fatal overdoses and the number of overdose deaths have increased substantially.[1]

Findings

Illicit Drug Toxicity Deaths

In April 2021, there were 176 suspected illicit drug toxicity deaths, about 5.9 deaths per day. This represents a broader trend for each of the first four months of 2021, in which the monthly death counts set a record each month; therefore, 2021 is on track to exceed the number of illicit drug toxicity deaths in 2020.

Since April 2020, there have been over 123 deaths every month, and for 11 of the past 12 months there have been more than 159 deaths every month. In 2020, there were 1,726 overdose deaths, the highest number of illicit drug toxicity deaths ever recorded in one year. In 2020, there was an average of over 4.7 deaths per day, approximately two more fatalities per day than in 2019.[1]

A Note on Terminology, Stigma, and Shame

Despite use of the term "overdose" in this report, and in early characterizations of the related public health emergency ongoing in BC, the drug-related harms and deaths discussed here are now better understood and described as "unregulated drug toxicity" events and deaths. There is considerable variation in the terminology used by people and organizations responding to this public health emergency, and new terms will continue to emerge. The term "overdose" implies that an individual had, or could have had, reliable information about the composition and potency of the substance(s) they used, but intentionally or accidentally took too much. In reality, the lack of supply-side regulation of currently illegal drugs leaves consumers with little or no accurate information about the content or potency of the drugs they buy, other than through limited drug checking services.

The ways we think and talk about substance and the people who use them can contribute to an atmosphere of stigma and shame, or can seek to reduce stigma and shame. Stigma and shame create barriers that can isolate people who use drugs, prevent them from accessing support services, and increase the risk of toxic drug events and deaths. Taking a public health approach to the toxic drug crisis rather than criminalizing, penalizing, or shaming people who use drugs, and ensuring that support services are culturally safe for Indigenous Peoples (First Nations, Métis, and Inuit), can help to remove barriers to accessing harm reduction and treatment options for those who need them.

For more information, see the following links:

First Nations Health Authority, FNHA Releases 2022 Toxic Drug Poisoning Crisis Data, https://www.fnha.ca/what-we-do/mental-wellness-and-substance-use/harm-reduction-and-the-toxic-drug-crisis/toxic-drug-crisis-data

Interior Health, Let's change the way we talk about substance use, https://www.interiorhealth.ca/stories/lets-change-way-we-talk-about-substance-use

BC Ministry of Mental Health and Addictions, BC receives exemption to decriminalize possession of some illegal drugs for personal use, https://news.gov.bc.ca/releases/2022mmha0029-000850

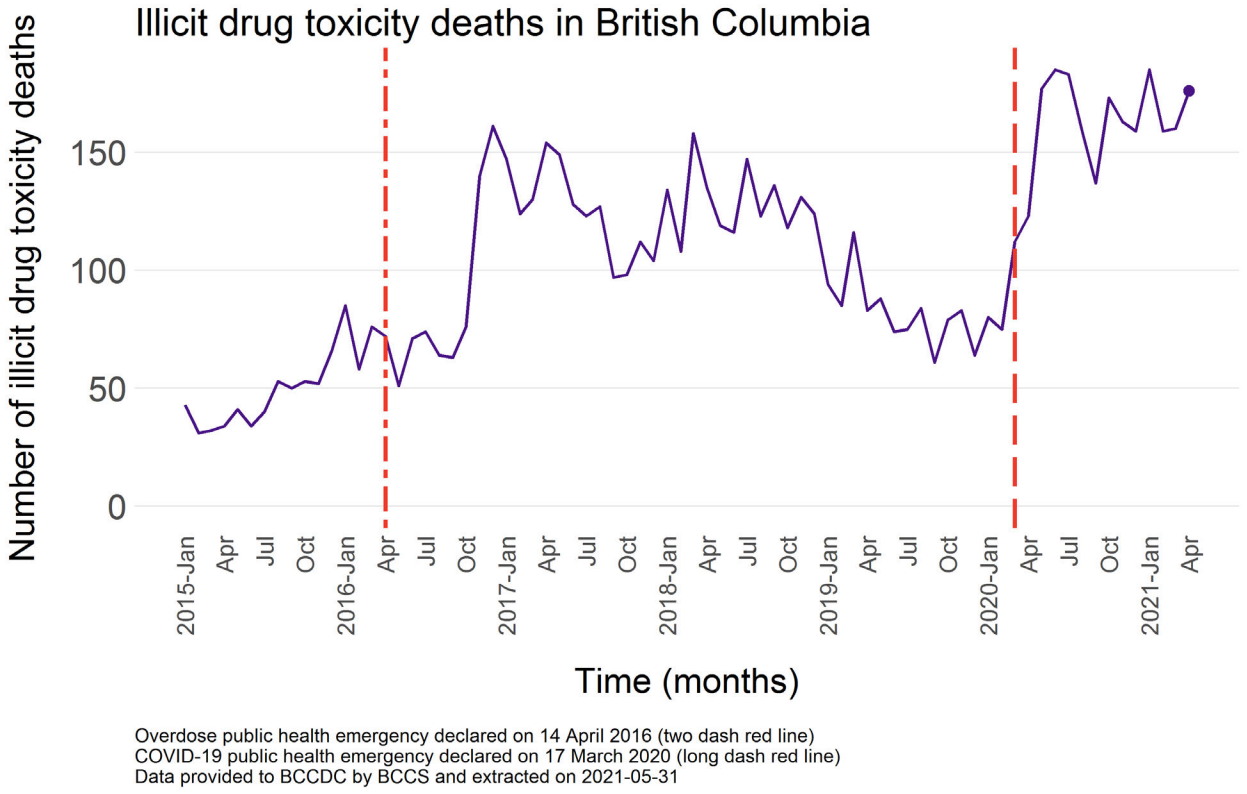
Provincial Health Services Authority, BC Centre for Disease Control, Toward the Heart, Respectful Language and Stigma Regarding People Who Use Substances, http://www.bccdc.ca/resource-gallery/Documents/respectful-language-and-stigma-final_244.pdf

Truth and Reconciliation: The Toxic Drug Crisis

Due to deeply rooted ideologies of settler supremacy and historical and contemporary impacts of colonization such as racism and social exclusion, many Indigenous Peoples experienced additional vulnerabilities to both the overdose emergency and the impacts of COVID-19 and associated public health measures. For many Indigenous individuals and communities, the stresses of public health restrictions were layered onto the cumulative stresses of intergenerational trauma, manufactured poverty and pervasive racism and discrimination. First Nations individuals are highly overrepresented among overdose deaths in BC: while Status First Nations people represent 3.8% of BC's residents,[7] First Nations people accounted for 16% of all overdose deaths in British Columbia from January to May 2020—a rate 5.6 times higher than other residents.[8] First Nations women continue to experience particularly high rates of non-fatal overdoses compared to other BC women.[9] These data suggest that the response to COVID-19 may be exacerbating this issue.

A gap exists in understanding the representation of Métis and Inuit peoples in the available overdose datasets; however, the development of new datasets and analyses are underway to allow Métis-specific data and reporting.

FIGURE 14.1



Figures 14.1 to 14.4 show deaths due to illicit drug toxicity from the BC Coroners Service. Illicit drug toxicity deaths include deaths due to:

- Controlled and illegal drugs: heroin, cocaine, MDMA, methamphetamine, illicit fentanyl;
- Medications not prescribed but obtained/purchased on the street, from unknown means or where drug origin is not known; and
- Combinations of any of the above with prescribed medications.

Figure 14.1 shows that illicit drug toxicity deaths have remained elevated since 2016. While an overall decline was observed from 2018 to the end of 2019, this trend has sharply reversed since March 2020. Since June 2020, there have been three months with over 180 illicit drug toxicity deaths (185 in June 2020, 182 in July 2020; and 185 in January 2021).[1]

FIGURE 14.2

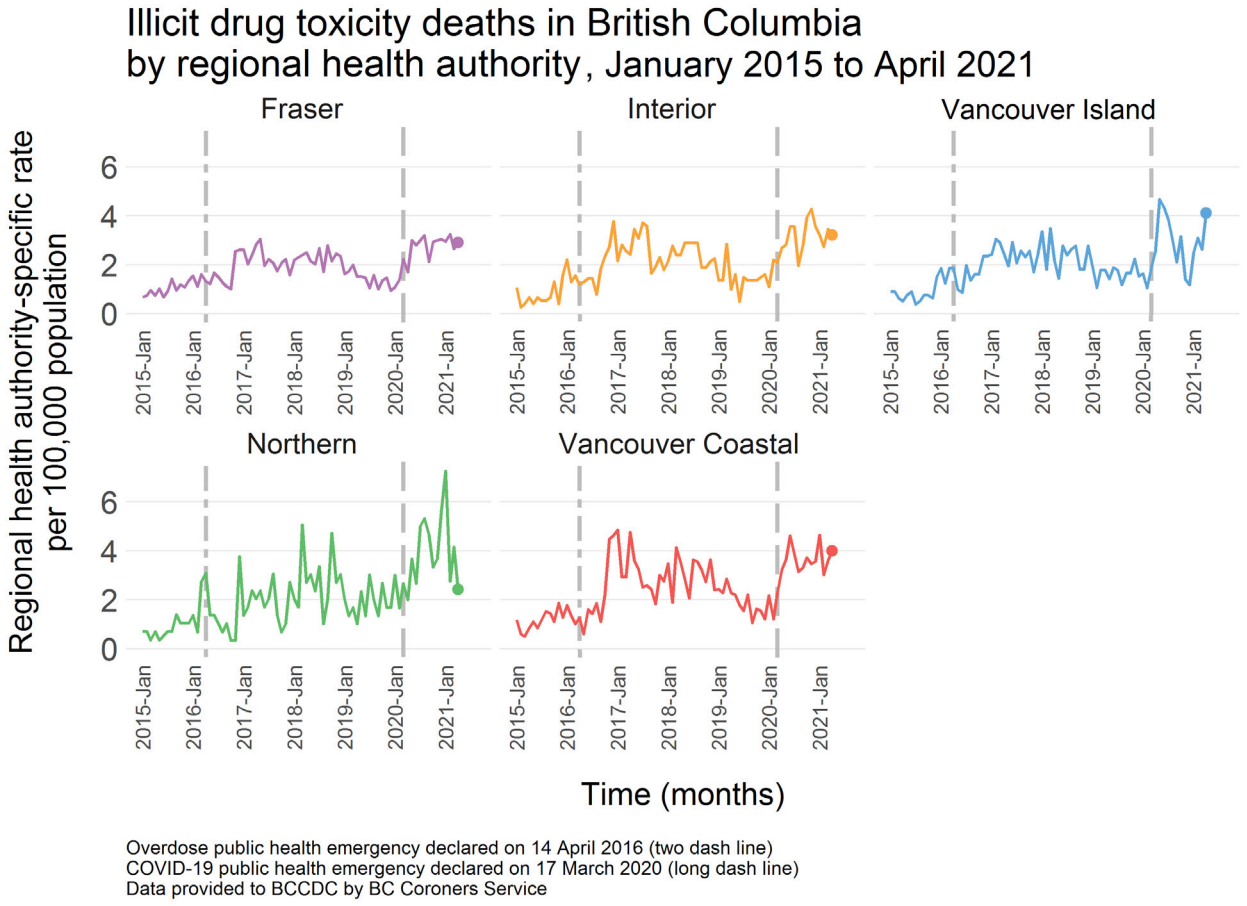


Figure 14.2 presents illicit drug toxicity deaths per 100,000 population by regional health authority. Since March 2020, death rates have increased across all health authority areas. Similar to the trend shown in Figure 14.1, rates in the Island health region saw a temporary decline in 2020 before seeing a surge late in the year that has continued to increase in 2021. Northern Health reached a high in late 2020 and early 2021 before declining slightly. The Fraser, Vancouver Coastal, and Interior health authority regions continue to have high rates of illicit drug toxicty deaths.

FIGURE 14.3

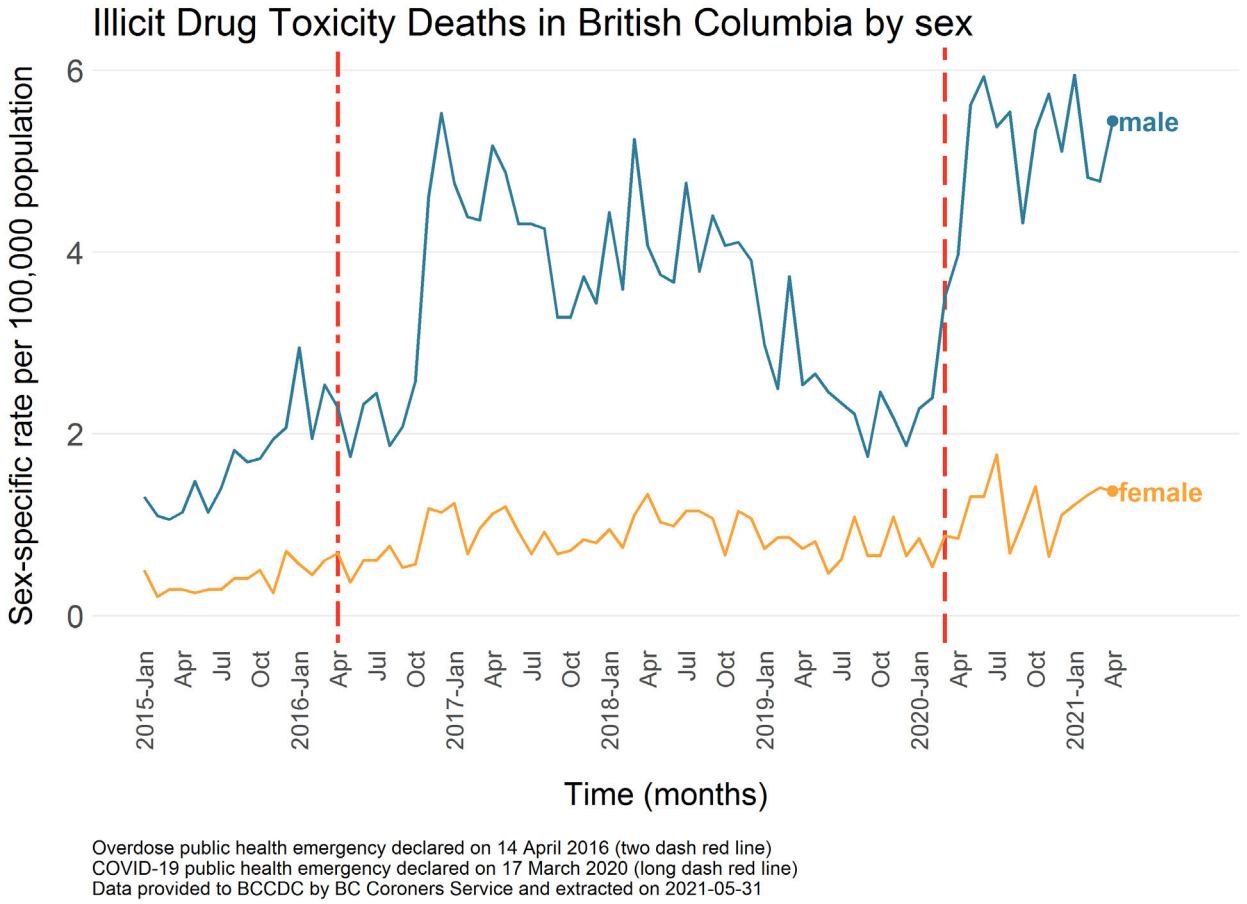


Figure 14.3 shows that illicit drug toxicity deaths per 100,000 population have increased among both males and females since March 2020. Since the onset of the COVID-19 pandemic, the disparity between sexes has increased.

FIGURE 14.4

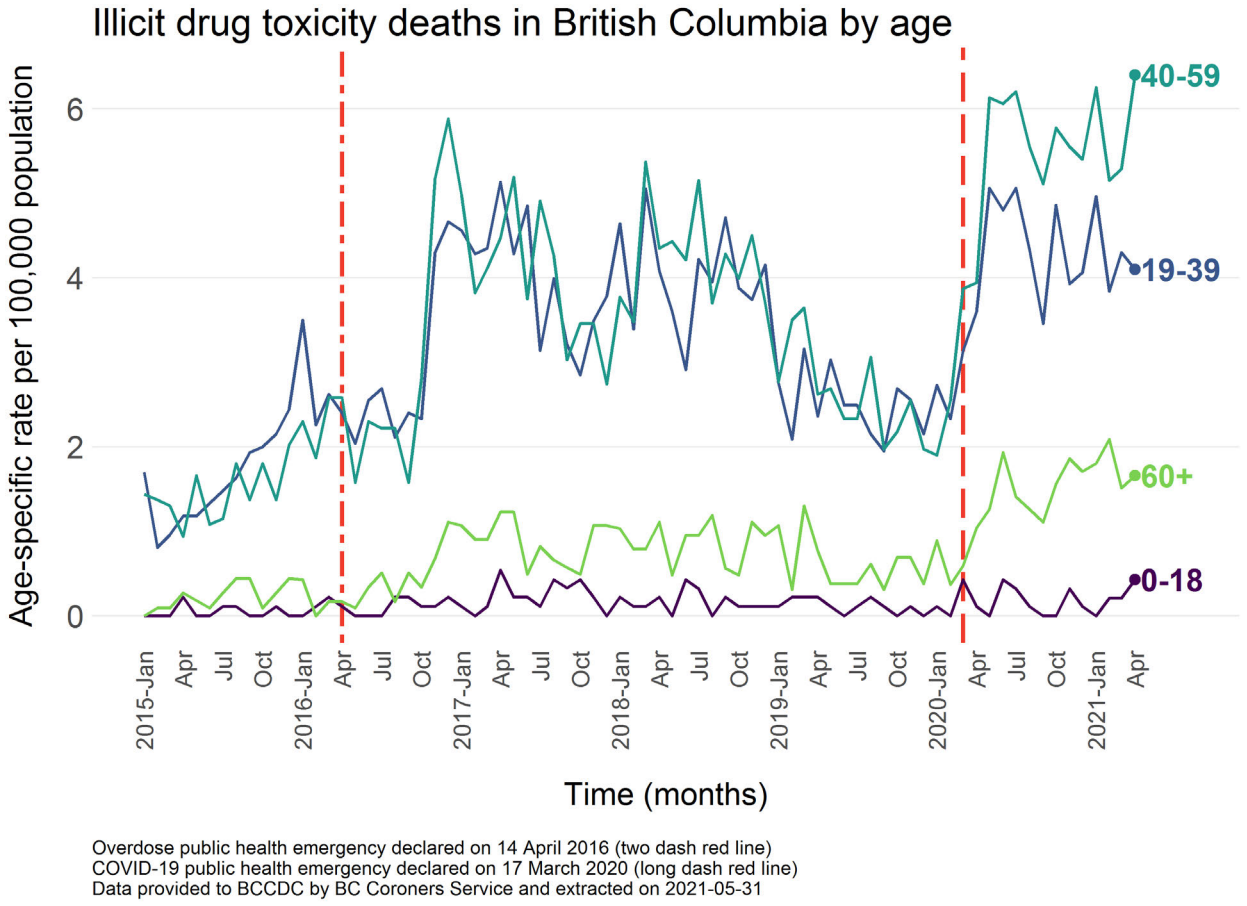


Figure 14.4 shows that, since March 2020, illicit drug toxicity deaths have increased in people over 18 years of age, especially for those in the 19–39 and 40–59 age groups.

Toxic Drug Supply

Since late March 2020, many reports of overdoses have included extreme toxicity, increased fentanyl concentrations, and difficulty reviving people due to mixtures of fentanyl and benzodiazepines and other sedatives.[2] Preliminary BC Coroners Service data in 2021 has found that fentanyl or its analogues have been detected in 86% of all illicit drug toxicity deaths. Since 2017, fentanyl or its analogues have been detected in 82% to 86% of deaths. Post-mortem toxicology results indicate that there were a greater number and proportion of cases with extreme fentanyl concentrations (exceeding >50ug/L micrograms/litre). The proportion found with this extreme concentration increased from 8% for the period of January 2019 to March 2020, up to 12% for the period of April 2020 to March 2021.[16]

Results from the new expedited testing protocol have found that about 91% of submitted samples have detected fentanyl and/or its analogues, 74% have detected at least one stimulant, 20% have detected at least one other opioid, and 39% have detected at least one benzodiazepine. In particular, benzodiazepines are being increasingly identified in illicit drug toxicity deaths and in the illicit drug supply. In July 2020, benzodiazepines were detected in 15% of samples relating to illicit drug toxicity deaths, increasing to 57% of samples in April 2021. In that same period, the benzodiazepine-related substance etizolam was identified in 37% of illicit drug toxicity deaths that have undergone expedited testing.[16] In April 2021, the BC Centre for Substance Use identified benzodiazepines in approximately 25% of samples thought to contain opioids and the Island Drug Checking Project identified etizolam or other benzodiazepines in 69% of samples expected to contain opioids.[3,4] Since April 2020, etizolam has been detected in about 60 percent of LifeLabs urine drug screens where benzodiazepines/thienodiazepine were identified.[5]

The presence of benzodiazepines in the drug supply is concerning because naloxone, which is normally used to reverse opioid-related overdoses, is not effective against benzodiazepines, and these sedatives are active in the body for long periods. When combined with opiates, benzodiazepines also increase the likelihood of overdose death.

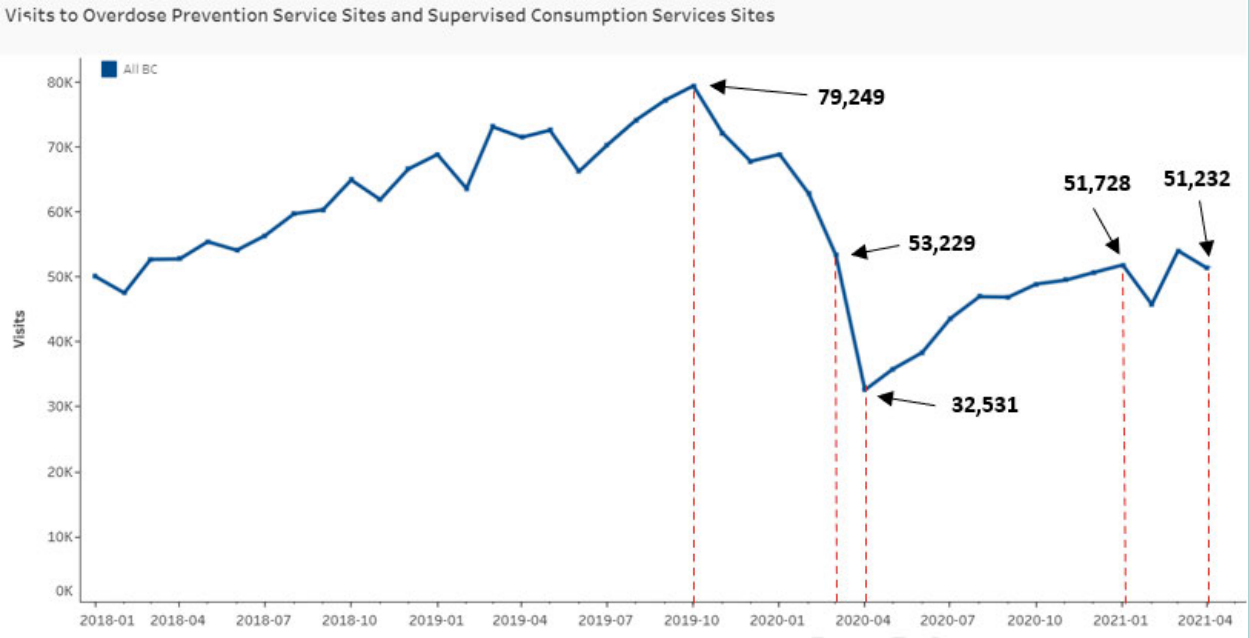
Overdose Prevention and Supervised Consumption Sites

OPS and SCS services provide people who use drugs with a space to consume their substances under the supervision of someone trained to administer naloxone and provide other emergency first aid services. As of February 2021, there were 38 OPS/SCS locations in BC. The largest number are in Vancouver Coastal and Island health regions, which have 10 OPS and 2 SCS each. The Fraser region has 6 OPS and 1 SCS, while the Interior health region has 3 OPS and 3 SCS, and the Northern health region has 1 OPS.

The COVID-19 pandemic and COVID-19 response measures have had unanticipated negative impacts for OPS/SCS. In 2020, the number of visits to OPS/SCS dropped nearly 40% as compared to 2019.

Health authorities are working to implement an episodic-OPS (e-OPS) protocol (*COVID-19: Provincial Episodic Overdose Prevention Services (e-OPS) Protocol*) at sites across the province that are outside of established OPS/SCS locations. This protocol is intended to provide guidance and support in the context of BC's dual public health emergencies for health and social services staff who may receive requests from patients/clients/residents to observe substance use and respond to overdose outside of designated or fixed OPS/SCS locations.[11]

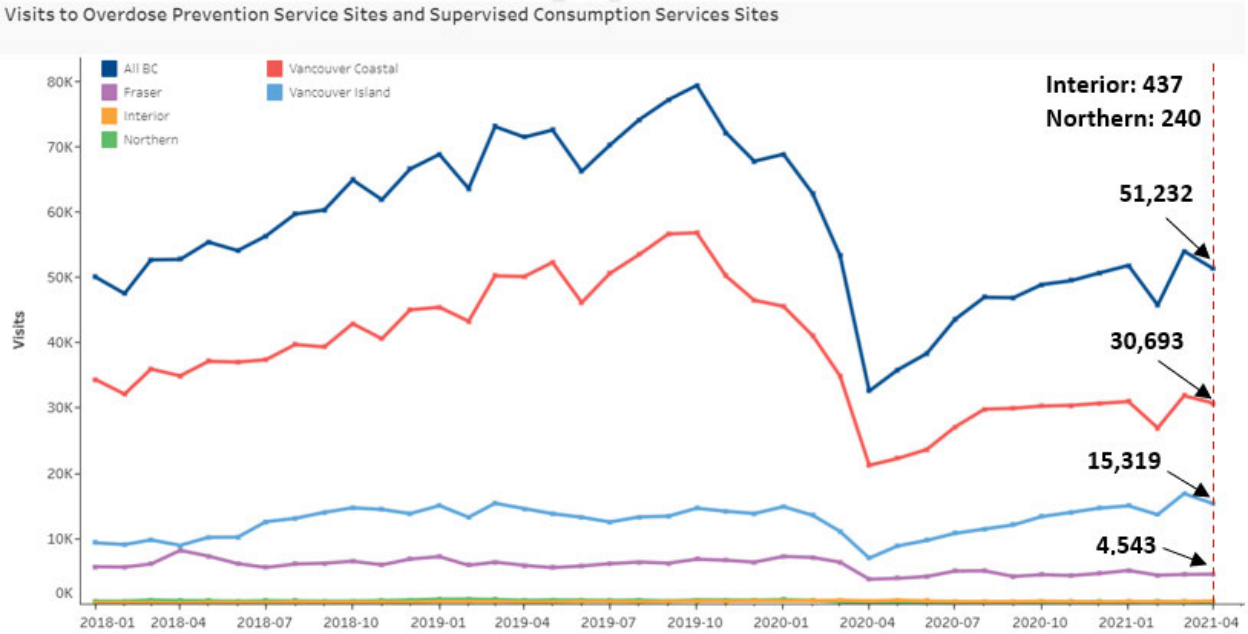
FIGURE 14.5



Data provided to BCCDC by BC Regional Health Authorities, Unregulated Drug Poisoning Emergency Dashboard (https://public.tableau.com/app/profile/bccdc/viz/UnregulatedDrugPoisoningEmergencyDashboard/Introduction), May 2021.

Figure 14.5 shows that while the number of visits to OPS/SCS had been declining since reaching a high of 79,247 in October 2019, the COVID-19 pandemic likely resulted in the accelerated decline in the number of visits. Since the lowest number of visits seen in April 2020, visits to OPS/SCS have been increasing and are returning to pre-pandemic levels.

FIGURE 14.6



Data provided to BCCDC by BC Regional Health Authorities, Unregulated Drug Poisoning Emergency Dashboard (https://public.tableau.com/app/profile/bccdc/viz/UnregulatedDrugPoisoningEmergencyDashboard/Introduction), May 2021.

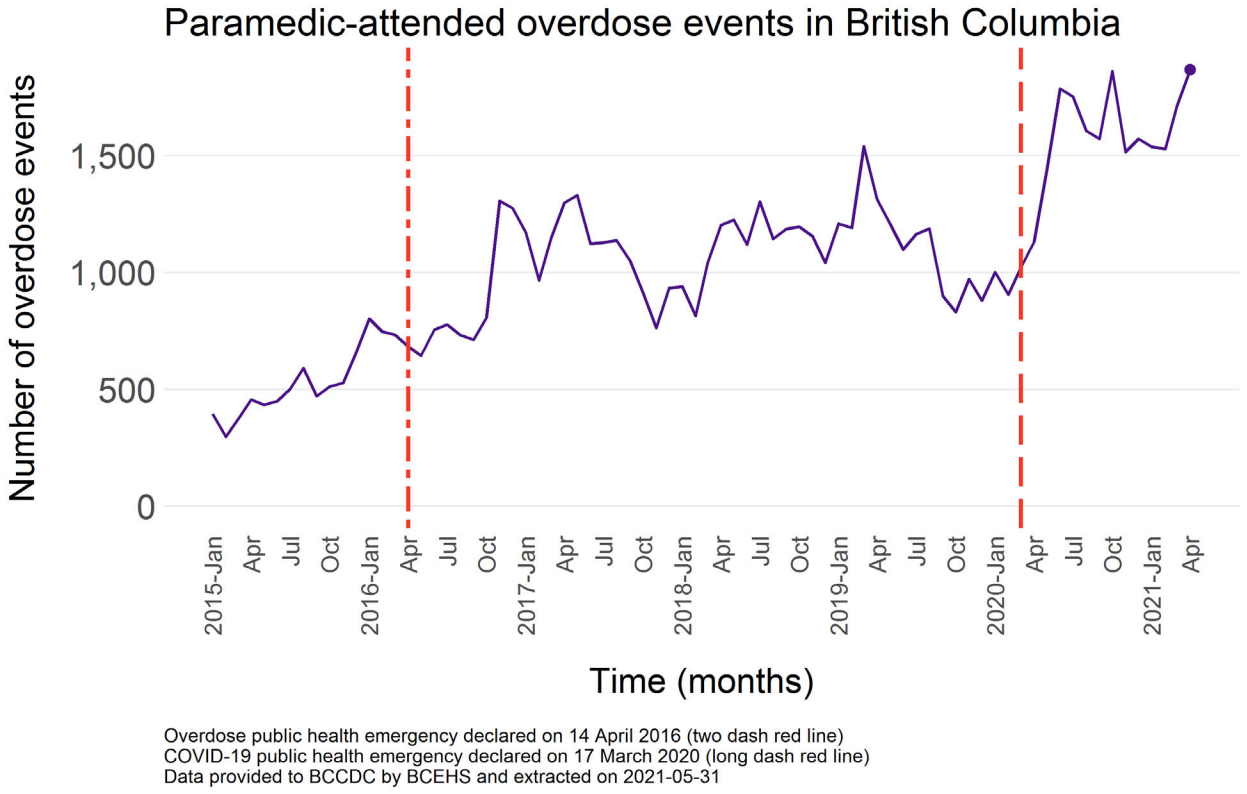
The COVID-19 pandemic and the introduction of COVID-19 response measures have not affected health authorities equally. Figure 14.6 shows that attendance at OPS/SCS has been disproportionately changed in Vancouver Coastal and Island health authorities.

Paramedic-attended Overdose Events

BC paramedics attend a range of non-fatal overdose events and overdose deaths every day. People who experience an overdose poisoning and are attended by paramedics have a better chance of surviving. In 2020, BC Emergency Health Services saw its overdose related call volume increase 12% from 24,166 in 2019 to 27,067 in 2020. Overall, since 2015, the number of overdose-related calls across the province has increased over 120%.[6]

Since May 2020, there have been over 1,400 paramedic-attended overdose events every month, reaching a new monthly high of 1,867 in April 2021.[5] In total, in 2020, paramedics attended 17,159 overdose events in BC, which was approximately 20% more than in 2019. For the 13-month period from April 2020 through April 2021 covering much of the COVID-19 pandemic response timeline, there were 20,875 paramedic-attended overdose events. This was nearly 45% more paramedic-attended overdose events than the 14,416 events over the 13-month period from April 2019 through April 2020.[5] From January to April 2021, paramedics have already attended a total of 6,643 overdose events, which is approximately 64% more than in the same four-month period in 2020.

FIGURE 14.7



Figures 14.7 to 14.11 present monthly paramedic-attended overdose events, based on patient care records completed by attending paramedics. The algorithm for overdose events includes cases where naloxone was administered by paramedics, cases where the paramedic impression codes indicate overdose due to street drugs, and events related to cardiac arrest that were likely overdose. The algorithm is designed to exclude overdoses primarily due to alcohol or prescription drugs.

Figure 14.7 shows that paramedic-attended overdose events were increasing from 2015 to 2016 (inclusive), and fluctuated considerbly from 2017 to 2019. In March 2019, paramedic-attended overdose events began to decline. Since the onset of the COVID-19 pandemic and the introduction of related response measures, paramedic-attended overdose events increased substantially, continuing to break records and reach new highs.

FIGURE 14.8

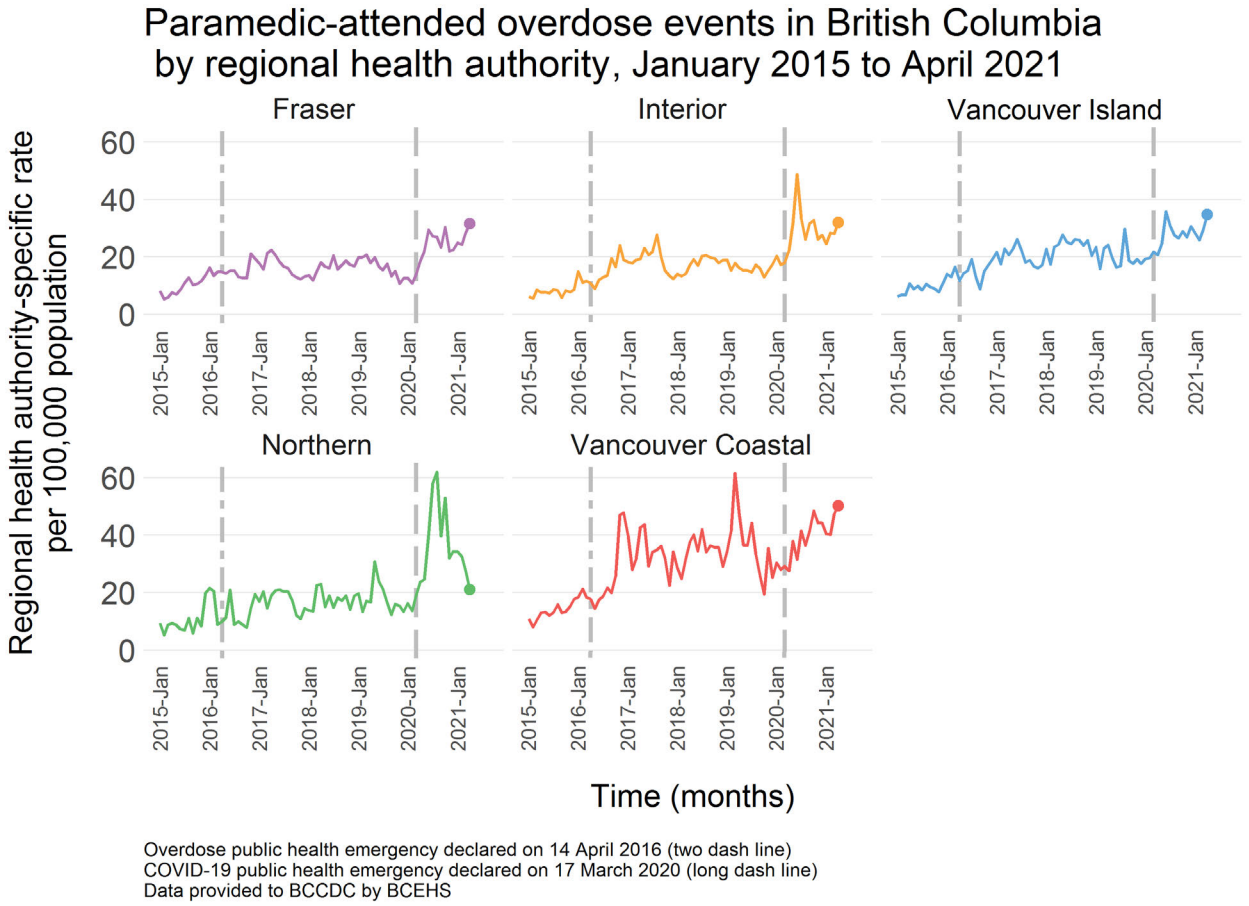
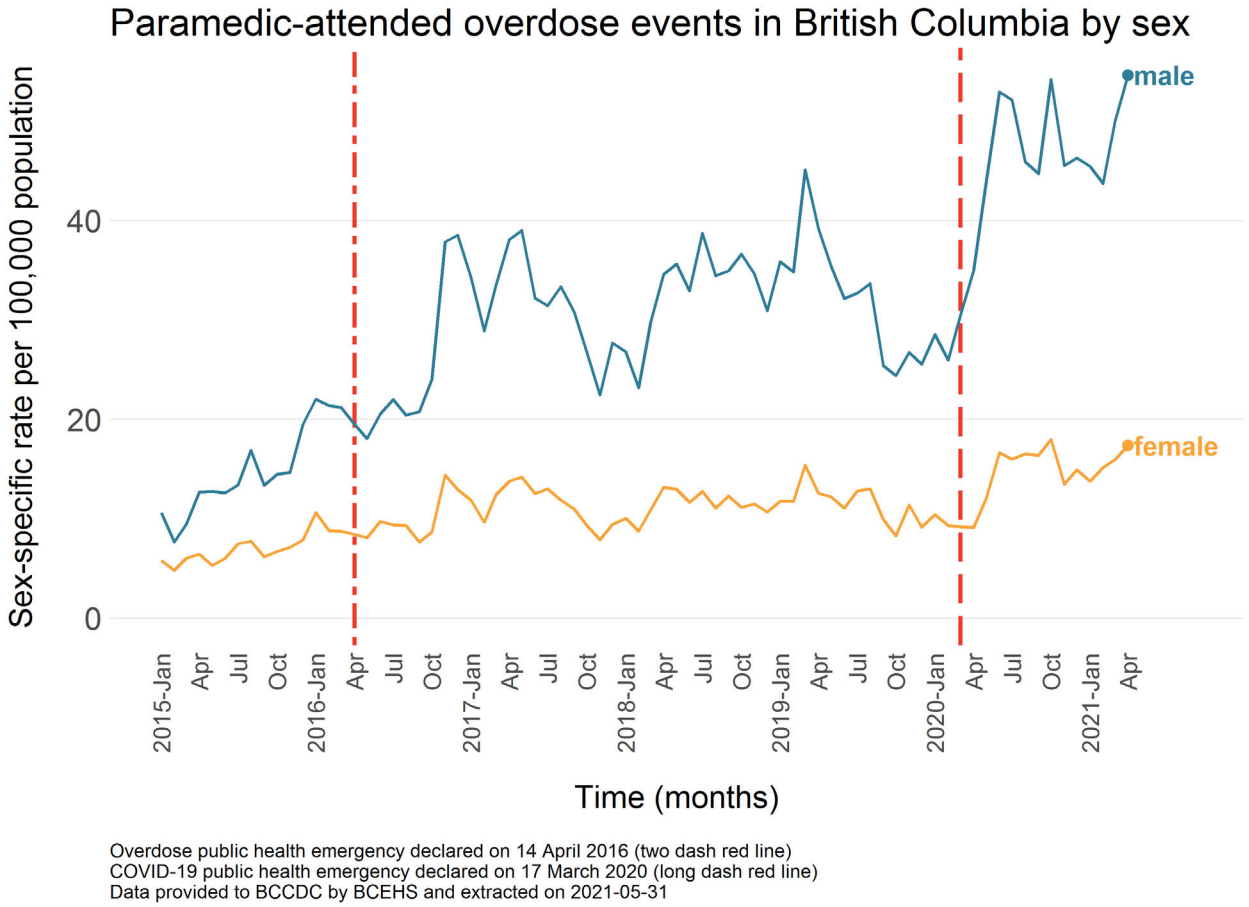


Figure 14.8 shows the rate per 100,000 population of paramedic-attended overdose events. The rate of paramedic-attended overdose events began to increase in March and April 2020 and has remained high. The sharpest increases in rates per 100,000 population were seen in the Northern and Interior health regions. While sharp increases in the Northern and Interior health authorities are concerning, these results should be interpreted with caution since health authority-specific rates are sensitive to small population fluctuations. The majority of overdose events continue to occur in the Vancouver Coastal and Fraser health authority areas, consistent with trends since the beginning of the overdose public health emergency.

FIGURE 14.9



Similar to Figure 14.7, analyses by sex and by age show that paramedic-attended overdose events have increased during the COVID-19 pandemic. Figure 14.9 shows that rates have increased for both males and females. In April 2021, there were 1,405 paramedic-attended overdose events amongst males, a new all-time high, and 456 amongst females, the second highest number recorded since the start of the ovedose health emergency. The disparity between males and females has also increased.

FIGURE 14.10

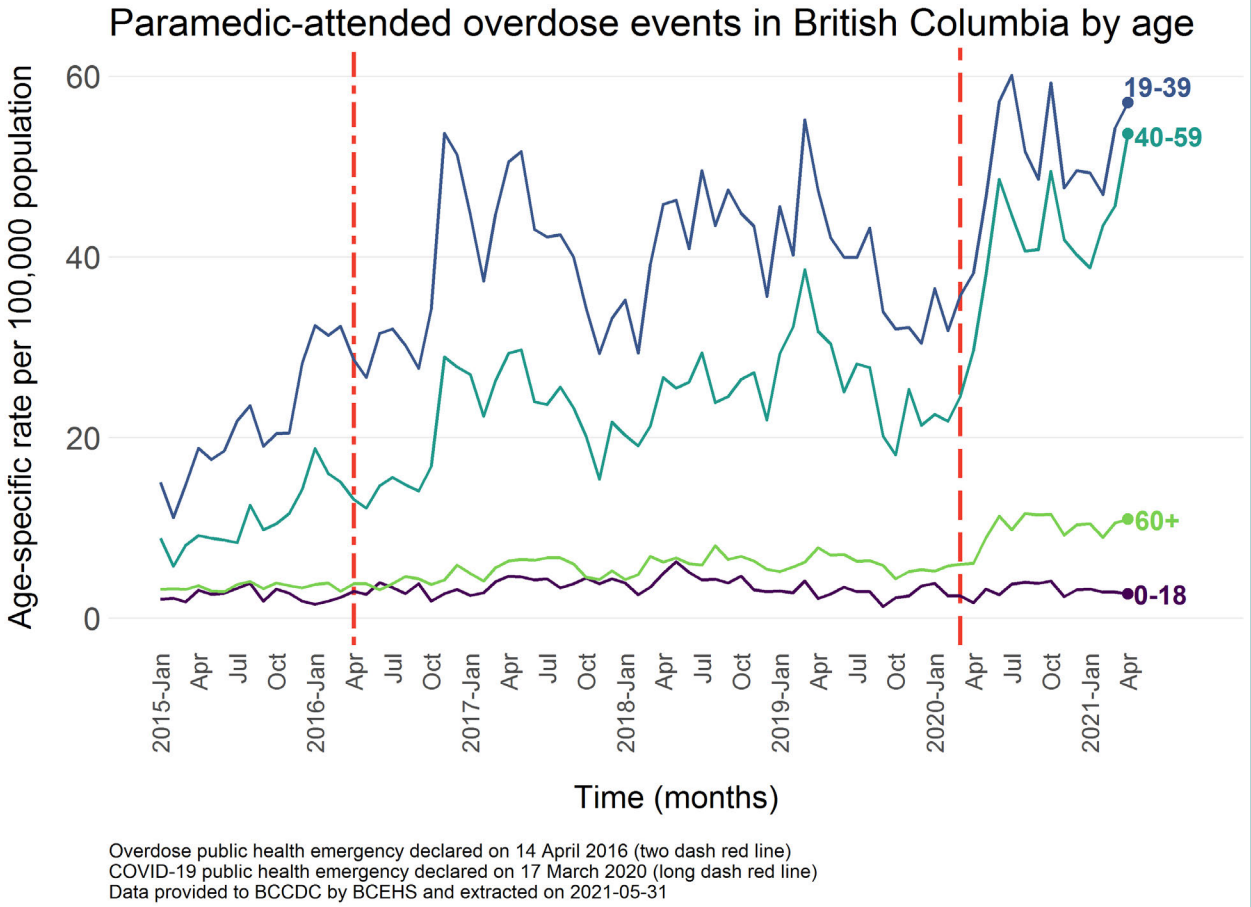


Figure 14.10 shows that overdose and paramedic-attended overdose rates have increased in most age groups since COVID-19, with the sharpest increases amongst those age 19–39 and 40–59.

FIGURE 14.11

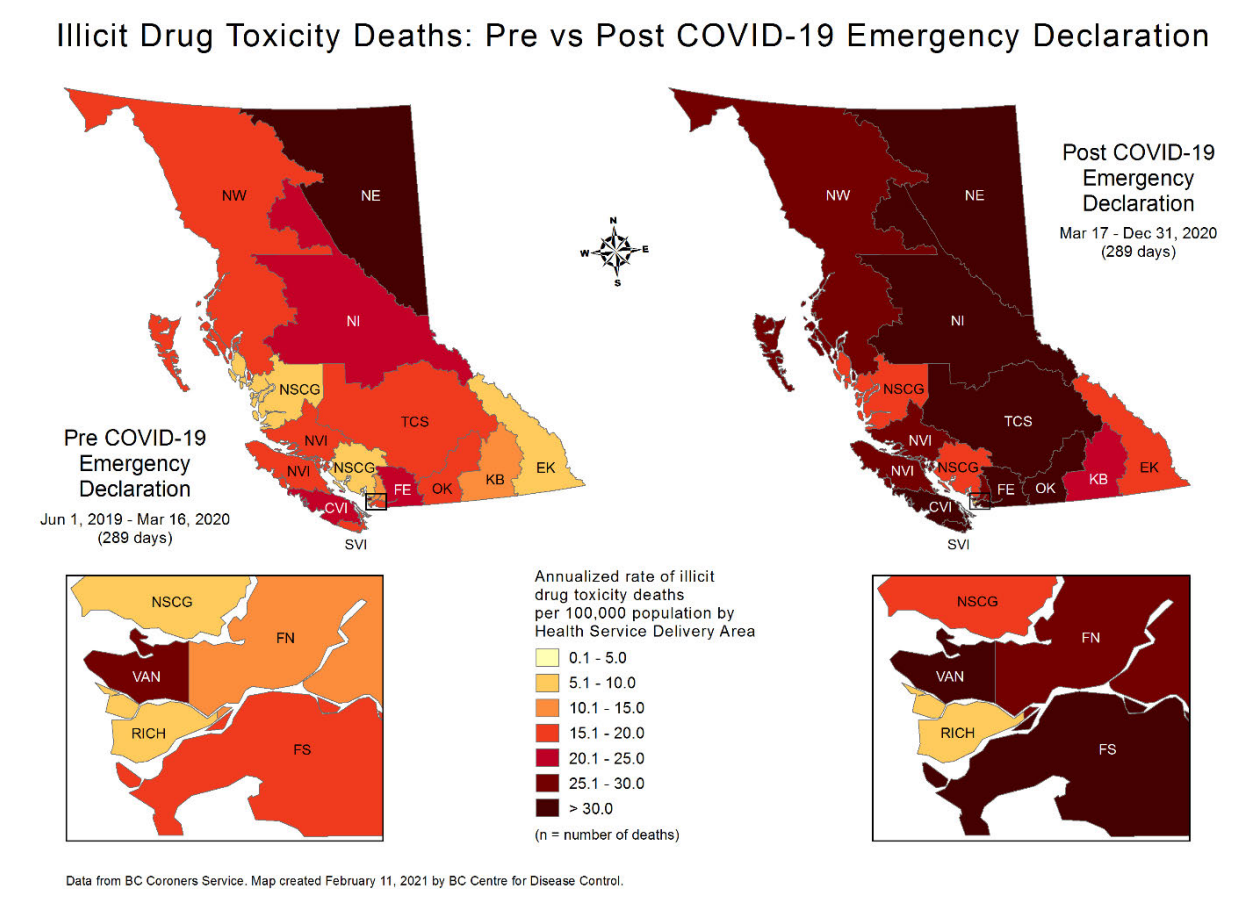


Figure 14.11 presents illicit drug toxicity mortality rates in all Health Service Delivery Areas (HSDAs) in BC, before and after the COVID-19 emergency declaration. During the 289 days prior to the COVID-19 emergency declaration (June 1, 2019 through March 16, 2020), illicit drug toxicity deaths per 100,000 population were generally high, with two HSDAs exceeding 25 deaths per 100,000 population (Northeast and Vancouver). Three additional HSDA populations had between 20.1–25 illicit drug toxicity deaths per 100,000 population (Northern Interior, Thompson Cariboo Shuswap, and Central Vancouver Island).

In the 289-day period after the declaration of the COVID-19 public health emergency (March 17, 2020 through December 31, 2020), 10 HSDA populations in BC had mortality rates exceeding 25 deaths per 100,000. In addition, three HSDAs that previously had rates below 10 deaths per 100,000 saw those figures increase to 20.1–25 deaths per 100,000 population.

Equity Considerations

Several groups have been overrepresented in overdose events and deaths in BC. While COVID-19 response measures have not impacted which groups are overrepresented, they have added to the disproportionate burden on these groups. Subpopulations and groups overrepresented in overdoses and deaths include individuals living in remote communities, people living in small-sized communities, individuals involved in the justice system, men age 20–49, and the perinatal population. For example, in BC, 66% of people who died from illicit drug overdoses between January 2016 to July 2017 had prior BC Corrections involvement.[6]

People who use drugs face multiple forms of discrimination, which is made worse by criminalization. Discrimination creates barriers to accessing health care and social supports. Fear of child apprehension, stigma, and judgment are commonly shared as barriers that prevent pregnant women who use drugs from seeking treatment.[7,8] A US study found that women with opioid use disorders had an increased risk of overdose during the first year postpartum.[9] Treatment options may also be ineffective, such as when the dose or length of opioid agonist treatment [OAT] prescription are not adequate.[22]

Actions Initiated or Planned to Address Unintended Consequence

- On March 26, 2020, the BC Centre on Substance Use (BCCSU) released *Interim Clinical Guidance: Risk Mitigation in the Context of Dual Public Health Emergencies.* This risk mitigation guidance aims to support individuals at risk of substance use-related harms exacerbated by the COVID-19 pandemic by improving access to prescribed pharmaceutical alternatives to illicit drugs. In cases where patients' risk cannot be lowered with standard evidence-based approaches, the document provides guidance for prescribing substances to support COVID-19 related self-isolation or physical distancing – including prescription alternatives to the illegal drugs including opioids, stimulants, benzodiazepines, alcohol and nicotine.[10]
- In May 2020, the BC Centre for Disease Control released the *COVID-19: Provincial Episodic Overdose Prevention Services (e-OPS) Protocol* which provides step-by-step guidance for health and social services staff to observe substance use and respond to illicit drug toxicity poisoning outside of designated OPS/SCS locations during the COVID-19 pandemic.[11]
- In May 2020, the Provincial Health Services Authority (PHSA), in partnership with regional health authorities and Lifeguard Digital Health, launched a new made-in-BC resource called the *Lifeguard App*. The app can connect people to emergency responders if an overdose occurs, which can assist people who are using drugs alone.[10]
- On August 5, 2020, the Government of BC announced an additional $10.5 million in funding for 2020/21 to 2023/24 to accelerate the response to the increasingly toxic illicit drug supply exacerbated by the COVID-19 pandemic and related response measures. This funding has increased access to overdose prevention services and interdisciplinary teams, and increased nursing care available for people at risk of overdose.[12]
- On September 16, 2020, the Provincial Health Officer issued a public health order to allow registered nurses (RNs) and registered psychiatric nurses (RPNs) the ability to diagnose, refer, order, and prescribe federally regulated controlled drugs and substances for the purpose of reducing the overdose risk for people with substance use conditions/disorders.[13] This is being rolled out in a phased approach starting with first line treatment, Suboxone. Currently, over 90 RNs/RPNs Registered Nurses and Registered Psychiatric Nurses have enrolled in education and training for buprenorphine/naloxone. Nurses began prescribing in early 2021. This represents 23 communities across BC, largely in rural and remote areas.
- On February 1, 2021, Health Canada and the BC Ministry of Mental Health and Addictions announced more than $15 million in federal funding for four safer supply projects for people at risk of overdose in BC. The four projects will provide people with opioid use disorder with a safer, medical alternative from a licensed prescriber, and connect them with important health and social services.[14]
- The BC Ministry of Mental Health and Addictions is prioritizing the development of pharmaceutical alternatives to toxic drugs as part of the province's harm reduction approach and ongoing response to the overdose emergency. These alternatives are meant to provide low-barrier, flexible options to the illicit drug supply and do not carry the expectation or requirement that people will enter into treatment or reduce overall substance use. This supports people's autonomy in less clinically-intensive settings.[11]

Considerations for Further Action

Addressing Inequities for Underserved Populations, Including Structural Discrimination

1. Involve the people who use drugs and whose lives are most affected by decisions, in decision-making processes.
2. Address the societal stigma and structural discrimination in institutional practices. Planning services for people who use drugs must recognize power imbalances often organized around sex, gender identity, age, race, Indigeneity, sexual orientation, physical ability, socio-economic status, and geography, as well as the stigma and structural discrimination rooted in the criminalization of drug use.[12]
3. Ensure that women who are pregnant or parenting are supported through recovery options that prioritize the mothers and their infants/children staying together.

Addressing Criminalization

4. Address the criminalization of people who use drugs. Criminalization creates barriers to accessing health care and other forms of care, and reinforces structural discrimination.

Addressing the Toxic Drug Supply

5. Ensure that individuals who use drugs have access to a wide range of pharmaceutical alternatives to reduce/eliminate reliance on the toxic drug supply.
6. Expand the range of pharmaceutical alternatives, including testing and evaluating non-medical models of delivery.

Improving Health Services

7. Increase access and effectiveness of mental health services, including more capacity, reduced barriers, and greater alignment between mental health and substance use service delivery, including access to harm reduction measures.
8. Enhance harm reduction services, including take-home naloxone, overdose prevention and supervised consumption services (e.g. services for smoking, episodic overdose services, particularly in housing).
9. Expand the reach and range of drug checking services around the province, including more advanced technologies (e.g. Fourier-transform infrared spectroscopy [FTIR] spectrometry, mass spectrometry) and flexible service delivery models (e.g., distributed sample submission via drop-off or mail-in).
10. Improve treatment by reducing the barriers to opioid agonist treatment (OAT) and enhancing linkages to care through multidisciplinary outreach teams that include people with lived experience and improve retention in care.
11. Enhance the role that primary care networks and urgent primary care centres play in providing substance use care.
12. Enhance surveillance and monitoring to better understand the circumstances of the crisis. Ensure health authorities have the information they need to understand the circumstances of overdose and to inform planning at the local and regional levels.

Appendix 14-A: Ministry of Mental Health and Addictions Comprehensive Package of Health Sector Interventions and COVID-19

The comprehensive package of essential services for overdose prevention in BC includes the following essential health sector interventions:

Naloxone	Ensuring optimal supplies, training, and community-level infrastructure for sustained Naloxone access, including coverage, supplies, trainers and increasing capacity.
Overdose Prevention Services	Supporting a diversity of community-level, low barrier services tailored to population/community needs, such as overdose prevention and supervised consumption services, drug checking services, and the Lifeguard App.
Acute overdose risk case management	Robust surveillance, analytics, and referral system to identify individuals at risk within communities and capacity for follow-up connection to care including fire, ambulance, and police.
Treatment and Recovery	Facilitate low-barrier access to the full spectrum of evidence-based medications, treatment, and recovery services including rapid access addiction clinics and continuum of opioid use disorder (OUD) treatment including Opioid Agonist Treatment (OAT), injectable OAT, and Tablet injectable OAT. Capacity building and supports for prescribers and other clinicians including Learning About Opioid Use Disorder (LOUD) in the Emergency Department initiative, RACE Line, and 24/7 Addiction Medicine Support Clinical Support Line.

Appendix 14-B: Overdose Data and Surveillance

Following the declaration of a public health emergency in response to overdoses and deaths in April 2016, the Provincial Health Officer (PHO) issued nine orders to expedite the collection of suspected and confirmed overdose data. This allowed medical health officers across the province to collect real-time information on overdoses, to immediately identify where risks are arising, and warn and protect people who use drugs.

The Overdose Emergency Response Centre coordinates provincial data and analysis activities including:

- Unlinked data streams: BC Coroners data, BC Emergency Health Services data, BC Emergency Department data, BC Take Home Naloxone program data, supervised consumption and overdose prevention services utilization, PharmaNet data on opioid agonist treatment uptake, and toxicology data from various laboratory services.
- Linked data: BC Provincial Opioid Cohort (ODC), a project of the BC Centre for Disease Control (BCCDC) that links data from the BC Coroners Service, Drug and Poison Information Centre, BC Emergency Health Services, emergency department visits at hospitals across BC, BC Corrections, and data from the Ministry of Social Development and Poverty Reduction (SDPR). The data is supplemented with data holdings from the Ministry of Health (MOH) and BCCDC. The study details the comprehensive health history of people who have experienced possible fatal and non-fatal opioid overdose. The asset is stewarded and analyzed collaboratively with partners engaged in the response.
- Dashboards: Weekly and monthly interactive dashboards and reports for the public published on the BCCDC website (http://www.bccdc.ca/health-professionals/data-reports/substance-use-harm-reduction-dashboard).
- Modelling: A BCCDC-led project to provide ongoing mathematical modelling estimating death events averted as a result of the rapid expansion of harm reduction and other services.
- Cascade of Care: A project with Dr. Bohdan Nosyk, Associate Professor at Simon Fraser University and the BC Centre for Excellence in HIV/AIDS (BCCfE) entitled “Towards a comprehensive performance measurement system for Opioid Use Disorder in British Columbia.” The project is based on province-wide linkage of health and other administrative databases, including BC Perinatal Services, Corrections BC, and the Ministry of Social Development and Poverty Reduction.
- Evaluation of the interim guidance document, *Risk Mitigation in the Context of Dual Public Health Emergencies*: This evaluation is ongoing and is conducted using both administrative and survey data to determine the benefits and harms of prescribing under this guidance. The Evaluation Team is led by Dr. Amanda Slaunwhite, BCCDC and is comprised of representatives from Ministry of Mental Health and Addictions, MOH, BCCDC, British Columbia Centre on Substance Use, Canadian Institute of Substance Use Research, and the Centre for Excellence in HIV/AIDS. This evaluation is supported by a broad consortium of over 70 researchers who help to interpret and contextualize findings.

Appendix 14-C: Services for People who are Currently or Recently Incarcerated

In 2017, health-care services in provincial correctional facilities transitioned to Provincial Health Services Authority's Correctional Health Services (CHS). CHS has eliminated the waitlist for Opioid Agonist Therapy (OAT) for people in prison. Currently, 40% of CHS clients are on OAT.[13]

CHS is also piloting Community Transition Teams at five of the ten provincial correctional facilities. These teams provide care coordination and peer mentorship for people leaving prison who are eligible for the program.[14] Naloxone kits (used to reverse the effects of an opioid overdose) are offered to anyone leaving custody.

Support services, delivered by community organizations or regional health authorities, are inconsistently available across the province. Overdose Prevention Sites (OPS) provide space for people to use drugs under supervision. Like other services such as shelters, foodbanks, and treatment centres, during COVID-19, many OPS operated at decreased capacity.

People leaving prison may be less aware of harm reduction initiatives such as the Lifeguard App. Peer mentorship and support programs are a promising practice.[15,16]

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Chapter 15

Discussion and Recommendations

> "From the very early days of the COVID-19 pandemic, I have spoken about how we are all in the same storm, but each of us is in a different boat. . . . We have learned that we can ride out the roughest moments by working together and supporting each other. But we also know that at every point, with each public health order, there are some people more severely impacted than others—despite our best efforts."
>
> Dr. Bonnie Henry
> BC Provincial Health Officer
> April 5, 2022[1]

The chapters in this report explore several societal consequences of the COVID-19 pandemic and public health response measures introduced to reduce the spread and impact of COVID-19 in BC. The experience of the COVID-19 pandemic has led to greater awareness of the unintended impacts of public health response measures. In some cases, it may take years of monitoring health outcomes to determine the full effects of the pandemic and related response measures. The lessons learned so far are reflected in three key and deeply interconnected themes that were highlighted over the course of this project:

1. The need to uphold inherent Indigenous rights, self-determination, and truth and reconciliation;
2. The profound impacts of racism and discrimination; and
3. The amplification of pre-existing inequities during the pandemic.

Increasingly, these themes have informed the ongoing public health response to, and recovery from, the COVID-19 pandemic. The Office of the Provincial Health Officer (OPHO) and the BC Centre for Disease Control (BCCDC) are committed to continued collaboration with Indigenous and health sector partners and other organizations to ensure that these themes, which are explored further below, help shape and improve responses to future public health emergencies and recovery from the COVID-19 pandemic.

Key Themes

1. The Need to Uphold Inherent Indigenous Rights, Self-determination, and Truth and Reconciliation

As the First Peoples of the land now known as British Columbia, BC First Nations have inherent Aboriginal and treaty rights and title, affirmed by law, that must be upheld.[a,2,3] First Nations territories stretch across every inch of this province, as demonstrated by the First Peoples' Map of BC (Figure 15.1). BC is also home to many First Nations, Métis, and Inuit people with ties to other homelands in what is now known as Canada, and they also have rights to self-determination, health, and wellness. This includes Métis Nation British Columbia (MNBC) and its Chartered Communities across the province (Figure 15.2). Please see Chapter 6 for more information about MNBC.

In addition to being legally and morally bound to honour Indigenous rights and title, settler-colonial governments, including the government of British Columbia, have committed to uphold the principles of self-determination and truth and reconciliation and to work collaboratively with Indigenous partners to reach these goals.[4,5,6] The often profound health inequities experienced by Indigenous Peoples (First Nations, Métis, and Inuit), both before and during the pandemic,

[a] Please refer to *Inherent Rights of Indigenous Peoples* in Chapter 1 of this report for further information.

was a recurring theme throughout the *Examining the Societal Consequences of the COVID-19 Pandemic* ("Societal Consequences") project. This theme emerged both through engagement with Indigenous partner organizations and in additional research, and reinforces what Indigenous Peoples have consistently asserted: that self-determination and truth and reconciliation are essential steps in supporting optimal health and wellness for Indigenous people.

2. The Profound Impacts of Racism and Discrimination

The Societal Consequences project highlights the impacts of **systemic racism** and the importance of dismantling existing power structures to improve equity in general, and health equity in particular, for the benefit of every person in British Columbia. This is another theme that recurred throughout the course of the project, and one that crosscuts every chapter and topic presented in this report. As discussed in Chapter 2, racism, stigma, and discrimination are ongoing and extremely harmful problems that undermine community safety and wellness in BC and across Canada. These issues became significantly worse during the pandemic, as demonstrated by the increase in hate-related incidents (e.g., racist acts, gender-based violence, and other hate crimes) documented in the BC Human Rights Commissioner's report, *From Hate to Hope*: *Report of the Inquiry into Hate in the COVID-19 Pandemic.*[7,8]

The United Nations highlighted similar trends at a global level, noting the rise in "'scapegoating, stereotyping, stigmatization and the use of derogatory, misogynistic, racist, xenophobic, Islamophobic or antisemitic language'…often coupled with disinformation and misinformation about COVID-19."[9]

The report *In Plain Sight: Addressing Indigenous-specific Racism and Discrimination in BC Health Care*, though not specific to the effects of the pandemic, shows how COVID-19 intersected with pre-existing racism and discrimination to further complicate and reduce access to culturally safe health care for Indigenous people in BC.[10]

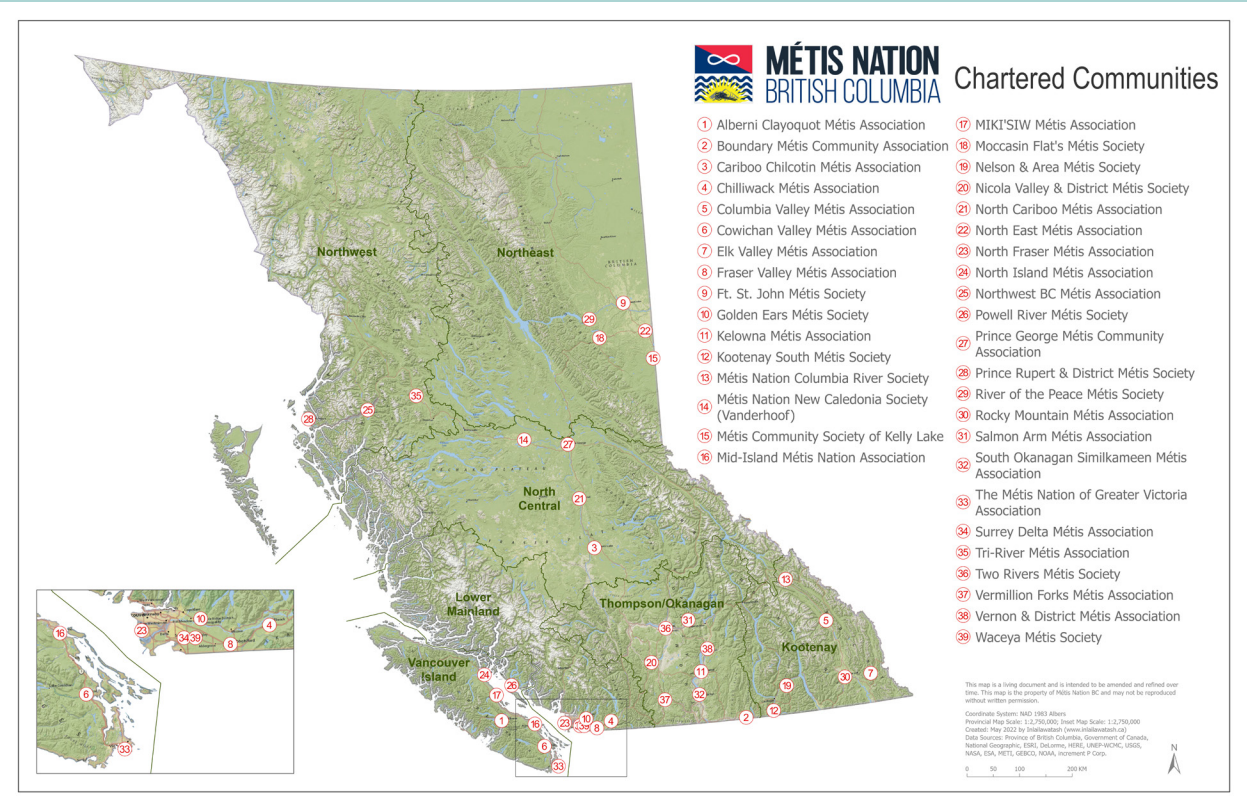
It is not always possible to report accurately on racism, stigma, and discrimination and their impacts due to the complex nature of these issues, along with challenges such as underreporting and the lack of disaggregated data. Creating effective strategies for collecting data and reporting on racist and discriminatory acts will help policymakers and legislators better understand the scope of the problem and respond appropriately (see text box: The *Anti-Racism Data Act* and Related Definitions).

Vancouver, BC, July 1, 2021. Blake Elliott/Shutterstock.com

FIGURE 15.1 **The First Peoples' Map of BC**

As this map shows, there are 34 First Nations language groups in BC, whose territories stretch across every inch of this province. To learn more about the First Peoples' Map, visit https://maps.fpcc.ca/.

FIGURE 15.2 **Métis Nation British Columbia Map of Métis Chartered Communities in BC**



This map is a living document and is intended to be amended and refined over time. For the latest version, please visit https://www.mnbc.ca/citizens-culture/chartered-communities. This map is the property of Métis Nation British Columbia (2022) and may not be reproduced without written permission.

MNBC, the OPHO, and the BCCDC affirm the inherent and treaty rights of BC First Nations, and their stewardship of the lands now known as British Columbia since time immemorial. This map shows the location of 39 Métis Chartered Communities represented by MNBC. Métis people live in Chartered Communities and throughout the province of British Columbia.

A truly upstream approach to arresting racism and associated inequities requires understanding how racism is rooted in white supremacy and settler colonialism. It requires that students, the public, and health-care and government workers participate in ongoing learning about the profound impacts of racism and discrimination (including discrimination based on factors such as sex, gender, 2SLGBTQQIA+[b] identities, level of ability, and socio-economic status) on individuals and communities. Further, an upstream approach necessitates work to promote a culture of **anti-racism** in BC.

As outlined in Chapter 1 of this report, the Societal Consequences project partners envisioned an intentional approach to these issues, acknowledging the ongoing impacts of settler colonialism and systemic racism, and embracing the "Grandmother Perspective" espoused by the BC Office of the Human Rights Commissioner on using disaggregated data to highlight race-, sex-, and gender-based inequities.[11] Project partners worked to uphold Indigenous self-determination and data governance standards[c] throughout the project, with Indigenous partner organizations taking the lead in terms of when and how they

[b] The acronym 2SLGBTQQIA+ refers to Indigenous people who identify as Two-Spirit and all people who identify as lesbian, gay, bisexual, trans, queer, questioning, intersex, and/or asexual, as well as those with non-heterosexual/non-binary sex and gender identities who do not see themselves reflected in this acronym.

[c] As presented in Chapter 1 of this report, Indigenous data governance standards include the First Nations principles of OCAP® (ownership, control, access, and possession) and the principles of OCAS (ownership, control, access, and stewardship) embraced by Métis Nation British Columbia.

engaged in the project overall and when and how Indigenous data were used. Due to the lack of relationships between the OPHO, the BCCDC, and Inuit in BC, and the lack of data governance protocols for Inuit data in BC, these stories and experiences are absent from this report. Other limitations and successes are explored further in the *Conclusion and Recommendations* section of this chapter.

3. The Amplification of Pre-existing Inequities during the Pandemic

As illustrated throughout this report, populations who experienced socio-economic exclusion pre-pandemic were consistently more likely to report negative impacts as a result of the pandemic and related public health response measures. These populations include Indigenous Peoples, racialized populations (e.g., Black and Asian Canadians), immigrants and newcomers, women, 2SLGBTQQIA+ individuals, people with disabilities, and those with lower socio-economic status.[14,15,16] Frequently, these identities intersect and overlap, which compounded the impacts of and challenges associated with the pandemic. These impacts and challenges—including substantial mental health and substance use-related harms[17]—did not end with the pandemic, and are likely to have longer-term implications and outcomes for many people.

Ongoing population health monitoring and surveillance will help to assess the longer-term effects of the pandemic and public health response measures—particularly for people and groups subject to marginalization and exclusion—as well as revealing persistent health inequities that require ongoing focused attention. Maximizing the benefits and reducing potential harms associated with public health monitoring and surveillance means being aware of ethical issues related to data justice and sovereignty, bioethics, and self-determination.[18,19,20,21]

The Anti-Racism Data Act *and Related Definitions*

On May 2, 2022, the Province of British Columbia introduced the *Anti-Racism Data Act* to help identify and eliminate **systemic racism** in government programs and services. Racism and discrimination are systemic problems that undermine the health and wellness of many people in BC. The Province has been working with the Office of the BC Human Rights Commissioner, First Nations and Métis leadership, racialized communities, and others in BC on a secure data collection system to analyze information on "race, ethnicity, faith, gender, sex, ability, income, and other social identity markers," and is building on this work to develop broader anti-racism legislation.[12]

Definitions

Anti-racism: "The practice of actively identifying, challenging, preventing, eliminating, and changing the values, structures, policies, programs, practices, and behaviours that perpetuate racism. It is more than just being 'not racist,' but involves taking action to create conditions of greater inclusion, equality, and justice."[13(p.4),14]

Systemic racism: Also known as structural or institutional racism, systemic racism "is enacted through routine and societal systems, structures, and institutions such as requirements, policies, legislation, and practices that perpetuate and maintain avoidable and unfair inequalities across ethnic or racial groups, including the use of profiling and stereotyping."[13(p.4)]

In addition, it is important to be aware that there are other types and means of collecting health data (e.g., Indigenous research methods, qualitative methods). Supporting the direct involvement of populations who experience health inequities is critical to developing effective solutions.[22,23]

Conclusion and Recommendations

The Societal Consequences project has laid the foundation for better understanding the health and wellness of the population of BC prior to, during, and in the aftermath of the pandemic. In addition, the project used an equity framework grounded in anti-racism, decolonization, sex and gender parity, and social determinants of health. This work has furthered relationships between the OPHO, the BCCDC, regional health authorities, and the health sector and community-based researchers and Indigenous organizations who collaborated on this project.

The project encountered challenges in meeting its goals. These included gaps in public health surveillance infrastructure. Processes for accessing data, especially data from outside the health system, varied considerably, and were sometimes not well established. This led to delays and suggested the need for improved coordination. In addition, BC's capacity for population health assessment and monitoring was stretched thin by the demands of the pandemic.

One aim of the project was to work collaboratively with the First Nations Health Authority (FNHA), Métis Nation British Columbia (MNBC), and the BC Association of Aboriginal Friendship Centres (BCAAFC) to ensure that the Societal Consequences project explicitly acknowledged and made progress towards upholding inherent Indigenous rights, including the right to self-determination, and truth and reconciliation with Indigenous Peoples. Still, the project was conceived of as an OPHO–BCCDC partnership that invited participation from FNHA, MNBC, and BCAAFC after its inception. Co-governance at the project initiation phase, bringing in the expertise and wisdom of "multiple-eyed seeing"[d] right from the outset, may have shaped the project differently.

The OPHO and BCCDC could have done more to support FNHA, MNBC, and BCAAFC's capacity to engage throughout the project. Efforts by the OPHO and BCCDC to enhance MNBC and BCAAFC participation by providing additional resources were not sufficient to overcome systemic and longstanding imbalances in power and access to resources that place Indigenous organizations at a disadvantage when partnering with settler-colonial institutions. Contributions from BCAAFC were highly valued; however, due to the high demands on their services during the pandemic, they needed to prioritize their limited resources and withdrew from the project partway through. Understandably, providing services to First Nations, Métis, and Inuit individuals, families, and communities through the fears and hardships of the pandemic was the top priority for FNHA, MNBC, and BCAAFC. These lessons, along with further feedback on the process from FNHA, MNBC, and BCAAFC, will promote improved collaboration in future work together.

The COVID-19 pandemic has underscored the need for better access to robust, consistent, and regularly updated data to rapidly assess the status of and changes to the health of the population and health equity in BC, with a focus on social, cultural, and economic determinants of health. The pandemic has also demonstrated the importance of quickly recognizing the unintended consequences of public health measures and considering those consequences alongside data about the measures' effectiveness. This allows for a process of continual assessment and refinement of public health measures to minimize societal disruption and other adverse impacts. Going forward, continued cross-sectoral collaboration could provide valuable opportunities to promote the benefits of embedding public health partnerships and approaches into the work of organizations outside the health sector, including assessing and monitoring social and other determinants of health.

[d] Please refer to the introductory *Commitment to Anti-racist Approaches, Upholding Inherent Indigenous Rights, and Truth and Reconciliation* section in this report for a description of "multiple-eyed seeing."

There is value in continuing with the population health and wellness monitoring and assessment initiated through the Societal Consequences project, for several reasons:

- The effects of COVID-19 and related public health response measures will continue to accrue.[24]
- Pandemic-related changes to indicators such as birth rates and excess mortality can only be seen and examined once sufficient time has passed for these effects to become apparent in the data.
- Many other societal consequences are yet to be examined and may emerge over time.

This report's recommendations support enhanced collective capacity to monitor and report on up-to-date health determinants data linked to population health indicators. This includes important work to advance Indigenous data sovereignty and increase access to disaggregated data to support improved health equity, justice, and system change while minimizing adverse impacts to populations that are often subject to systemic white supremacy, Indigenous-specific racism, and other systems of oppression such as racism, sexism, homophobia, transphobia, and ableism.

Recommendations

1. **Advance Indigenous population health data sovereignty as an important component of self-determination**

   a. Make substantial investments in advancing First Nations, Métis, and Inuit population health data sovereignty, including but not limited to adequate resourcing that enables Indigenous governing bodies to provide services and undertake real-time population health surveillance.

   b. Work to advance Indigenous population health data sovereignty by engaging in meaningful partnership with Indigenous governing bodies and organizations to uphold the inherent rights and title of BC First Nations, and the inherent rights of all Indigenous Peoples (First Nations, Métis, and Inuit) in BC through effective co-governance models.

2. **Advance population and public health surveillance and assessment capacity, collaboration, and coordination**

   Make substantial investments in local, regional, provincial, and Indigenous population and public health surveillance and health assessment capacity to monitor population health status and equity, track burden and trends of diseases and injuries, and identify potential and emerging public health risks. In particular, expand surveillance capacity for determinants of health and non-communicable diseases with a focus on enhancing collaboration and coordination across sectors.

3. **Clarify and communicate the population and public health surveillance and assessment mandate of the BC Centre for Disease Control (BCCDC) and its commitment to Indigenous population health data sovereignty**

   Clarify and raise awareness of BCCDC's mandate as the provincial body for BC population and public health surveillance and assessment, including the determinants of health, communicable and non-communicable diseases, and environmental health. At the same time, reaffirm BCCDC's ongoing commitment to collaborate with Indigenous governing organizations and to honour Indigenous data governance standards in this work.

Looking Forward

Together, the people of British Columbia have undergone significant challenges and sustained devastating losses as a result of the COVID-19 pandemic. Through it all, BC residents worked hard to be kind and to help one another, to remain calm in the midst of chaos, and to keep each other safe. BC is now able to review and assess the events of the pandemic, and to take what has been learned into a new era of rebuilding and recovery. The findings discussed in this report will provide opportunities for the Province, Indigenous partners, leaders, residents, and communities across BC to better prepare for and address future public health challenges.

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First Nations Health Authority
Health through wellness

FNHA's Statement on the Societal Consequences of BC's COVID-19 Response

BC's response to the COVID-19 pandemic has had a significant impact on people who live in the province since the pandemic was declared a public health emergency on March 17, 2020.

Indigenous peoples have been disproportionately affected by COVID-19 as well as the public health measures taken to respond to it, which have reinforced existing inequities, discrimination and racism present in BC's health system.

Data shows that First Nations people in BC have tested positive for COVID-19 at a higher rate than other residents, have had lower median ages of hospitalization and have higher rates of admission to intensive care units (ICU) and death from COVID-19.

Social determinants such as housing, food security, education and geography are critical aspects of our health and wellness, as are access to primary and emergency care. The impact of COVID-19 on these determinants has had a ripple effect on the health and wellness of First Nations in BC.

However, First Nations people and communities have faced this pandemic and drawn strength and resilience from Indigenous ways of knowing, being and living. As part of the broader First Nations governance structure in BC, the First Nations Health Authority (FNHA) has been proud to serve as a partner, advancing communities' priorities during the COVID-19 pandemic.

STRENGTHS OF THE PANDEMIC RESPONSE

First Nations' responses to the pandemic have showcased strengths and resilience that are grounded in culture and community. First Nations people have found new ways to connect with loved ones, support their communities and keep each other well.

The FNHA's Good Medicine series highlights "good news" stories that demonstrate how communities have adapted positively during the pandemic with creative solutions and how community members have chosen to be kind and support one another.

In acts of self-determination, now recognized by the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), many Nations across BC have established checkpoints or closed their communities in an effort to protect Elders, seniors and other vulnerable members from the spread of the virus.

First Nations community leaders and health directors have played instrumental roles in keeping community members safe, leading emergency response operations, obtaining personal protective equipment, coordinating COVID-19 vaccine clinics and planning for the safe resumption of services.

The FNHA has worked quickly to adapt to the emergency, expanding our virtual services to ensure First Nations individuals have access to essential health services during the pandemic.

In April 2020, the FNHA launched the First Nations Virtual Doctor of the Day to increase access to primary care that is close to home. Knowing the impact COVID-19 and related isolation have had on mental health, the FNHA also launched the First Nations Virtual Substance Use and Psychiatry Service, which provides access to specialists in addictions medicine and psychiatry, as well as mental health and wellness care coordinators. The Maternity and Babies Advice Line provides support to expectant and new parents, as well as their families and the health care providers of newborn babies in rural and remote First Nations communities in BC. In recognition that not everyone has access to the technology needed for virtual services, the FNHA partnered with the Social Planning and Research Council of BC to distribute 700 Wi-Fi-enabled tablets to help First Nations people and communities stay connected to health services during the pandemic.

As a partner in health and wellness, the FNHA has worked with communities to identify needs, providing support and services throughout the pandemic. When community transmission of COVID-19 became more common, the FNHA introduced meal, accommodation and transportation supports for people who need to self-isolate. Alternative accommodations, such as hotels or community spaces, were organized where self-isolation at home was not safe. Transportation to and from the isolation location were arranged whenever necessary. Meal supports have been provided and the FNHA increased meal rates to match rising food costs.

Working closely with our federal and provincial health partners, the FNHA and First Nations communities launched a successful immunization campaign that prioritized First Nations and other Indigenous peoples to receive a first dose of COVID-19 vaccines.

Vaccines became available in rural and remote First Nations communities at the end of December 2020 – six weeks earlier than originally anticipated – and by March 31, 2021, first-dose vaccine clinics were completed for every First Nations community in BC.

The FNHA adopted a "whole community" approach in which all eligible people in First Nations communities were offered vaccine doses. The FNHA also advocated for and collaborated with First Nations people who live away from home to ensure they were prioritized for vaccination and had access to culturally safe services.

Indigenous adults became eligible for their first vaccine dose as part of Step 2 of BC's immunization plan. As of early December 2021, more than 118,700 people age 18 and older and more than 11,600 people age 12–17 had received at least one dose of a COVID-19 vaccine in First Nations communities, as well as outside of communities by regional health authorities. Of these individuals, more than 105,200 First Nations people age 18 and over and more than 9,900 First Nations people age 12–17 had received two doses.

First Nations children age 5–11 also began to receive the pediatric COVID-19 vaccine as soon as doses became available in the province.

These actions, which could only have occurred through strong partnerships with communities and the broader health system, helped to keep First Nations people safer and saved many lives. The FNHA continues to work closely with provincial health partners to ensure First Nations people are prioritized to receive a booster dose and to ensure that additional vaccine doses are available in community for anyone who has not yet been vaccinated.

www.fnha.ca/coronavirus

NEGATIVE IMPACTS OF THE PANDEMIC RESPONSE

BC's response to the pandemic has also had negative impacts on First Nations people, especially where the public health response has reinforced long-standing inequities that disadvantage Indigenous peoples. This has been most evident in the toxic drug public health emergency, which has dramatically worsened during the pandemic.

Following the province's call to maintain physical distance and to self-isolate, people who use substances have often done so alone. For a large period of the pandemic, there has been low utilization of treatment facilities, overdose prevention sites and other harm reduction services, even as drug supply toxicity surged.

The consequence has been a significant and disproportionate increase in overdose events and deaths among First Nations people. During the first seven months of 2021, there were 175 First Nations deaths due to toxic drug poisoning, which significantly exceeded the total number of First Nations drug toxicity deaths that occurred in all of 2019. First Nations deaths in 2021 constituted 14.5 percent of all deaths from drug poisoning in BC. From January to July, women represented 39.5 percent of all First Nations drug poisoning events, as compared to 24.1 percent of other residents who were women.

First Nations people have not been alone in experiencing the uncertainties, stresses and losses related to the pandemic and its profound impact on mental health. People around the world have been navigating elevated rates of anxiety, depression and grief.

For many First Nations people, these challenges are layered with the intergenerational trauma and loss associated with previous pandemics, with contemporary trauma, systemic racism in the health system and colonialism more broadly. Distrust of health care providers and the wider health system has contributed to some First Nations people feeling reluctant to access mental health and substance use services and has contributed to lower vaccine uptake in some communities.

In the midst of these challenges, First Nations people in BC have been subjected to a new and ongoing wave of racism and discrimination, both within and beyond the health system. As detailed in the 2020 report *In Plain Sight*, systemic anti-Indigenous racism pervades BC's health system and "results in a range of negative impacts, harm and even death." Over the course of the COVID-19 pandemic, many First Nations individuals and communities have experienced stigma and have been denied access to businesses and services, especially in areas where there have been localized outbreaks of the virus.

At the same time, many First Nations people, especially those who live in rural and remote parts of the province, have experienced reduced access to a wide range of health and wellness services, including primary care, screenings, assessments and immunizations. For many, preventative care and surgeries have been delayed or deferred. Others may have chosen to postpone or cancel health appointments due to concerns about COVID-19.

The pandemic response has also interrupted daily life for First Nations in BC, for those experiencing business closures and reduced family incomes. Communities have also seen a rise in food insecurity due to challenges in production, transportation, access and storage. Some have experienced decreased physical activity due to more time spent at home.

In the face of these challenges, First Nations people have traditionally drawn strength and resilience from community, culture and ceremony. While communities have worked to find new and safe ways to connect (e.g. virtually), public health orders and measures taken by communities to protect people from COVID-19 have frequently limited important community events and cultural activities. The decreased connection to social support networks and services has been particularly impactful on women, girls and 2SLGBTQA++ people, some of whom have had to face gender-based violence with fewer resources or options.

ENGAGEMENT WITH THE PROVINCE

In the province's examination of the societal consequences of the public response to the pandemic, BC's Office of the Provincial Health Officer (OPHO) and the BC Centre for Disease Control (BCCDC) approached the FNHA early and consistently. The FNHA was invited to participate in the working group set up for this purpose and to provide First Nations–specific input into the development of the project's Societal Consequences reports.

While the OPHO and BCCDC have been supportive of the possible creation of First Nations–specific reports, it became apparent by mid-2021 that there was not capacity to do this fully or in a good way due to multiple interconnected crises. In particular, First Nations communities have grappled with the heartbreaking findings of the unmarked graves of their children across BC, beginning with the findings at the former Kamloops Indian Residential School in late May. In lieu of a series of First Nations reports, this statement serves to capture some of the more significant positive and negative unintended societal consequences of the COVID-19 pandemic for First Nations people in BC.

For more information:

- COVID-19 Community Situation Report (FNHA Public Health Response): https://www.fnha.ca/what-we-do/communicable-disease-control/coronavirus/community-leaders
- FNHA's Good Medicine series: https://www.fnha.ca/wellness/community-wellness/good-medicine
- First Nations Virtual Doctor of the Day: https://www.fnha.ca/what-we-do/ehealth/virtual-doctor-of-the-day
- Virtual Substance Use and Psychiatry Service: https://www.fnha.ca/what-we-do/ehealth/virtual-substance-use-and-psychiatry-service
- Maternity and Babies Advice Line: https://www.fnha.ca/what-we-do/ehealth/maternity-and-babies-advice-line

Supplement B:

Priority-setting Framework

Using This Document

At the onset of the Societal Consequences project, 60 report themes were identified. This framework was used to determine the order in which reports would be developed.

This framework uses four key criteria (severity/intensity, size of the population impacted, vulnerability of the impacted population, and anticipated duration of the impact), each on a scale of 1 to 10, to determine which tier a report should be placed in. After an initial assessment, more than half of the 60 reports were placed in Tier 1; therefore, Tier 1 was broken down into Batches 1 to 4, using the same criteria. Tier 1, Batch 1 reports are those determined to be most urgent.

TIERS AND BATCHES

TIER 1: Highest Priority: Warrants immediate action/response

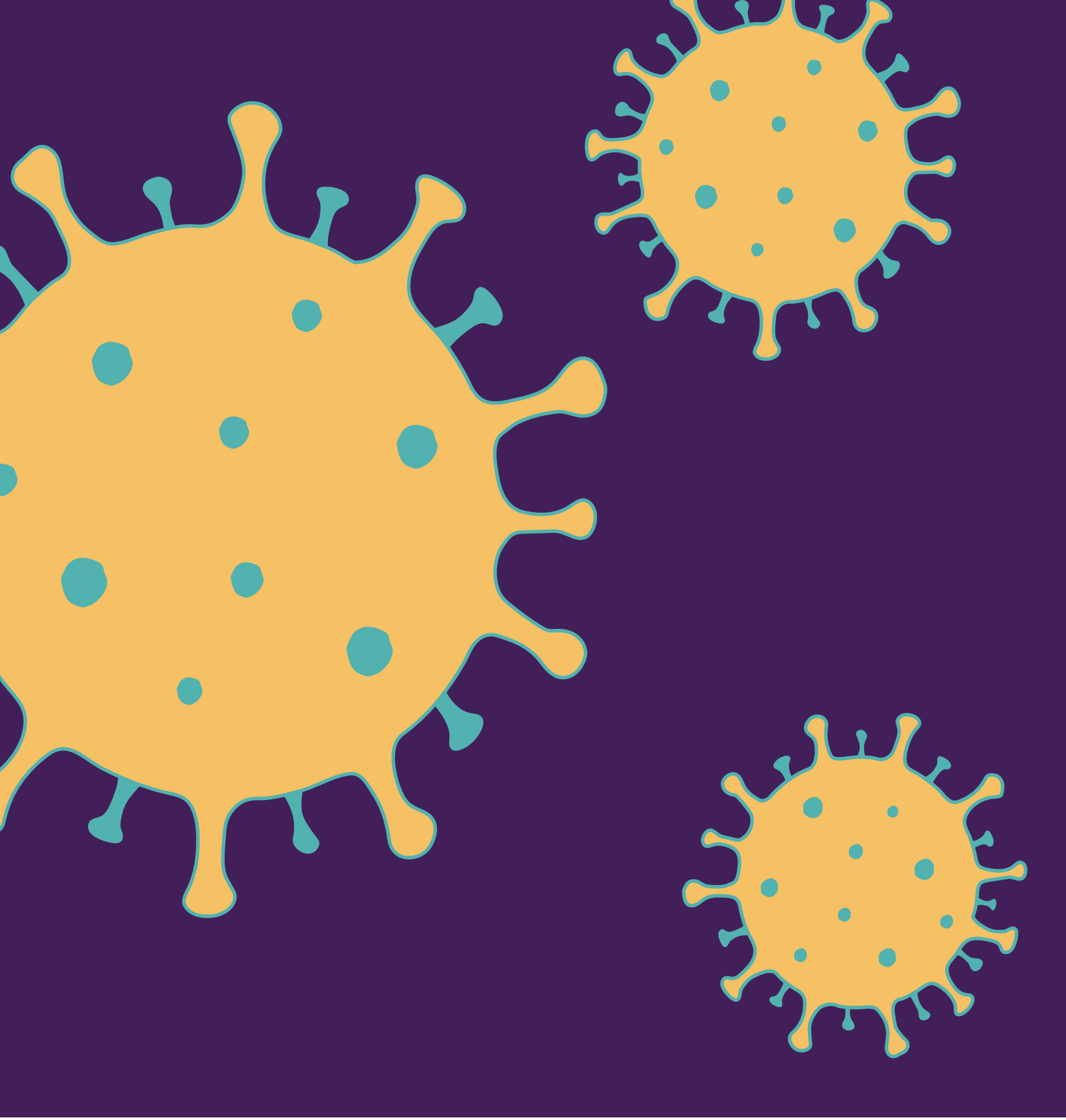
Batch 1 → Batch 2 → Batch 3 → Batch 4

TIER 2: Warrants action/response as soon as possible, but is not an immediate/imminent health risk

TIER 3: Action/response will be needed, but is not urgent (compared to Tiers 1-2)

TIER 4: No action/response is needed, but monitoring/assessment will proceed/continue

NEGATIVE/HARMFUL CONSEQUENCES	POSITIVE/BENEFICIAL CONSEQUENCES
A- Severity of the harm (scale from highest = death to lowest = inconvenience)	**A+ Intensity of the benefit** (scale from highest = markedly improved health outcomes to lowest = superficial benefit)
1 = inconvenience	1 = superficial benefit
3 = minor health impact (e.g., sprain/break; stress/anxiety)	3 = minor health benefit
5 = moderate health impact (e.g., obesity/diabetes; increased problematic substance use)	5 = moderate health impact (e.g., reduced substance use; increased physical activity; increased family/ community connectedness)
7–8 = serious health impact or multiple moderate impacts (e.g., non-fatal overdose; cancer severity)	7–8 = serious physical/mental health benefit or multiple moderate benefits
10 = death	10 = longer healthier life; or remedy of chronic issue
B- / B+ Size of the population impacted	
1 = less than 10	7 = many/most of BC population
2–3 = small groups	8–9 = majority of BC population
5 = approximately half the BC population	10 = entire BC population
C- Vulnerability of the population impacted, and likelihood of creating increased inequity for underserved populations (3 aspects: how vulnerable is the population, how much wider does the disparity get, how many disparities/issues are included)	**C+ Vulnerability of the population impacted, and likelihood of creating increased inequity for underserved populations** (3 aspects: is the impacted population a vulnerable one, does it create improved health outcomes, does it create improved access to health/social services)
1 = somewhat vulnerable population with low likelihood of increased disparity	1 = somewhat vulnerable population with low likelihood of short-term increased access
2–3 = somewhat vulnerable population with likelihood of short-term disparities	2–3 = somewhat vulnerable population with some benefits to access
5 = population with underserved needs, with reasonable likelihood of moderate disparities	5 = population with underserved needs, with increased access to services and one or more improved health outcomes
7 = underserved and vulnerable population, with high likelihood of moderate disparities	7–8 = underserved and vulnerable population, with greater access to several services and improved health outcomes
8–9 = underserved and vulnerable population, with high likelihood of widening of disparities	
10 = most underserved and vulnerable population with irreversible widening of multiple disparities	10 = most underserved and vulnerable population having widespread increased access to services
D- / D+ Anticipated duration of the impact	
1 = temporary and short-lived, one-off	7 = longer term (~12–24 months); aligns with COVID-19 phase 3 and phase 4, including post-immunization
2-3 = short-term (~2 months); aligns with COVID-19 phase 1 measures (March 16–May 19, 2020)	8 = ~2–10 years
5 = moderate-term (~6 months); aligns with COVID-19 phase 1 and phase 2 (March 16–Sept 30, 2020)	9 = more than 10 years
	10 = lifelong impact



BC Centre for Disease Control
Provincial Health Services Authority

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www.health.gov.bc.ca/pho/reports/annual

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