



#### THE HONOURABLE UZOMA ASAGWARA

Minster of Health, Seniors and Long-Term Care Room 302, Legislative Building Winnipeg, Manitoba R3C 0V8

Dear Minister Asagwara,

Fulfilling the requirements of The Public Health Act, I have the honour and privilege of presenting you the *Chief Provincial Public Health Officer's Report on the Health Status of Manitobans 2025: A Healthier Manitoba for All.* 

Respectfully submitted,

**Dr. Brent Roussin** 

Chief Provincial Public Health Officer



# **Table of Contents**

Message from the Chief Provincial Public Health Officer	. 7
HEALTHY POPULATIONS 10	
CONVENTIONAL MEASURES OF HEALTH OUTCOMES 22	
MEASURING WHAT MAKES US HEALTHY 42Economy and Employment.4Income and Poverty.4Food Insecurity.5Housing and Homelessness.5Early Childhood Development.6Early Learning and Child Care, K to 12 Education.6Education and Learning Beyond K to 12.6Justice.8Health Care and Health System Impacts.6Healthy Built Environment and Lifestyle Behaviours.6Misinformation and Disinformation.10	48 54 59 63 73 80 86 91
CHRONIC DISEASE 109         Diabetes       1         Cardiovascular Disease       1         Cancer       1         INJURY 123       1         Unintentional Injury       1	15 19
Intentional Injury	39
Water	59 62
Sexually Transmitted and Blood-borne Infections 17 Tuberculosis 18 Immunization and Vaccine-preventable Diseases 18 Respiratory Viruses 18 Antimicrobial Resistance 18	81 82 87

FINAL THOUGHTS AND RECOMMENDATIONS 190

# Message from the Chief Provincial Public Health Officer

Manitoba faces a pivotal opportunity to reimagine how we understand and improve health and well-being. This report, *A Healthier Manitoba for All*, builds on the foundation of the 2022 Health Status Report to offer an updated and holistic picture of the health of Manitobans.

Mandated under the Public Health Act, this report provides a transparent, data-informed, and socially accountable assessment of population health in Manitoba. It seeks to inspire action, foster collaboration, and highlight the interconnectedness of health determinants across all sectors. Its guiding vision, "improving health in everything we do," reflects a commitment to systemic, coordinated solutions.

Public Health has a responsibility to look beyond the impacts of the traditional health-care system and advocate for multisectoral action on the upstream causes of ill health. Effective health policy extends beyond the boundaries of the health-care system. Through an exploration of data, trends, and emerging challenges, this report continues the conversation that health is influenced by the social, economic, environmental and structural contexts in which we live. Improving health outcomes for all Manitobans requires coordinated, compassionate, and evidence-based approaches to addressing the root causes of ill health.



#### The Case for a Multisectoral Approach

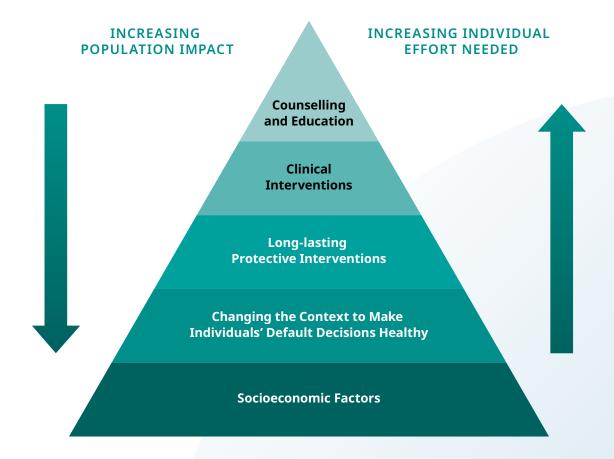
Manitobans' health is shaped by a complex web of factors, many of which lie outside the traditional health-care system. Despite continued investments in health care, disparities in health outcomes are growing. This compels us to rethink health policy through a broader, more integrated lens.

Chronic diseases, such as diabetes and cardiovascular disease, pose significant challenges, both for individuals and for the health-care system. These conditions are often the result of risk factors, such as tobacco use, alcohol consumption, poor diet, and physical inactivity. Broader, upstream social and environmental conditions heavily influence these risk factors.

#### THE HEALTH IMPACT PYRAMID

The health impact pyramid provides a framework for public health action. Interventions in the top layers of the pyramid are designed to help individuals rather than entire populations.<sup>1</sup>

Addressing chronic disease requires interventions across the health impact pyramid, from individual-level education to population-wide policy changes. Greater intervention at the base of the pyramid creates environments that support healthier choices, reduce health disparities, and improve outcomes for everyone.



# Addressing Urgent Issues with Compassion and Evidence

The health challenges facing Manitoba in 2025 demand urgent attention, but they also require a thoughtful and compassionate response. Homelessness, substance use, and racism are not merely health issues – they are societal issues that reflect more profound inequities and systemic failures. Addressing these challenges requires a shift in perspective, from viewing health as the sole responsibility of the health-care system to recognizing it as a shared societal obligation.

Homelessness is a pressing issue that disproportionately affects structurally disadvantaged populations, including Indigenous peoples and those living with mental illness. Stable housing is a fundamental determinant of health, yet many Manitobans lack access to safe, appropriate and affordable housing.

Responding to substance use demands compassionate, evidence-based approaches to prevention, treatment and harm reduction. Stigma often prevents individuals from seeking help, perpetuating cycles of poor health and social exclusion.



Racism and discrimination remain pervasive barriers to health equity, affecting access to health care, education, employment, and other determinants of health for many populations including Indigenous peoples, women, newcomers and refugees, people from racialized groups and members of the 2SLGBTQ+ community. This report aims to highlight the unequal physical, social, economic, and structural factors that lead to disparities in outcomes for certain groups more than others.

#### **A Hopeful Path Forward**

Despite the challenges outlined in this report, there is reason for optimism. Manitoba possesses the tools, knowledge, and resources needed to create a healthier and more equitable future for all its residents. Addressing the root causes of ill health requires sustained action across all sectors, supported by clear metrics and regular public reporting to ensure accountability.

This report emphasizes that health and well-being are shared responsibilities. Governments, communities, organizations, and individuals all play a role in shaping the health of Manitoba.

By working together, we can reduce health disparities, improve outcomes, and build a stronger, more equitable province.

The Health Status of Manitobans Report 2025 challenges us to rethink what influences health and recognize that today's policy decisions will shape the well-being of future generations. Together, we can build a province where everyone has the opportunity and resources to live a healthy and fulfilling life.



**DR. BRENT ROUSSIN**Chief Provincial Public Health Officer





# **Acknowledgements**

A report of this nature is not possible without the contributions of many organizations and individuals. I would like to extend my sincere appreciation to everyone across the Government of Manitoba and Shared Health Manitoba who provided their time, knowledge and perspectives in the development of this report.

This report describes the inequitable conditions that lead to disparities in health outcomes for populations across Manitoba. The ongoing harms of colonialism and racism contribute to Indigenous peoples being disproportionately affected. While their input does not represent an endorsement of this report, I am grateful to the Assembly of Manitoba Chiefs First Nations Health and Social Secretariat of Manitoba, Keewatinohk Inniniw Minoayawin, the Manitoba Métis Federation and the Southern Chiefs Organization for sharing their perspectives and expertise.

Finally, this report is the result of the hard work and dedication of Amy Young and Paige King from Manitoba Health, Seniors and Long-Term Care.

#### **Data Acknowledgement**

The COVID-19 pandemic had widespread, and varied effects on the data presented in this report. When interpreting data and trends over the last five years, the disruption to services across sectors, the impact of social support programs, changes to personal behaviours and a wide range of other factors must be considered.

#### **Land Acknowledgement**

We would like to acknowledge the land that this report is about and on which it was developed. Manitoba borders include the treaty territories and ancestral lands of the Anishinaabe, Anishininewuk, Dakota Oyate, Denesuline and Nehethowuk peoples. We also acknowledge that Manitoba is located on the Homeland of the Red River Métis and that the northern region includes lands that were, and are, the ancestral lands of the Inuit. We respect the spirit and intent of treaties and treaty making and remain committed to working in partnership with First Nations, Inuit and Métis people in the spirit of truth, reconciliation and collaboration.

# **Executive Summary**

This report invites Manitobans to view health not as simply the absence of disease, but as the foundation for a dignified and fulfilling life. Health encompasses the physical, mental, emotional, spiritual, social, cultural, environmental, and economic well-being of individuals, families, and communities.<sup>2</sup> By shifting the focus from individual illness to population health, we recognize that solutions to rising disease rates extend beyond clinical care and to the broader conditions that shape how people live, learn, work, and age across Manitoba.

The health-care system and population health approaches both play important roles in supporting the health of Manitobans. Generally, health-care providers focus on interventions to prevent disease and restore health in individual patients. In contrast, population health plays a distinct role in preventing disease and illness by understanding and improving the underlying conditions that lead to poor health outcomes.



#### What We Found

The overall health status of Manitobans continues to improve. Over the past 20 years, trends in life expectancy, infant mortality, premature mortality, and injury mortality have all significantly improved, however these improvements are not distributed equally.<sup>3</sup> Inequities in health outcomes for those living in the Northern Health Region and those from the lowest income quintiles persist.<sup>3</sup>

#### **Chronic Disease**

In many cases, rates of chronic disease have decreased overtime. However, a growing and aging population means that the overall number of people living with chronic conditions requiring health-care services continues to increase across Manitoba.<sup>3</sup> For example, between 2017-18 and 2022-23, rates of hypertension remained stable, but there was a 10.4 per cent increase in the number of people in Manitoba with high blood pressure.<sup>3</sup>

The increasing population living with chronic conditions, including heart disease, stroke, cancer and diabetes, amongst others, drive substantial demand for health-care services. Chronic diseases are the leading cause of hospitalizations and deaths in the province.<sup>3</sup> Steadily increasing rates of diabetes are of particular concern. In 2024, it was estimated that over 152,000 Manitobans were living with diabetes (type 1 and type 2 diagnosed) and is estimated to increase to over 210,000 by 2034.<sup>4</sup>

#### **Communicable Disease**

The distribution of communicable diseases across populations starkly reminds us of the persistent health equity challenges in Manitoba. While anyone can acquire a communicable disease, how it spreads is highly influenced by factors related to the individual who may become infected and the environment around them. In Manitoba, the burden of communicable diseases, particularly sexually transmitted and blood-borne infections, is disproportionately borne by individuals experiencing poverty and homelessness, injection drug use and those with underlying addictions or mental illness.

A common thread throughout this report is that disparities in health outcomes share similar underlying social, economic and environmental causes. To fully understand the health status of Manitobans, it is necessary to analyze not only the rates and patterns of disease but also those of the underlying determinants of health, such as early childhood development outcomes, educational attainment, employment, and income. Income, for example, has one of the most significant impacts on health outcomes. However, a person's ability to earn sufficient income is shaped long before entering the workforce, through the experiences and environments they encounter in childhood and throughout their education.

#### **Recommendations**

Improving the health and well-being of Manitobans requires action beyond the health-care system. Treating illness alone cannot reverse the growing burden of chronic disease or close long-standing health gaps. Real progress depends on coordinated policies across government that address the conditions shaping health, such as education, income, housing, environment, and community connection.

This report contains three recommendations to advance shared responsibility for the health and well-being of Manitobans by aligning government policies and priorities.



# Healthy Populations

### What is Health?

Our understanding of health and what it means to be healthy has become increasingly more complex over time. Initially seen as simply an absence of disease, the concept of health was expanded to in the mid 1940's to include mental and social factors. Early views treated health as something you either have or do not have, suggesting that the strategy for promoting and maintaining health lies mainly within the health-care system. Today, we know ill health is driven by a complex web of social, economic, environmental and structural factors, and our understanding of health and well-being is far broader than simply it being an absence of disease.

**Population Health Approach** 

A population health approach aims to improve the health of the entire population and to reduce health inequities among population groups. It reflects a shift in thinking about how health is defined and recognizes the range of social, economic, physical and structural factors that contribute to health. Instead of viewing health as a state, the population health approach describes health as "the capacity of people to adapt to, respond to, or control life's challenges and changes." <sup>6</sup>

Individuals and groups may define health differently, based on their values, culture, experience and worldview. Broadly speaking, health encompasses the physical, spiritual, mental, emotional, environmental, social, cultural and economic well-being of individuals, families and communities.<sup>2</sup> Health is not the reason for living, but rather a means to support people in living dignified and fulfilling lives, whether they are living with an illness or not. Within this definition lies the concept of well-being, which encompasses the quality of life as well as people's ability to contribute to the world with a sense of meaning and purpose.<sup>7</sup>

This report aims to understand and measure the conditions that shape health in Manitoba, not only to describe the health of our population, but to identify where and how we can act to improve it. To do this, we must first examine the conditions that contribute to health.

# **Essential Conditions for Good Health**

Health is not created in hospitals, but in homes, classrooms, workplaces, and communities.

In 1986, the Ottawa Charter on Health Promotion described a set of fundamental conditions and resources for health that included: "peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice and equity."8

These conditions are often referred to as determinants of health and they can both favour, and be harmful to health. The following framework is just one example illustrating how individual health and well-being is dependent on the community, environment and society, as well as the broad categories of determinants that influence each level.<sup>9</sup>

#### **Achieving Health and Mental Health Equity at Every Level**



Source: Let's Get Healthy California<sup>9</sup>

#### The Ottawa Charter on Health Promotion

Forty years ago, the Ottawa Charter outlined an effective framework for promoting health that remains relevant today. Our society is complex and interrelated, meaning that health cannot be separated from other goals, such as creating good jobs, growing the economy, better educational outcomes and improving community safety. Therefore, the prerequisites and opportunities for health cannot be ensured by the health sector alone.<sup>8</sup>

Health promotion demands coordinated action by all concerned: by governments, by health and other social and economic sectors, by non-governmental and voluntary organizations, by local authorities, by industry and by the media."8

#### Action on health promotion means:

- building healthy public policy
- creating supportive environments
- strengthening community action
- developing personal skills
- reorienting health service<sup>8</sup>

Determinants of Health	
Income and social status	Employment and working conditions
Education and literacy	Childhood experiences
Physical environments	Social supports and coping skills
Healthy behaviours	Access to health services
Biology and genetic endowment	Gender
Culture	Race / Racism <sup>8</sup>

Before the Ottawa Charter, the 1974 Lalonde Report acknowledged the importance of the environment in promoting health. It emphasized the role of personal lifestyle behaviours (physical activity, diet, smoking and alcohol consumption) in driving disease and injury.<sup>11</sup> While lifestyle behaviours remain strong drivers of chronic disease today, the Ottawa Charter recognized that, without a secure foundation in the determinants of health, people cannot reach their full health potential.<sup>8</sup> This marked a significant shift from blaming individuals for poor health outcomes to a more collective responsibility that goes far beyond the health sector. Today, Canada is a partner in advancing the United Nations Sustainable Development Goals that require a whole-of-government and whole-of-society effort to build stronger, safer and more inclusive societies that leave no one behind.<sup>12</sup>



#### **United Nations Sustainable Development Goals**

The 17 Sustainable Development Goals represent an urgent call for global action, recognizing that ending poverty and other deprivations must be accompanied by strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve oceans and forests.<sup>13</sup>

## The 17 Goals

- 1. No Poverty
- 2. Zero Hunger
- 3. Good Health and Well-Being
- 4. Quality Education
- **5.** Gender Equality
- 6. Clean Water and Sanitation
- **7.** Affordable and Clean Energy
- 8. Decent Work and Economic Growth
- **9.** Industry Innovation and Infrastructure

- 10. Reduce Inequalities
- 11. Sustainable Cities and Communities
- **12.** Responsible Consumption and Production
- **13.** Climate Action
- **14.** Life Below Water
- 15. Life on Land
- **16.** Peace, Justice and Strong Institutions
- **17.** Partnership for the Goals<sup>13</sup>

#### **Stigma**

Stigma refers to negative attitudes, beliefs, or behaviours about, or towards, a group of people.<sup>14</sup> It is often experienced based on different identities, characteristics, and behaviours including race, gender, gender identity, sexual orientation, language, age, substance use, health conditions, ability and social class. Stigma leads to specific groups of people being devalued and discriminated against, which can lead to disadvantage and inequitable social and health outcomes.<sup>15</sup>

Promoting health requires that everyone has a fair and just opportunity to achieve optimal health. For this to happen, obstacles, such as poverty, discrimination, and their consequences, including powerlessness and lack of access to such things as good jobs with fair pay, quality education and housing, safe environments and health care, must be removed.<sup>16</sup>

#### **Structural Determinants of Health**

Structural determinants of health include political, macroeconomic, and commercial factors. Racism and the continued harms of colonialism are two structural factors driving health inequities for Indigenous peoples and racialized populations in Manitoba that underpin all other determinants of health including access to health care and education, culture, language, housing, jobs and income.

Racism is a structural system present in all aspects of society that is built into polices, laws and practices on the false belief that different races are superior or inferior to one another.<sup>17</sup> It is at the core of colonialism, which has been recognized as the most damaging determinant of health for First Nations Peoples.<sup>18</sup>



# Race, Ethnicity and Indigenous Identity Data

Manitoba is the first province in Canada to collect voluntary race-based data from patients when they register for care at hospitals.. Collecting this data is necessary to measure the access to, and quality of, care received by different groups. Race, ethnicity and Indigenous identity data can challenge harmful stereotypes that may compromise the health-care different populations receive and ensure that every Manitoban receives the highest quality of care possible.<sup>19</sup>

One goal of this report is to deepen our collective understanding of how the inequitable circumstances of our lives contribute to differences in the distribution of risk factors, as well as disparities in health and well-being outcomes across different populations.

# The Limitations of the Health Care System in Population Health

Canada's universal health-care system developed in two phases, initially focused on providing acute hospital care, laboratory and diagnostic services and later expanding to cover outpatient doctors' services.<sup>20</sup> The purpose was to diagnose and treat people who were sick, which remains the primary function of the system today. When health policy is viewed narrowly as health-care policy, an expansion of the health-care system is the primary response to disease.<sup>21</sup>

Fifty years ago, the Lalonde Report recognized the limitations of this approach noting that "the traditional view of equating the level of health in Canada with the availability of physicians and hospitals is inadequate ... and there is little doubt that future improvements in the level of health of Canadians lie mainly in improving the environment, moderating self-imposed risks and adding to our knowledge of human biology."<sup>11</sup>



At the time of the Lalonde Report, 45 per cent of hospitalizations were caused by cardiovascular diseases, injuries due to collisions, respiratory diseases and mental illness.11 The leading underlying causes were identified as lifestyle behaviours such as lack of exercise, stress, low rates of seat belt use, cigarette use and alcohol consumption.<sup>11</sup> Lalonde stated that "the organized health-care system can do little more than serve as a catchment net" for people whose poor health is driven by these factors.<sup>11</sup> Instead of shifting the solution towards social policies, an increased focus on individual risk factors and specific diseases led to the expansion of interventions aimed at modifying risk factors at the personal level through patient and clinician interactions.21

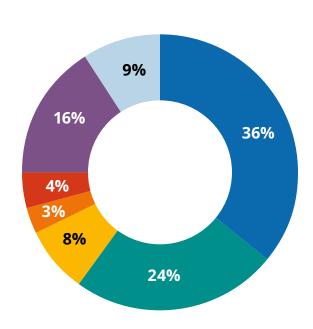
While Lalonde highlighted the importance of the environment and lifestyle for health, the emphasis on individual factors fails to recognize the impact of the upstream determinants of health on these outcomes. The Health Impact Pyramid (p. 3) exemplifies that the greatest impact on health occurs at the base of the pyramid, by addressing the underlying determinants of health.

Spending on the health-care system continues to increase in response to growing rates of illness. For the year ending March 31, 2024, health-care expenditures in Manitoba exceeded \$8.9 billion and consumed 38 per cent of the total provincial budget.<sup>22</sup> In 2025-26, Manitoba plans to spend over \$9.3 billion on health care.<sup>23</sup>

#### **SUMMARY OF EXPENSES 2025-26**

#### Millions of Dollars and Per Cent





TOTAL EXPENSES \$25.850

Source: Manitoba Finance

Despite increasing investments and expansion of the health-care system, rising rates of chronic disease continue to drive demand for services, and the gaps in health outcomes between populations continue to worsen. This is because the conditions that lead to poor health outcomes are mainly influenced by the programs and policies of sectors outside of health care. Without a change in approach, the growing demand for health-care services will continue to place pressure on a system with finite resources.

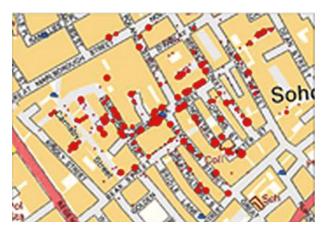
#### What is Public Health?

While health care and public health both aim to protect and improve health, they do so in distinct, yet complementary, ways.

The history of public health is a story of promoting health and preventing disease in populations dating back to ancient times.<sup>24</sup> Public health practice was founded in environmental health, with early actions focused on improving sanitation and providing clean water to reduce the spread of disease.

By example, in the mid 1800s, large numbers of people were moving into cities across Europe. This movement of so many people led to overcrowding in substandard housing, inadequate public water supplies, and inadequate waste disposal systems. In London, sewers and flushing toilets drained directly into the Thames River. As a result, a series of outbreaks of waterborne and other infectious diseases occurred, causing large-scale illness and death.<sup>24</sup>

#### MAP OF LONDON CHOLERA OUTBREAK, 1854



Source: University of Southampton https://www.southampton.ac.uk/news/2013/04/lifesaving-cholera-map.page

In one outbreak in Soho, more than of 600 people died over a period of 10 days. Following an investigation of who fell ill and, just as importantly, who did not, Dr. John Snow observed that the cases either lived close to, or used, the Broad Street pump for their drinking water. He also observed that workers and residents of the area who relied on local wells escaped the epidemic. Following these observations, he concluded that contaminated water from the pump was the source of the disease. Dr. Snow's research convinced the government to remove the pump handle, and the outbreak disappeared within a few days. Legislation was later passed that overhauled London's water and sewage systems, contributing to the non-return of cholera.<sup>24</sup>

The story of the Broad Street Pump highlights the importance of the environment on human health. Contaminated water from the river was the source of significant illness and death. Once the environmental factor was addressed, through improved water and sanitation systems, the negative impact on human health was reduced.

In addition, it demonstrates how public health works and why this work is often described as invisible. Public health professionals regularly work behind the scenes and across sectors. The invisible work of the investigation required collaboration with community members, employers, and various government offices to gather and analyze information, make recommendations, and advocate for the visible outcome: the removal of the pump handle.

Ultimately, it demonstrates how the work of public health complements the work of the health-care system by preventing illness. Public health professionals seek to understand and change the conditions that cause increased rates of disease in specific communities or populations leading to better long-term population health. Health-care providers, such as those in a hospital system, typically focus on interventions to restore the health of individual patients.

The story of the Broad Street Pump shows the diverse activities that remain the foundation of public health practice today including:

#### Health protection

Ensuring the safety of our environment (water, air, food, waste), preventing the spread of disease and managing outbreaks and other incidents that threaten public health.<sup>25</sup>

#### Health surveillance

Referred to as epidemiology, the study of the patterns, causes and effects of health and disease conditions in defined populations.<sup>26</sup>

#### • Disease and injury prevention

Involves investigation, contact tracing, implementing preventive measures to reduce the risk of infectious disease emergence and outbreaks, as well as activities to promote safe, healthy lifestyles to decrease preventable illness and injuries.<sup>27</sup>

#### · Population health assessment

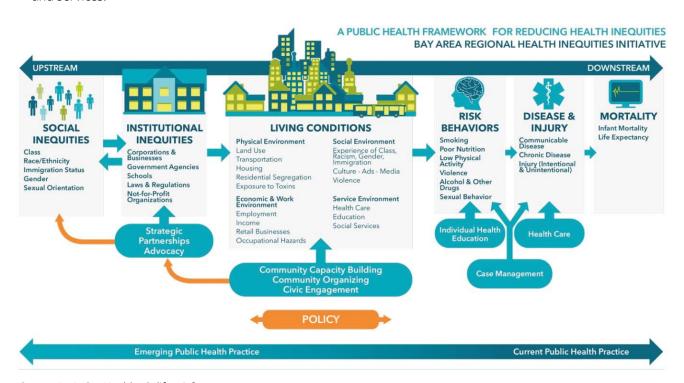
Understanding of the health of communities or specific populations, as well as the factors that underlie good health or pose potential risks, to inform the development of better policies and services.<sup>27</sup>

#### Health promotion

Focuses on preventing disease, encouraging safe behaviours and improving health through public policy, community interventions, active public participation, and advocacy or action on environmental and socio-economic determinants of health.<sup>27</sup>

In addition to the activities outlined above, public health practice has expanded to include **emergency management**, which involves planning and responding to both natural and human-made disasters to minimize serious illness and injuries, overall deaths and social disruption.<sup>27</sup>

The following image shows the range of public health work, from more individual interventions and case management, often referred to as downstream, to advancing strategic partnerships and advocacy to improve social inequities, often referred to as upstream. Given the breadth of work, public health practitioners often act as a bridge, connecting different sectors, levels of government and the health-care system.<sup>9</sup>



Source: Let's Get Healthy California<sup>9</sup>

# Multisectoral Action for Improving Population Health

The factors influencing population health and well-being are numerous, interrelated, and primarily lie outside the health-care system. Therefore, improving population health and reducing health inequities requires a coordinated and sustained effort across all sectors.

Multisectoral action requires identifying shared goals and interests across sectors and collaboratively developing solutions that deliver benefits across multiple priorities (e.g. health, education, justice, economy and employment). It can include joint efforts across government, community and other settings. A multisectoral approach has many benefits, including more efficient use of resources, reduced duplication of efforts and maximizing the impact of investments.<sup>28</sup>

Health in All Policies, or HiAP, is a proven framework for multisectoral action that creates a shared responsibility for population health and well-being. aThe general aim of HiAP is not to focus on specific health issues, but rather, to sustain engagement across sectors on societal problems that influence many health problems by emphasizing:

- formalized governance structures
- partnerships centred on collaboration
- co-benefits for health and development
- · investment in trusting relationships
- focus on upstream determinants of health<sup>30</sup>

"Health in All Policies is an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies and avoids harmful health impacts in order to improve population health and health equity."

- Helsinki Statement on Health in All Policies, 2014<sup>29</sup>



To create a strong and sustainable foundation that overcomes the siloed and rigid nature of government structures, HiAP employs a four-pillar approach that can be tailored to any sector to address cross-cutting policy challenges.<sup>31</sup>

#### PILLAR 1

Governance and Accountability

#### PILLAR 2

Leadership at All Levels

#### PILLAR 3

Way of Working and Work Methods

#### PILLAR 4

Resources, Financing and Capabilities





A HiAP approach leverages knowledge, resources, and capacity from various sectors to create more effective and comprehensive policy responses that address the root causes of ill health and health inequities in the long term.<sup>31</sup>



# Conventional Measures of Health Outcomes



Health is a complex concept, making it difficult to measure. Conventional indicators, such as life expectancy, infant mortality, and potential years of life lost, are commonly used to gauge population health. While these measures are essential, they reflect illness more than health, and when used in isolation, they risk shaping health policy around treatment rather than prevention.

This section presents key population-level health indicators for Manitoba while acknowledging their limitations. These conventional measures are deeply influenced by the broader determinants of health, which are explored in depth in the next section of this report.

Overall, population health status continues to improve or remain stable in Manitoba. Yet, substantial disparities in factors impacting health outcomes including education, employment, income and others, continue to drive inequities across the province, particularly for Indigenous peoples and people living in the Northern Health Region.<sup>3</sup>

#### **Income Quintiles**

Throughout this section and report, outcomes will be presented based on income quintiles. Income quintiles divide the population into 5 categories, each representing approximately 20 per cent of the population. Income quintile 1 represents the lowest 20 per cent, while income quintile 5 represents the highest.

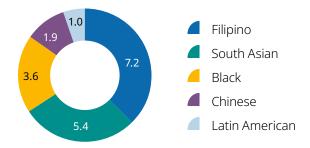


# **Population**

The fifth largest province in Canada, Manitoba is a diverse province with an estimated population of 1,507,330 residents as of April 1, 2025.<sup>32</sup>

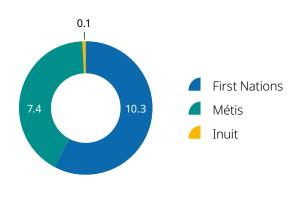
According to the 2021 Census, approximately 22 per cent of the provincial population identified as being from a visible minority group and 18 per cent self-reported Indigenous identity.<sup>33</sup>

#### POPULATION BY VISIBLE MINORITY<sup>33</sup>



In July 2024, Manitoba was the youngest province, based on median age.

POPULATION BY INDIGENOUS IDENTITY<sup>33</sup>



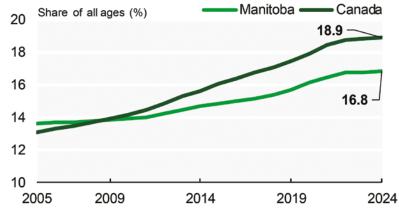


**CANADA** 

**37.3 years** 

Manitoba has a lower percentage of population aged 65+ compared to the Canadian average. In 2024, 16.8 per cent of the Manitoba population was over the age of 65. This rate has remained stable for the past three years.<sup>34</sup>

Population Aged 65 & Over (July 1)

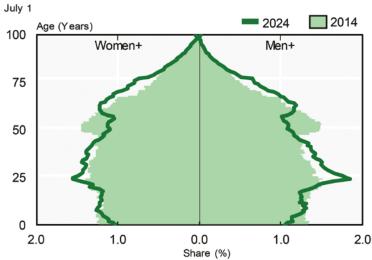


Source: Statistics Canada, Table 17-10-0005-01

# **Population Pyramids**

A population pyramid shows the age and gender distribution of a population. They help to detect changes or differences in population patterns. In 2024, the Generation Y cohort (born between 1981 and 1996), currently aged 28 to 43, made up the largest share of Manitoba's population at 22.7 per cent.34 A decade earlier, the Baby Boomer Generation cohort (born between 1946 and 1965), then aged 49 to 68 made up the largest share of Manitoba's total population at 25 per cent. In 2024, this cohort was aged 59 to 78 and had a share of 19.5 per cent.34

#### Population Pyramid, Manitoba



Note: Shares are based on individual totals for each gender.

Source: Statistics Canada, Table 17-10-0005-01

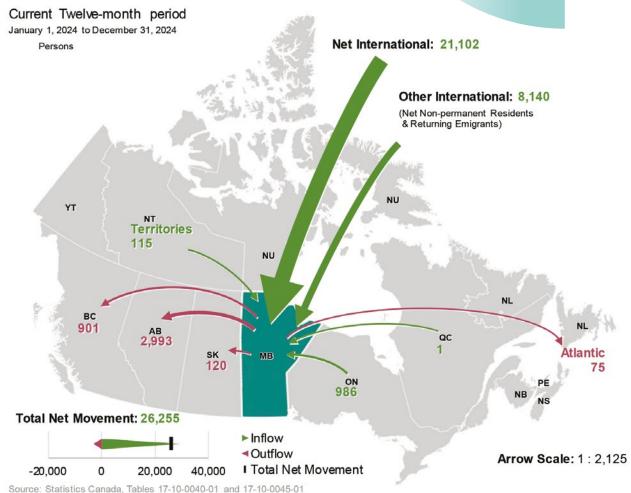


# **Population Growth**

Population growth is maintained through a combination of natural growth and migration. In 2024, there were 15,622 births in Manitoba, which equates to a total fertility rate of 1.50 births per woman.<sup>35</sup> A birth rate of 2.1 is needed to maintain the population. Due to a low fertility rate, migration plays a large part in sustaining and growing Manitoba's population.

In general, Manitoba experiences a net loss of people to other provinces and a net gain from international migration. In 2024, Manitoba welcomed a net increase of 26,255 people through a mix of international and interprovincial migration.<sup>36</sup>





# **Life Expectancy**

Life expectancy, or the number of years a person can expect to live from birth, is an important indicator of population health status. People living in Manitoba have a lower life expectancy from birth than the national average.<sup>37</sup>

#### LIFE EXPECTANCY FROM 2021 TO 2023

#### In Canada



Males: 79.3 years



Females: 83.8 years

#### In Manitoba



Males: 76.9 years



Females: 81.9 years<sup>37</sup>

#### FROM 2016 TO 2021...

The gap in life expectancy across the prairies (Alberta, Saskatchewan and Manitoba) varies by Indigenous identity.<sup>38</sup>

Non-Indigenous identity – 84.7 years

Métis – 79.4 years (gap = 5.3 years)

Registered First Nations Peoples – 71 years (gap = 13.7 years)



Across the prairie region, the gap between Registered First Nations Peoples and those without an Indigenous identity has increased over time.<sup>38</sup>

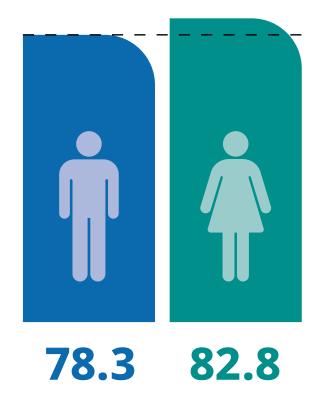
 11.7 years from 2006 to 2011 to 13.7 years from 2016 – 2021.



Provincial analysis shows that life expectancy in Manitoba has significantly increased over time for males and females.

On average, females in Manitoba live 4.5 years longer than males.<sup>3</sup>

In Manitoba, from 2018 to 2022, life expectancy for males was 78.3 years compared to 82.8 years for females.<sup>3</sup>





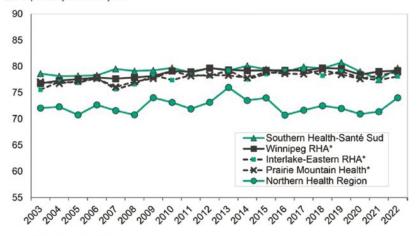
#### **Inequities by First Nations Identity**

For the years 2012 to 2016, the life expectancy for First Nations males was 68 years compared to 72 years for females. At the time, this represented an 11-year gap compared to all other Manitobans.<sup>39</sup>

Differences in life expectancy are evident by geography and income. The figures below illustrate substantial inequity for those living in the Northern Health Region, where males can expect to live 6.2 years less and females can expect to live 7.3 years less than the average lifespan.<sup>3</sup>

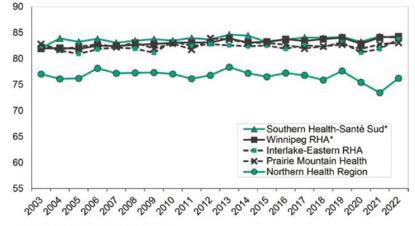
# LIFE EXPECTANCY AT BIRTH BY HEALTH REGION – MALES AND FEMALES

Figure 3.18: Male Life Expectancy at Birth by Health Region, 2003 to 2022 Life expectancy at birth in years



<sup>\*</sup> statistically significant linear trend over time

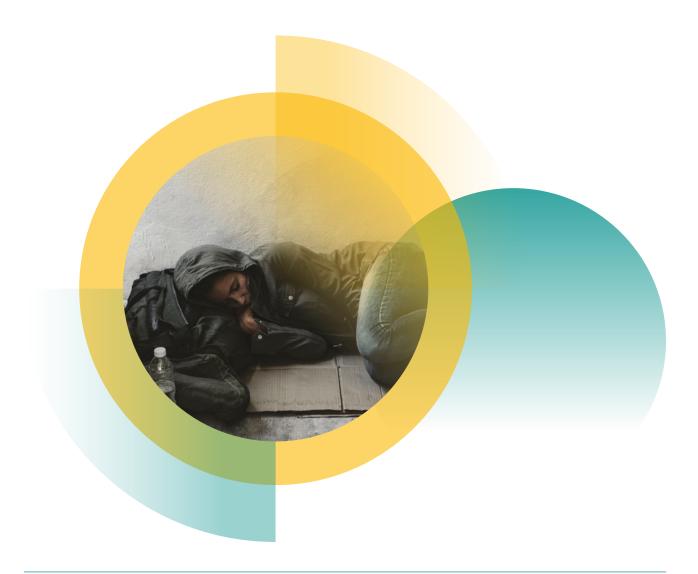
Figure 3.20: Female Life Expectancy at Birth by Health Region, 2003 to 2022 Life expectancy at birth in years



<sup>\*</sup> statistically significant linear trend over time

Poverty has a significant impact on life expectancy. Males living in the lowest rural income quintile have a life expectancy that is 9.5 years lower than males from the highest urban income quintile. For females, this gap is 8.9 years.<sup>40</sup>

Income Quintile	Males	Females
Urban 5 (highest)	84.8 years	89.3 years
Rural 1 (lowest)	75.4 years	80.4 years



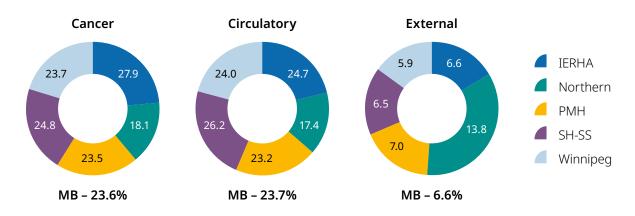


## **Causes of Death**

Chronic disease is the leading cause of death in Manitoba across all health regions.

Between 2018 and 2022, cancer and diseases of the circulatory system caused 47.3 per cent of all deaths across the province.<sup>3</sup> In the Northern Health Region, cancer and diseases of the circulatory system make up a smaller proportion of overall deaths compared to other regions. Deaths from external causes, such as injury and poisoning, and other causes are higher in the north.<sup>3</sup>

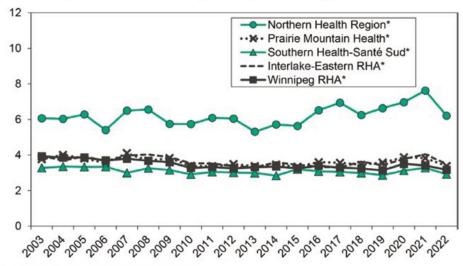
#### CAUSES OF DEATH BY HEALTH REGION FROM 2018 TO 2022<sup>3</sup>



#### **Premature Mortality Rate (PMR)**

The premature mortality rate, or death before the age of 75 years, varies across the province. Overall, the PMR has significantly decreased over time in Manitoba in all regions except the Northern Health Region. Residents of the Northern Health Region die before the age of 75 at almost twice the rate of the provincial average.<sup>3</sup>

Figure 3.10: Premature Mortality Rates by Health Region, 2003 to 2022 Age- and sex-adjusted rate of deaths before age 75 per 1,000 residents (age 0-74)



statistically significant linear trend over time.

There is a strong correlation between death before the age of 75 and income in both urban and rural areas.<sup>40</sup> People living in urbans areas with the highest income are the least likely, while those from urban areas with the lowest income are the most likely to die prematurely.<sup>40</sup>

#### IN UBRAN AREAS<sup>40</sup>

Highest Income - 1.7 people per 1,000 die prematurely Lowest Income - 5.8 people per 1,000 die prematurely.

#### IN RURAL AREAS<sup>40</sup>

Highest Income - **2.6 people per 1,000** die prematurely Lowest Income - **4.8 people per 1,000** die prematurely.

## **Inequities by First Nations Identity**

Between 2012 and 2016, 81 per cent of all death among First Nations Peoples occurred before the age of 75 compared to 35 per cent among all other Manitobans.<sup>39</sup>

On average, for the years 2018 to 2022,

## 3.57 Manitobans

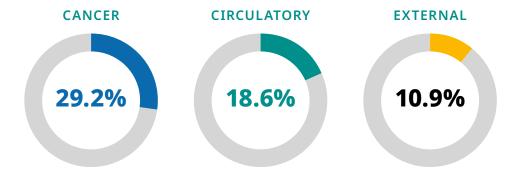
per 1,000 died before the age of 75.3



# **Causes of Premature Mortality**

Overall, chronic diseases are the leading causes of death before the age of 75 in Manitoba.3

Between 2018 and 2022, cancer was the leading cause of premature death followed by diseases of the circulatory system, and external causes (injury and poisoning).<sup>3</sup>



Causes of premature death in the Northern Health Region are different from those of all other regions. Between 2018 and 2022, external causes (injury and poisoning) were the most likely cause of early deaths in the north, accounting for 18.3 per cent of deaths before 75, compared to 15.6 per cent for cancer, and 15.4 per cent for circulatory diseases.<sup>3</sup>

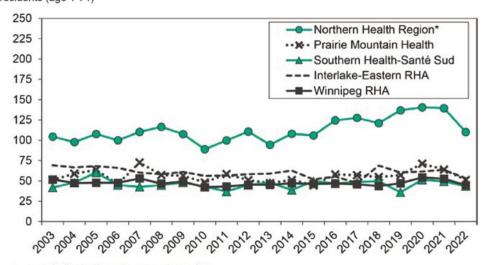
From 2012 to 2016, the leading cause of premature death for First Nations Manitobans was external causes. The most common type of external cause was self-harm accounting for more than 20 per cent of all external causes of premature death. The second most common cause was accidental poisoning by a medication, drug or alcohol.<sup>39</sup>

## **Potential Years of Life Lost (PYLL)**

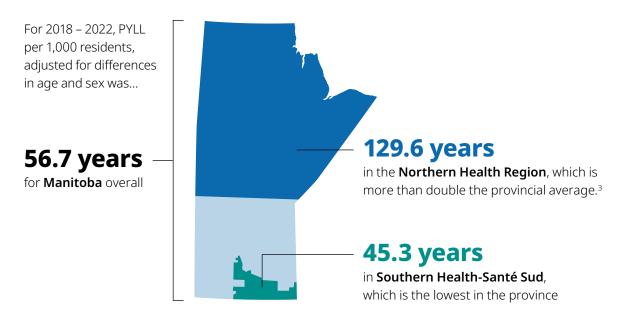
Another way to understand the burden of early death is to calculate the number of years lost when a person dies prematurely. Potential years of life lost is the average number of years that could have been lived if someone had not died before the age of 75. For example, a person dying at 60 has lost 15 years

of life. PYLL has remained stable overall in Manitoba and each region, except for the Northern Health region, where PYLL has increased significantly.<sup>3</sup> An increasing rate of PYLL in Northern Health region suggests there are a greater number of young and middle-aged people dying.

Figure 3.22: Potential Years of Life Lost by Health Region, 2003 to 2022 Age- and sex-adjusted average annual potential years of life lost before the age of 75 per 1,000 residents (age 1-74)



statistically significant linear trend over time.



There are strong associations between PYLL per 1,000 residents (age 1–74) and income in both urban and rural areas.<sup>3</sup>

#### RURAL

Income quintile 5 (highest) 39.5 years

Income quintile 1 (lowest) 90.5 years<sup>40</sup>

#### **URBAN**

Income quintile 5 (highest) 25.4 years

Income quintile 1 (lowest) 89.6 years<sup>40</sup>

## **Inequities by First Nations Identity**

PYLL for First Nations Peoples is consistently significantly higher than for all other Manitobans, including by income and urban and rural areas. The gap in PYLL between First Nations Peoples and all other Manitobans increased over time and was 2.6 times higher in 2016 compared to 2002.<sup>39</sup>





# **Infant Mortality**

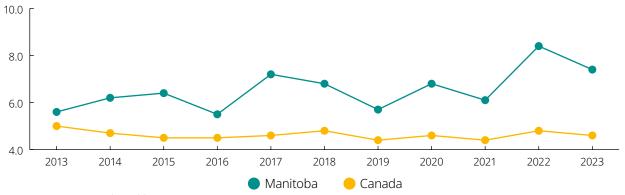
The number of infants that die before 12 months of age is widely considered to be one of the most important indicators of overall population health and of the well-being of a society. Rates of infant mortality vary, based on data sources and definitions used in reporting, and so comparing data must be made with caution.

According to national data, infant mortality in Manitoba has consistently been the highest amongst the provinces in Canada.<sup>41</sup>

In 2023, 7.4 infants per 1,000 live births died in Manitoba compared to 4.6 per 1,000 nationally.<sup>41</sup>

#### **INFANT MORTALITY**

#### Rate per 1,000 live births



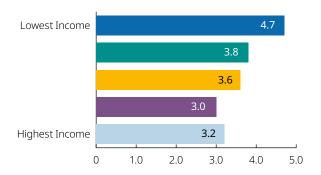
Source: Statistics Canada, Table 13-10-0713-01

Infant mortality is strongly associated with socioeconomic status, with risk factors including inadequate housing, poverty, unemployment, food insecurity, low maternal education, and lack of access to health care.<sup>42</sup> The following graphs show the disparity in infant mortality rate by income and maternal education.<sup>42</sup> Improving disparities in the

underlying determinants can improve conditions and outcomes for mothers and infants.<sup>42</sup> A more detailed look at early childhood development and the relationship between maternal and child health can be found in the "measuring what makes us healthy section."

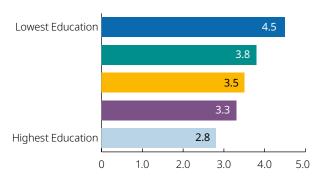
#### **INFANT MORTALITY RATE BY INCOME**

#### Rate per 1,000 live births



# INFANT MORTALITY RATE BY MATERNAL EDUCATION

#### Rate per 1,000 live births

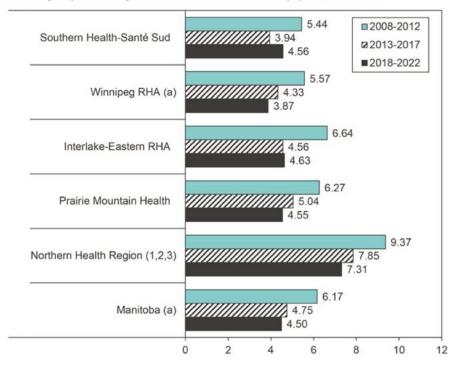


Source: Public Health Agency of Canada https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/science-research-data/5.Infant\_Mortality\_EN\_final.pdf



Provincial analysis shows a significant decrease in infant mortality over time, but substantial disparity based on geography and income. Rates of infant mortality in Northern Health Region are significantly higher than provincial rates for all time periods.<sup>3</sup>

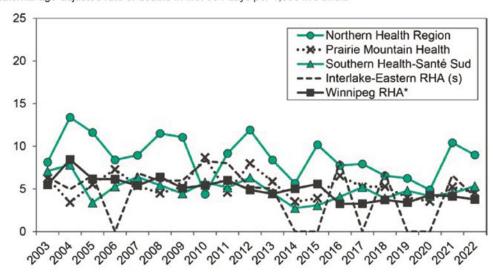
Figure 9.18: Infant Mortality Rate by Health Region, 2008-2012, 2013-2017, and 2018-2022 Maternal age-adjusted average annual rate of death in first 364 days per 1,000 live births



<sup>1,2,3</sup> statistically significant difference from the Manitoba average in the first, second or third time period

Figure 9.19: Infant Mortality Rate by Health Region, 2003 to 2022

Maternal age-adjusted rate of deaths in first 364 days per 1,000 live births



statistically significant linear trend over time.

a statistically significant difference between the first and second time period b statistically significant difference between the second and third time period

s data suppressed due to small numbers

s data suppressed because the number of deaths were between 1-5 for one or more years.



Between 2018 and 2022, infant mortality rates were significantly associated with income for both urban and rural areas.<sup>3</sup>

	Urban	Rural
Incomo Quintilo 1 (lowest)	6.13	716
Income Quintile 1 (lowest)	0.13	7.10
Income Quintile 5 (highest)	2.53	4.01
Gap	Nearly 2.5 times	Over 1.75 times

# **Sleep-related Infant Death**

Sleep-related infant deaths are a leading cause of infant mortality in Canada and Manitoba.<sup>42</sup> Each month in Manitoba, one to two infants die in their sleep-<sup>43</sup> Infants three months and younger are at the greatest risk. Between 2009 and 2018, 57 per cent of deaths occurred in the first three months.<sup>43</sup> These tragic events are highly connected to income and socioeconomic status. Between 2009 and 2018, 60 percent of all sleep-related infant deaths occurred in neighbourhoods where the average household income was less than \$35,000, and a further 30 per cent occurred in areas with average incomes between \$35,000 and \$50,000.<sup>43</sup>

There were 193 infants who died between 2009 and 2021 in Manitoba. 43,44

The Manitoba Advocate for Children and Youth (MACY) has published two reports on sleep related infant deaths since 2020. The first report focused on individual and household-level risk factors, while the second shifts focus to the broader conditions that contribute to these largely preventable outcomes.<sup>44</sup>

It is these broad, systemic factors, primarily outside of a person's control, that can lead to an inability to change individual or household risk factors, such as not having a safe sleep surface available or bed sharing.<sup>44</sup> Preventing sleep-related infant deaths in Manitoba requires a focused effort across sectors to close the gaps in education, poverty, food insecurity, justice and housing so that all infants have an equal chance at surviving and thriving.<sup>44</sup>

#### The MACY analysis of 48 sleep-related infant deaths between 2019 and 2021 found that:

81%

of infants who died were Indigenous

27%

occurred in First Nations communities

64%

of infants' homes were considered overcrowded

40%

of households had serious environmental concerns

70%

of mothers were known victims of intimate partner violence

**50%** 

of mothers experienced some type of maltreatment as a child themselves<sup>44</sup>

## **Summary**

The measures of population health presented here are important and clearly demonstrate that where people live and their income matter significantly to health and well-being. The patterns observed in life expectancy, premature mortality, and infant mortality are not random. They reflect systematic differences in the social and economic conditions that shape the lives of Manitobans.

Health care is an essential response to morbidity and mortality, but expanding the health care system alone is not sufficient to improve overall population health and well-being. Health policy needs to also include goals such as improving education outcomes, income, employment and housing. When health policy is viewed as much broader than health-care policy, there is greater potential to improve the overall, long-term health and well-being of Manitobans and to reduce the demand on the health-care system.



# Measuring What Makes Us Healthy



Health status reports often focus on physical healthrelated outcomes, such as rates of heart attacks or diabetes, and describe gaps between populations by geography, age, sex, or income. While important, these snapshots typically overlook the conditions that give rise to those outcomes in the first place, such as early childhood development, education, income, and housing.

A population's opportunity to be healthy is shaped long before health care is delivered and must be assessed through the lens of the social, economic, and environmental conditions in which people live.

This section brings together data from across levels of government, the private sector, and non-governmental organizations to assess the conditions that contribute to the health of Manitobans, as well as those conditions that put their health at risk. By measuring these determinants of health, we can better inform decision-making, improve quality of life, and close the health disparities between populations and communities.

# **Economy**

Economic conditions are not peripheral to health – they are foundational. Income is one of the most powerful predictors of health outcomes. Individuals with higher incomes are more likely to live longer, experience fewer chronic conditions, and report better mental health. The health of the economy impacts the number and type of jobs available and the overall costs of goods and services. You cannot have a healthy population without a healthy economy. Generally, the economy thrives when its workforce and consumers are healthy, and a population's well-being is closely tied to its ability to meet basic needs, such as food, and shelter, through economic opportunities.

Underpinning a strong, resilient economy is literacy. The ability to read, write, understand numbers and solve problems are powerful tools to foster economic stability. People without these foundational skills are more likely to experience unemployment, low wages and poverty.<sup>46</sup>

A one per cent increase in adult literacy could boost Canada's gross domestic product by over \$50 billion and raise national productivity by five per cent.<sup>47</sup>

For the average Manitoban, measures of employment, unemployment and inflation may be the most relevant economic measures as they affect a person's ability to find and maintain employment, make a sufficient income and contribute to the overall cost of living.

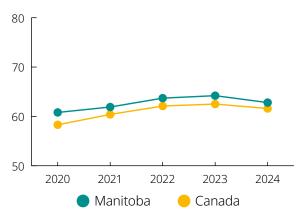


## **Employment Rate**

The employment rate is the percentage of workingage people who are employed. A higher rate is often interpreted as a sign of a strong economy where businesses are hiring. The chart below shows the estimated employment rate for Manitobans 15 years and over, compared to the Canadian average, for each March.<sup>48</sup>

# EMPLOYMENT RATE, SEASONALLY ADJUSTED

# Percentage of the population 15 years of age and over



Source: Statistics Canada, Table 14-10-0287-01

Employment rates increase with level of education. In 2024, 84 per cent of Manitobans aged 25 to 64 with a college diploma or higher were employed, compared to 57 per cent who had below a high school diploma. <sup>49</sup> Higher employment rates are associated with lower rates of anxiety, depression, and chronic stress, particularly when jobs offer fair wages and stability. <sup>50</sup>





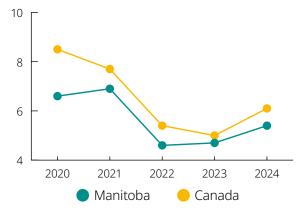
## **Unemployment Rate**

The unemployment rate represents the proportion of people looking for work who can't find it, and a high unemployment rate is strongly correlated with economic downturns. It doesn't capture those who are of working age but are not actively job hunting (i.e., discouraged workers, homemakers). The chart below shows the estimated unemployment rate in Manitoba compared to Canada, measured in March of each year.<sup>48</sup>

Unemployment is linked to poorer health outcomes, including higher rates of substance use, mental health challenges, and even premature mortality.<sup>50,51</sup>

# UNEMPLOYMENT RATE, SEASONALLY ADJUSTED

# Percentage of the population 15 years of age and over



Source: Statistics Canada, Table 14-10-0287-01



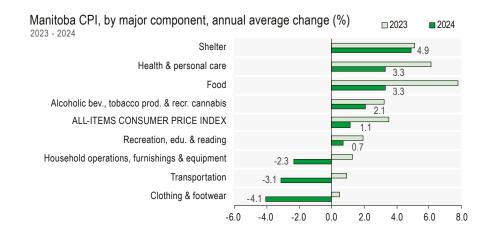
#### **Inflation**

The consumer price index (CPI) represents the changes in prices experienced when purchasing goods and services, such as gas and groceries. The CPI compares the cost of a fixed basket of goods and services and is generally used as an indicator of inflation.<sup>52</sup> The table below shows the difference in the average cost of goods and services by category from 2023 to 2024 and highlights that the cost of food, shelter and health and personal care are driving increasing costs for Manitobans.<sup>53</sup>

Inflation directly affects health when the rising costs of essentials, such as food and shelter, reduce households' ability to both access and afford nutritious food, stable housing, medications, and other basic needs.

These economic measures are predictors of health and well-being. When economic conditions improve equitably across populations, so, too, do health outcomes. Conversely, economic hardship is a pathway to worsening health. Understanding this relationship is essential for developing policies that foster both a resilient economy and a healthier population.

#### Manitoba Consumer prices index, average annual change, by major component, 2024



## **Income and Inequity**

Income is one of the biggest predictors of health-related outcomes with health and well-being improving at every step up the income and social ladder.<sup>54</sup> A person's income is shaped by social and structural determinants of health described previously. Based on the average market income, which is a measure of income before taxes and transfers, the average Manitoba family has a lower income than the average Canadian family.

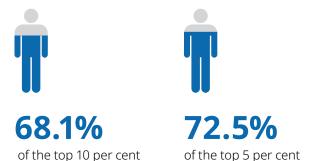
Income in Manitoba is disproportionately concentrated in the highest earning groups. For example, in 2022, the top 10 per cent of individual income earners held 29.3 per cent of all income. There are also significant inequalities in income by sex, with males being more likely to be a part of higher income groups.<sup>55</sup>

IN 2023, CANADA'S AVERAGE MARKET INCOME FOR COUPLES WITH CHILDREN WAS

# \$158,500 compared to \$130,400

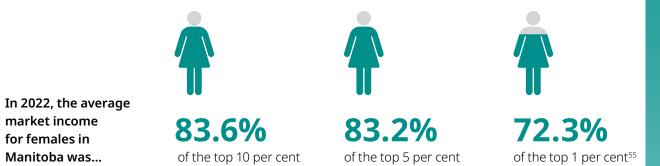
in Manitoba.55







Not only do males make up a greater percentage of high-income earners, but their average income is also higher. This gap is the greatest for the top one per cent of earners.<sup>55</sup>



### **Income Thresholds**

Based on market income in Manitoba

in 2022, males

made up...

In Manitoba, in 2022, a market income of \$108,500 or greater represented the top 10 per cent \$144, 200 or greater represented the top 5 per cent \$280, 300 or greater represented the top 1 per cent<sup>56</sup>

Studies from the mid 2000's estimated that 15 per cent of total health-care expenditures could have been avoided if all Winnipeg residents had equivalent access to resources to experience health outcomes comparable to the top 20 per cent of income earners in the city.<sup>57</sup> Disparities in health, social and economic outcomes by income are included throughout this report.



# **Poverty**

To live a healthy life, all people need access to the resources (food, housing, transportation, health care etc.), means (employment and income), choices, and power required to acquire and maintain a basic standard of living and to participate in society. People also need a sense of identity, connectedness, inclusion and dignity.<sup>58</sup> When someone experiences poverty, they are deprived of these things.

The income-based Market Basket Measure (MBM) is the official measure of poverty in Canada. It sets a threshold for poverty, based on the cost for a set 'basket' of goods and services that represent a modest, basic standard of living for a family of two adults and two children in various locations.

The poverty line is then estimated for households of different sizes. If a household has a disposable income below the market basket measure threshold, it is deemed to be living in poverty.<sup>59</sup>

It is not uncommon for the terms 'poverty' and 'affordability' to be used interchangeably, but they are not the same. The experience of poverty is more than a lack of sufficient income for the necessities of life, and measures to improve affordability do not address poverty. Poverty is both a cause and effect of economic and social exclusion that comes at a great cost to society.<sup>60</sup>

In 2019, poverty was estimated to cost Manitoba \$2.5 billion a year.<sup>57</sup>

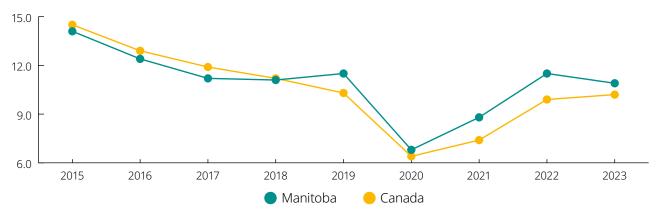
Health Costs	\$347 million
Crime	\$197 million
Opportunity Costs	\$1.6 billion
Intergenerational	\$324 million
Cost per Manitoban	\$1,952
Poverty Cost as a Percentage of Manitoba's GDP 3.4 per cent <sup>57</sup>	



According to the MBM, after declining between 2015-2020, rates of poverty in Canada have been increasing for the past three years and have nearly returned to pre-pandemic levels.<sup>61</sup>

#### **POVERTY RATE, MBM, 2018 BASE**

#### Percentage of persons in low income



Source: Statistics Canada, Table 11-10-0093-01

Poverty does not impact all Manitobans equally. Women, Indigenous peoples, recent immigrants, people with disabilities and children under 18 are more likely to be living in poverty.<sup>57</sup>

IN 2023, IN MANITOBA...

## 19.3 per cent

of the Indigenous populations 15 years and older lived below the poverty line as compared to

## 17.4 per cent nationally.

This is nearly double the rate for non-Indigenous populations (10.2 per cent MB, 10.0 per cent CAN).<sup>62</sup>

Rates are higher for First Nations Peoples and lower for Métis<sup>62</sup>

**FIRST NATIONS PEOPLES** 

27.5 per cent – MB 21 per cent – CAN

**MÉTIS** 

12.7 per cent – MB 12.8 per cent – CAN Manitoba has the highest rates of deep income poverty (DIP) of any province. DIP refers to having an income below 75 per cent of the poverty line.

In 2022,

## 6.9 per cent

of Manitobans living below the poverty line experienced DIP, similar to Saskatchewan at 6.7 per cent. The lowest rate of DIP was 3.2 per cent in Quebec and the national average was 5.0 per cent.<sup>63</sup>





People experiencing poverty are at a higher risk of developing diseases. They also face barriers to care and treatment which worsens health.

LOW-INCOME MANITOBANS ARE...

## 10 per cent

more likely to be diagnosed with cancer

# 40 per cent

more likely to contract a respiratory disease

# Up to 70 per cent

more likely to experience a heart attack or stroke<sup>57</sup>

Using an income-based poverty line, such as the MBM, represents the likelihood that a household has a poverty-level standard of living, but it does not tell the entire story of poverty. Working households with incomes above the poverty line may have a poverty-level standard of living because of factors such as rising costs, stagnant wages, inadequate social supports, debt and ill health.

In 2021, nearly eight in 10 Canadian households experiencing food insecurity had incomes above the poverty line.<sup>64</sup>

In 2024, the Canadian Centre for Policy Alternatives noted that over 170,000 Manitoba workers earn less than a living wage, with the vast majority

(88.9 per cent) employed by the private sector. Those workers are disproportionately women (57.8 per cent) and recent immigrants (16.1 per cent), and 36.4 per cent have a child who is less than 18 years old. Many work part-time (38 per cent), citing caregiving responsibilities and a lack of full-time work.<sup>65</sup>

All of this means employment is no longer a reliable shield against poverty in Manitoba. Many working households fall through the cracks, earning just enough to be excluded from assistance programs, yet not enough to afford essentials like safe housing, reliable transportation and adequate child care.

Poverty is more than a lack of income. It is being driven by a high cost of living, compared to wages, shortages of affordable housing, and shifting social connections. The experience of poverty reflects a deeper exclusion from the resources, choices, and opportunities that support health and dignity. Its consequences ripple across generations, worsening health outcomes, increasing costs to society, and reinforcing systemic inequities. Addressing poverty requires coordinated action across sectors to ensure all Manitobans have access to the conditions that make a healthy life possible –secure housing, nutritious food, meaningful work, and a sense of belonging.

# **Food Insecurity**

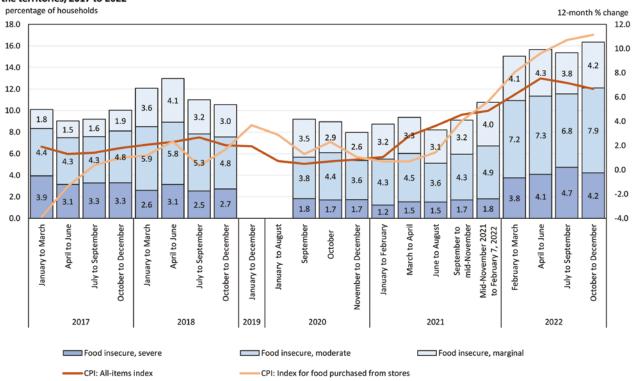
Food insecurity refers to the inadequate or insecure access to food due to financial constraints. <sup>66</sup> Certain groups, such as seniors, people with disabilities, and individuals in remote regions or "food deserts," are at higher risk. Food insecurity is one of the strongest predictors of poor health, and the relationship goes beyond nutrition-related diseases like diabetes. People living in food-insecure households are also much more likely to have other chronic physical and mental conditions, non-communicable diseases, and infections. <sup>66</sup>

Like many of the factors influencing health and well-being, food insecurity is multi-faceted and more complex than simply a lack of food. Food insecurity is an indicator of broader material deprivation that is tightly linked to low income, limited assets,

debt, and other indicators of social and economic disadvantage. 66 This deprivation creates additional challenges for people's ability to manage their health conditions. People living in food insecure households are more likely to be hospitalized for a variety of situations, stay in acute care longer, and die prematurely from all causes, except cancer. 66

Household food insecurity has been a long-standing issue that has worsened over time, exacerbated by high inflation and the rising cost of living. As shown in the chart below, in Canada, between 2017 and 2022, levels of food insecurity generally tracked with changes in consumer price inflation, especially for those experiencing moderate to severe food insecurity.<sup>67</sup>

Chart 2
Percentage of food insecure households and Consumer Price Index (12-month percentage change), Canada excluding the territories, 2017 to 2022



Notes: CPI = Consumer Price Index. Food insecurity data were not collected for a nationally representative sample of the Canadian Community Health Survey (CCHS) in 2019 and January to August 2021. The monthly CPI (12-month percentage change) was averaged to align with CCHS collection periods.

Sources: Canadian Community Health Survey, 2018, 2020 (September to December), 2021, and 2022; and Consumer Price Index Data Visualization Tool.

The experience of food insecurity can range from being worried about running out of food or having a limited selection of food (marginal food insecurity) to compromising on the quality or quantity of food (moderate food insecurity) and going days without eating and making other compromises (severe food insecurity).

## IN MANITOBA, IN 2023,

## 25.6 per cent

of households experienced food insecurity.

7.0 per cent were severely insecure

12.9 per cent were moderately insecure

5.7 per cent were marginally insecure<sup>68</sup>





The rate of household food insecurity increases to 35.1 per cent for people who identify as Indigenous in Manitoba.<sup>69</sup> While households with Indigenous identity are more likely to experience food insecurity generally, not all groups are affected in the same way. First Nations Peoples living off reserve are more likely to experience household food insecurity than Métis people in Manitoba.<sup>70</sup>

IN 2022...

## 50.5 per cent

of First Nations households off reserve experienced food insecurity

16.6 per cent were severely insecure

24.7 per cent were moderately insecure

9.2 per cent were marginally insecure<sup>70</sup>

## 31.6 per cent

of Métis households experienced food insecurity

10.6 per cent were severely insecure

13.0 per cent were moderately insecure

8.0 per cent were marginally insecure<sup>70</sup>

Manitobans residing in remote areas and First Nations residing on reserve are more likely to be food insecure compared to the average Manitoban.<sup>71</sup>

 Over 60 per cent of First Nations living on reserve in Northern Manitoba are food insecure.<sup>71</sup>

This disparity is just one example of the negative health consequences experienced by First Nations, Métis and Inuit peoples due to systemic racism and colonialism in Canada.



Hunger and food insecurity are associated with delays in socioemotional, cognitive and motor development and higher levels of hyperactivity/inattention and poor memory in children and depression and thoughts of suicide as well as mood, behaviour and substance use disorders in youth.<sup>72</sup>

#### IN MANITOBA, IN 2022...

25.7 per cent of children under the age of 18 lived in food insecure households, which is slightly higher than the average of 24.3 per cent across the 10 provinces.<sup>66</sup>

A substantial disparity exists for children with Indigenous identity. In 2022, 40.6 per cent of children with Indigenous identity lived in food insecure households. First Nations children living off reserve experience food insecurity at higher rates than Métis children.

- 51.6 per cent for First Nations Peoples living off reserve
- 29.2 per cent for Métis people<sup>70</sup>

## **Food Bank Usage**

Trends in food bank usage can be used to understand and monitor food insecurity at the local level. Food bank usage has increased year over year in Manitoba, driven by rising costs, job loss, immigration and low wages.<sup>73</sup>

In 2023-2024...

On average, Harvest Manitoba fed 20,221 households per month. An increase of 80 per cent compared to 2021-2022.<sup>73</sup>

Forty per cent of Harvest Manitoba's clients are employed.<sup>73</sup>

Based on a monthly average:

- 13 per cent (6,010) were single adults
- 36 per cent (16,726) were children
- 64 per cent (29, 838) were adults and seniors<sup>73</sup>

Food banks are a stop-gap measure for households, not a solution to food insecurity.



Income, housing and food insecurity are all connected. People with lower incomes are more likely to rent their homes. People who rent their homes are more likely to be in core housing need and are more likely to be food insecure than those who own their homes. 66 Tackling homelessness or food insecurity through isolated policy responses will fall short unless upstream drivers such as low income, poverty, racism, and the availability of affordable housing and healthy food are addressed together.



# **Housing and Homelessness**

Safe, appropriate and affordable housing is fundamental to achieving good health. When there is inequitable access to adequate housing, the consequences ripple across health, education, justice, and economic sectors.

Housing is considered acceptable if it is:

- Adequate (not in need of major repair)
- Suitable (has enough bedrooms for the household size/structure)
- Affordable (costs <30 per cent of household before-tax income)<sup>74</sup>

Core housing need describes when housing is inadequate, unsuitable or unaffordable. In Manitoba, there are significant differences in core housing need between homeowners and renters. The gap in core housing need is greatest for those who rent in social and affordable housing.<sup>75</sup>

# CORE HOUSING NEEDS IN MANITOBA IN 2021...

owners – 4.2 per cent

renters not in social and affordable housing – 19.2 per cent

renters in social and affordable housing – 32.0 per cent<sup>75</sup>

Housing conditions are especially important because people spend a significant amount of time in homes. Poor housing exposes people to many health risks. For example:

- Poorly insulated homes that are difficult to heat and cool can contribute to poor cardiovascular and respiratory health outcomes.<sup>76</sup>
- Living in overcrowded housing makes it more difficult to avoid people who are sick, increasing the likelihood of illness spreading.
- Spending a large percentage of your income on housing can leave people with not enough money for other necessities which can lead to stress and poor nutrition.

#### **Homelessness**

Homelessness in Winnipeg, Brandon and Thompson is estimated every two years through point in time counts. Measuring homelessness is difficult and the data presented here likely underestimates homelessness in Manitoba.

#### Estimates of Homelessness in Manitoba in 2024

#### **Thompson Brandon** Winnipeg • A minimum of 215 people were • A minimum of 229 people were • A minimum of 2,469 people identified as unhoused77 identified as unhoused78 were identified as unhoused79 About 95 per cent identified Approximately 63 per cent • About 79.9 per cent identified as Indigenous<sup>78</sup> as Indigenous or having identified as Indigenous<sup>79</sup> Indigenous ancestry<sup>77</sup> Approximately 67.9 per cent experienced chronic homelessness in the

previous 12 months<sup>79</sup>

The high proportion of Indigenous people among those experiencing homelessness reflects the long-term impacts of colonization, residential schools, systemic racism, and involvement in the child welfare system. Addressing this overrepresentation requires Indigenous-led approaches, cultural safety, and a commitment to reconciliation.



## HOMELESSNESS IS NOT EQUALLY DISTRIBUTED ACROSS THE POPULATION.

Based on over 1,500 people surveyed in Winnipeg in 2024:

## 55.1 per cent

identified as male,

## 39.3 per cent

identified as female

## 15.7 per cent

identified as part of the 2SLGBTQQIPA+\* community

## 22.1 per cent

were 16 - 25 years old

## 52.4 per cent

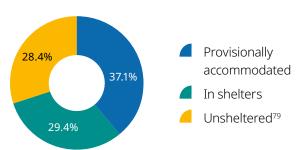
were 30 - 49 years old

## 25.5 per cent

were aged 50+79

When people think of homelessness, they may picture emergency shelters or encampments. In reality, homelessness includes a range of living situations, from unsheltered homelessness to temporary and precarious accommodations, such as couch surfing, motels, or transitional housing. Many of these experiences are hidden but represent real housing instability.

Of the people surveyed in Winnipeg in 2024:



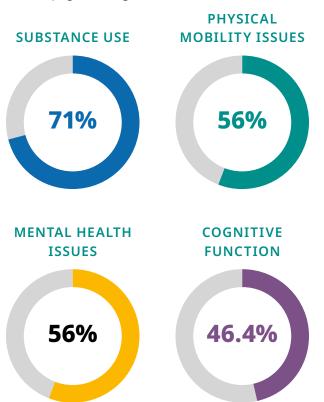


<sup>\*</sup> Two-spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Questioning, Intersex, Pansexual, Asexual, identities not explicitly listed.

Homelessness is primarily driven by structural and systemic factors, including a lack of affordable housing, the ongoing impacts of colonization, poverty, racism, and gaps in income supports, education, mental health, and addictions services. While individual circumstances can affect housing stability, the primary causes of homelessness lie in social and economic systems that do not adequately meet people's needs.

In 2024, high rates of health challenges were reported among people experiencing homelessness in Winnipeg including:

Homelessness and health and well-being directly impact each other. For example, Manitoba is facing co-occurring and reinforcing epidemics of homelessness, mental illness and substance use, often referred to as syndemics. These combined challenges interact in ways that worsen health outcomes and increase risks. When addressing syndemics, progress on any one factor will be limited unless all factors are addressed together using a multisectoral approach. The intersection of these syndemics will be explored further in the communicable disease section.

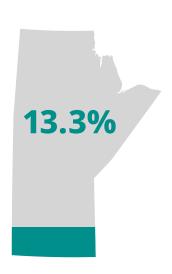




# **Early Childhood Development**

The early years, from conception until eight years of age, are a critical time for brain development and are considered the most important developmental phase throughout the lifespan. The effects of early childhood development are longlasting, shaping not only individual health trajectories but also generational patterns of well-being.

The interactions babies and young children have with their caregivers (positive, or negative), and the environments they are exposed to lay the foundation for future development. During this period, children's experiences can either nurture health and resiliency or make them vulnerable to poor health and development. Risk factors including poverty, hunger, inadequate housing, poor caregiver health, toxic stress, and adverse childhood experiences can undermine childhood development and impact future life outcomes.



IN 2022,

## 13.3 per cent

of children in Manitoba were living in poverty.81





## **Adverse Childhood Experiences (ACEs)**

ACEs are potentially traumatic events, such as emotional, physical or sexual abuse experienced in the first 18 years of life.<sup>82</sup> Commonly recognized ACEs include:

- emotional, physical and/or sexual abuse
- emotional or physical neglect
- household substance use
- household mental health issues
- exposure to intimate partner violence
- parental separation or divorce
- parental interactions with police<sup>82</sup>

It is estimated that approximately 52 per cent of the general population have experienced at least one ACE.<sup>82</sup>

As many as 78 per cent of Indigenous children have experienced at least one ACE.<sup>18</sup>



There is an important relationship between childhood adversity and poor health outcomes. Psychological effects from ACEs may lead to an increased likelihood of individuals having poorer lifestyle behaviours such as smoking, substance use and higher rates of overweight and obesity. These factors increase the risk for other health outcomes. Adults who experienced ACEs are more likely to report mental health conditions, cardiovascular disease, diabetes and many other chronic conditions. 22

# Child and Family Services and Intergenerational Impact

Involuntary contact with Child and Family Services (CFS), compared with voluntary in-home support services, can impact both parents and children, even when required for child safety. Parents can experience mental distress, trauma, stigma, marginalization, extreme fear of losing child custody, and stress related to oversight and compliance. <sup>83</sup> In situations where children are removed from homes, parents' health can be negatively impacted by

increased suicidality, depression, anxiety, substance use and premature mortality.<sup>83</sup> Children with a history of out-of-home care are more likely to have mental health problems and to use alcohol, cannabis and other substances.<sup>84</sup>

As of March 31, 2024, there were 8,919 children in out-of-home care, of a population of 321,960, or a rate of 27.7 per 1,000.85 This includes children who are placed with family or are under voluntary care agreements where their parents retain guardianship.

Modernizing child and family services to support children living with extended family or members of their community and not enter CFS care, alongside a return of jurisdiction of child welfare to Indigenous Nations are important actions to advance reconciliation with the goal of improving outcomes for children and families.



THE PERCENTAGE OF CHILDREN IN THE CARE OF A CFS AGENCY WHO ARE LIVING WITH FAMILY HAS BEEN INCREASING.

2018-19

27.5 per cent

2023-24

30.2 per cent.81

The measure was changed in 2024-25 to the percentage of Indigenous children living with their families or within their home First Nations to support preventive care, family reunification and post-reunification.

FOR 2024-25,

## 41.7 per cent

of Indigenous children in agency care were living with family or residing in their home First Nation.<sup>86</sup> There is a strong overlap between CFS and the youth criminal justice system in Manitoba. Being taken into care of CFS is strongly associated with whether youth would be charged with a crime.

Up to 72.6 per cent of all children charged in the youth criminal justice system have some involvement with CFS at some point during their childhood.<sup>87</sup>

## More than 1/3

of kids who have been in care of CFS were accused of a crime as a youth and close to 2/3 do not graduate from high school.<sup>87</sup>

Risk factors for children being taken into care in Manitoba include many of the social determinants of health previously noted, such as:

- 40.9 per cent have mothers who were 17 years or younger at the birth of their first child
- 25.7 per cent and 15.1 per cent were living in the lowest urban and rural income quintiles respectively
- 13.2 per cent have mothers who reported using substances during pregnancy
- 11 per cent have a developmental disability
- 32 per cent have a mental disorder
- 69 per cent from a family receiving income assistance
- 11 per cent were born small for gestational age<sup>88</sup>

These outcomes are not inevitable. They reflect the consequences of systemic inequities. Promoting the

well-being of children, families, and communities through early, culturally sensitive, and strength-based interventions must be treated as core components of public health strategy.

#### **Prenatal Care and Support**

Children and youth are the future of Manitoba and ensuring they have the best possible start in life benefits everyone. Many of the challenges in adult society, such as mental illness, heart disease, and crime, have their roots in early childhood.<sup>80</sup> Setting children up for success begins with a healthy pregnancy. Supporting adequate nutritional intake and mental health during pregnancy and post partum are just two of the many factors that impact growth and development from conception through early childhood.

Adequate nutritional intake during pregnancy is needed to promote healthy fetal organ development, skeletal growth and normal physical functioning. Malnutrition during this time, either from undernutrition, excessive weight gain, or poor glucose control has been connected to negative outcomes such as poor cognitive development, a low birth weight, which is a risk factor for infant mortality, and many chronic diseases including obesity, diabetes, cardiovascular disease.<sup>89</sup>



Positive mental health during pregnancy and postpartum can promote bonding and a secure attachment between parent and baby and support healthy social-emotional development. When mothers experience stress, anxiety and depression during this period, it can increase the risk of cognitive, behavioural and emotional difficulties for a child.<sup>89</sup>

#### IN MANITOBA, FROM 2016-17 TO 2020-21 AN AVERAGE OF

## 31.3 per cent

of females aged 15 to 44 were treated for mood and anxiety disorders.<sup>90</sup>

IN 2018-19,

## 24 per cent

of mothers in Manitoba reported feelings consistent with postpartum depression or an anxiety disorder.<sup>91</sup>

#### Health in All Policies in Action

Providing financial support to lowincome, expectant mothers to help meet the additional nutritional needs during pregnancy, supports the health and wellbeing of both the expectant mother and their fetus.

A prenatal benefit has been provided to low-income Manitobans since 2001. This benefit was doubled in 2024.

Adequate prenatal care is an important preventive factor in maternal and child health.

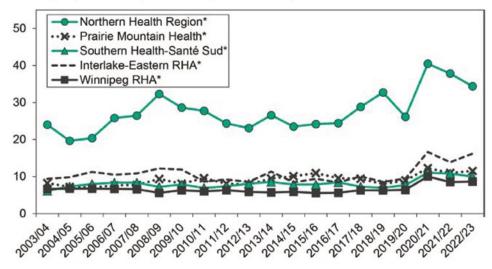
#### IN MANITOBA,

### 11.7 per cent

of women had inadequate prenatal care over the five years from 2018-19 to 2022-23.3

This rate has been increasing over time. The gap is almost three times higher for women living in the Northern Health Region where 34 per cent of women have inadequate prenatal care.<sup>3</sup> Adequate prenatal care is highly connected to living in urban settings. From 2018-19 to 2022-23, women from urban areas across all income quintiles, except urban quintile 1 (lowest) are more likely to have adequate prenatal care than women from rural areas, even those from the highest income quintile.<sup>40</sup>

Figure 9.4: Inadequate Prenatal Care Rate by Health Region, 2003/04 to 2022/23 Maternal age-adjusted annual percent of singleton live in-hospital births



<sup>\*</sup> statistically significant linear trend over time.

Adequate prenatal care, like all health care, is impacted by many factors, many of which will be discussed later in this chapter. One factor connected to increasing rates of inadequate prenatal care seen in the figure above is the drastic increase that coincided with the emergence of COVID-19 between 2019-20 and 2020-21.



### **Measuring Childhood Development**

Racism, colonialism and the intergenerational trauma from assimilation policies such as the residential and day school systems and the Sixties Scoop continue to impact Indigenous children across Manitoba. The inequities that start in early childhood continue throughout the school age years and into adulthood.

The Early Childhood
Development Instrument
(EDI) completed in
kindergarten measures
student's ability to meet ageappropriate expectations in
five domains of early childhood
development, including:

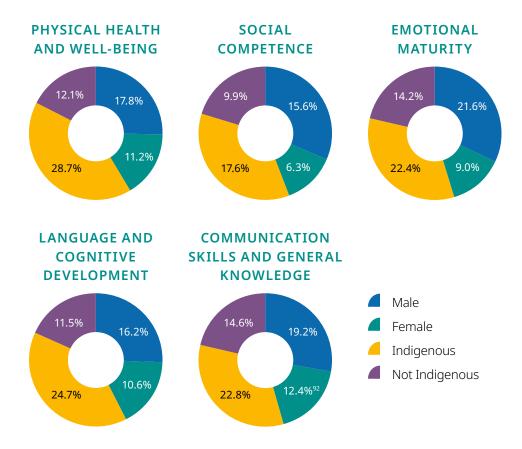
- physical health and well-being
- social competence
- emotional maturity
- language and cognitive development
- communication skills and general knowledge



Most students in Manitoba are considered on track according to the EDI measure. However, there was a notable increase in students identified as vulnerable across domains between 2018-19 and 2022-23 following the COVID-19 pandemic. Students identified through the EDI as vulnerable in kindergarten are more likely to demonstrate poor school performance in later years.

Percentage of students identified as vulnerable across domains			
	2018-19	2022-23	
Physical	12.8 per cent	14.6 per cent	
Social	9.5 per cent	11.0 per cent	
Emotional	11.8 per cent	15.5 per cent	
Language	12.2 per cent	13.5 per cent	
Communication	14.4 per cent	15.9 per cent	

Of the group identified as vulnerable in 2022-23, males were more vulnerable than females and students identified as Indigenous by their parents/caregivers were more vulnerable than those who are not Indigenous across all domains.<sup>92</sup>





## **Early Learning and Child Care**

One protective factor that can support closing the gap in early childhood development before school entry is participation in high-quality early learning and child care. High-quality child care supports children's cognitive, social and emotional growth, setting a positive trajectory on the social determinants of health, particularly for those from vulnerable communities.

Every dollar invested in early childhood education yields between \$1.50 and \$6 in economic return including increased earnings of working mothers and reduced expenditures on social benefits.<sup>93</sup>

It can be difficult to gauge demand for child care, but when the demand for spaces exceeds the availability, or fees are unaffordable, parents and other caregivers can face increased stressors such as trying to find alternative care or not being able to work to their full potential which decreases the household income and may lead to additional stress. Women, low-income workers, parents and caregivers of children with disabilities and those working non-standard hours are more likely to be impacted.<sup>94</sup>

In Manitoba, progress is being made on both the availability and affordability of child care.



The average out-of-pocket parent fees for child care have been reduced from:

\$20.70

\$8.10

in 2020-21

in 2024-2595

The percentage of children ages birth to five, for whom there was a regulated child care space has increased from:

26.2%

32.3%

in 2020-21

in 2024-2596



As one Manitoban parent shared through the Harvest Voices survey: "In our family, only my husband works. I can't go to work because of the small children. When I can work full-time, I hope we won't need to go to the food bank."

- Harvest Voices Respondent.98

The impact of high-quality, affordable and accessible child care goes far beyond the direct benefits to children and families, to communities and society as a whole. The child-care sector generates a range of economic, social and fiscal benefits including job-creation, improved labour force participation and incomes for parents of young children, especially women.<sup>97</sup> All of these factors contribute to more resilient communities and a more inclusive economy.

## K - 12 Education

Education is a key driver of health. A strong relationship exists between school success, socioeconomic status, health outcomes, and overall quality of life.<sup>99</sup> The gaps between Indigenous and non-Indigenous students identified in kindergarten through the EDI measure continue throughout the school age years as seen in grade 9 credit attainment and grade 12 graduation rates.

Grade 9 is the first year in Manitoba where students must pass compulsory courses toward earning their high school diploma. Success in this year is a key predictor of whether a student will successfully complete high school.<sup>100</sup>



IN 2023-2024, IT WAS FOUND THAT...

87.7%

of Manitoba students in grade 9 attained a credit in **English Language Arts** 

86.9%

of Manitoba students in grade 9 attained a credit in **Mathematics**<sup>100</sup>

66.5%

of self-declared Indigenous students attained a grade 9 credit in **English Language Arts** compared to **93.4 per cent** of non-Indigenous students

63.9%

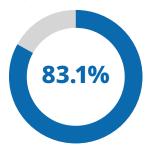
of self-declared Indigenous students attained a grade 9 credit in **Mathematics** compared to **93.2 per cent** of non-Indigenous students<sup>100</sup>

\*The data presented here include a cohort of first-time Grade 9 students in public schools, First Nations schools administered by school divisions and funded independent schools in Manitoba. The percentage of first-time grade 9 students in the Northern region who attained an English Language Arts (ELA) credit by year-end has been steadily increasing during the post-pandemic years, moving closer to the pre-pandemic level. Although the ELA achievement level of first-time grade 9 students in the Northern region remains below the levels in the urban and rural regions, the data indicates an optimistic trend towards continued improvement in ELA literacy among Northern region students.<sup>100</sup>

High school graduation is generally viewed as the minimum requirement for pursuing additional education and entering the workforce. Most students graduate within four years of starting grade nine, however some students need additional time.

# FOUR AND SIX YEAR GRADUATION RATES - PROVINCIAL PERCENTAGE FOR JUNE EACH YEAR

In June 2024...



The four-year high school graduation rate was **83.1 per cent**.



The six-year graduation rate was **88.5 per cent**.<sup>101</sup>

Overall, provincial graduation rates have been increasing steadily since June 2014.<sup>101</sup>

#### PROVINCIAL FOUR AND SIX YEAR GRADUATION RATES

#### Percentage for June each year



Source: Manitoba Education and Early Childhood Learning

<sup>\*</sup> The data presented here represent public schools in Manitoba (excluding First Nations schools administered by school divisions) and funded independent schools.



Non-Indigenous students graduate at rates far higher than self-declared Indigenous students, however graduation rates for both groups have been increasing over time.<sup>101</sup>

#### **FOUR-YEAR GRADUATION RATES**

Self-declared Indigenous students -

### 54.5 per cent

Non-Indigenous students -

## 91.0 per cent<sup>101</sup>

#### SIX-YEAR GRADUATION RATES

Self-declared Indigenous students -

### 64.1 per cent

Non-Indigenous students -

### 95.0 per cent<sup>101</sup>

<sup>\*</sup> The data presented here represent public schools in Manitoba (excluding First Nations schools administered by school divisions) and funded independent schools.

#### FOUR-YEAR GRADUATION RATES BY SELF-DECLARED INDIGENOUS IDENTITY

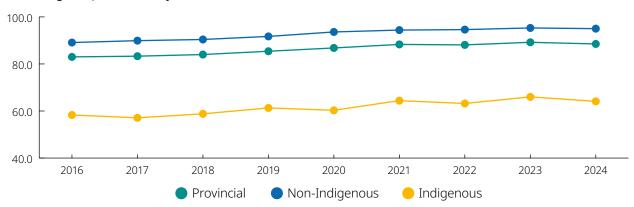
#### Percentage for June of each year



Source: Manitoba Education and Early Childhood Learning

#### SIX-YEAR GRADUATION RATES BY SELF-DECLARED INDIGENOUS IDENTITY

#### Percentage for June of each year



Source: Manitoba Education and Early Childhood Learning

Graduation is not only a marker of academic success but also a predictor of long-term health. Individuals with lower educational attainment are more likely to have higher rates of chronic disease such as diabetes, heart disease and depression.<sup>99</sup>

Geography also plays a role in educational outcomes. Students in northern and remote areas, many of whom are Indigenous, face significant barriers such as chronic underfunding of schools, teacher shortages, and limited access to specialized services. These systemic challenges deepen educational and health inequities. In 2024, two of Manitoba's northern and rural school divisions had four-year graduation rates below 50 per cent.<sup>102</sup> Gaps exist within Winnipeg as well. School divisions in lower-income neighborhoods report graduation rates up to 12 per cent lower than those in more affluent areas, reflecting broader social determinants such as housing stability and access to community resources.<sup>102</sup>



#### Language as a Social Determinant of Health

There is a clear link between language and health. A recent review of 262 studies conducted internationally found that where Indigenous communities were connected to their language, their health improved. The link between language and health is also supported in the Manitoba context by a study finding that health outcomes for francophones improved over the second half of the 20th century as language rights and access to education became stronger. Expanding policies to allow Indigenous languages to be the primary language of instruction in a school can support better education and health outcomes for students.

Manitoba's educational landscape reveals stark inequities that contribute to health disparities. The ongoing harm of colonialism and systemic discrimination continue to impact educational outcomes for Indigenous students. The Assembly of Manitoba Chiefs has emphasized the importance of culturally relevant curricula and Indigenous-led education systems to bridge these gaps.<sup>105</sup> There is a link to lower educational attainment in Indigenous communities and higher rates of chronic illnesses, substance use disorders, and lower life expectancy, underscoring the urgent need for systemic change. Addressing these disparities should not be viewed as just an educational priority, but as a public health imperative, critical to ensuring all Manitobans can achieve their full health potential.

## **Education and Learning Beyond K-12**

#### **Adult Learning and Literacy**

Adult learning and literacy programs provide individuals with the foundational skills and knowledge necessary to navigate daily life, make informed decisions, and pursue personal and employment-related goals. Literacy skills are also the foundation for acquiring other skills essential for full participation in an increasingly digital and knowledge-based economy.

The number of adult learners in Manitoba has been increasing over the last three years.

6,843



8,624

in 2021-22 in 2023-24

#### IN 2023-24, OF THE 8,624 TOTAL LEARNERS:

44%



18%

identified as were receiving
Indigenous employment and income assistance<sup>106</sup>



#### **Training and Employment Programs**

Effective training and employment programs offer people affordable and accessible opportunities to connect with new career pathways, learn new skills, and improve their ability to secure more stable and higher paying jobs. These programs are essential for helping workers adapt to changing job markets while improving social inclusion, strengthening community resilience, and reducing unemployment and under-employment among under-represented groups. By addressing systemic barriers and equipping individuals with confidence and indemand skills, employment and training programs contribute to a more inclusive, resilient and productive labour market.

The number of Manitobans accessing these supports have increased annually from 27,800 in 2020-21 to 33.449 in 2024-25.<sup>107</sup>

#### In 2024-25, of the 33,449 individuals:

24 per cent identified as Indigenous

39 per cent identified as a newcomer

43 per cent identified as women

15 per cent identified as a person with a disability

37 per cent were youth under 30<sup>107</sup>

In 2024-25, 50.1 per cent of Manitobans who participated in training and employment services self-reported as being employed, self-employed or in further training after completing their programming.<sup>107</sup> While this reflects a slight decrease from 2023-24 (53.6 per cent), it marks a notable improvement from 2022-23 (43.5 per cent), indicating overall progress in supporting labour market and training attachment.<sup>107</sup> It is important to note that these figures are based on self-reported data, which may under-represent actual employment outcomes due to non-responses or reporting gaps.

#### **Post-secondary Education**

Just as adult learning strengthens personal health literacy and community engagement, post-secondary education opens broader pathways to economic security, both of which contribute to healthier lives and more resilient populations. Employment income increases with level of education making access to higher

education a potential means of breaking generational cycles of poverty by providing individuals with the tools needed to succeed. Adults without a high school diploma are more than twice as likely to rate their health as "poor" or "fair," compared to university graduates.<sup>108</sup>

# Employment Income Statistics for Manitobans aged 25 to 64 years by Highest Level of Education – 2020<sup>109</sup>

Employment income statistics	Median employment income (\$)	Average employment income (\$)
No certificate, diploma or degree	31,600	36,680
High (secondary) school diploma or equivalency certificate	38,400	44,960
Postsecondary certificate or diploma below bachelor level	46,000	52,200
Bachelor's degree	54,400	62,350
Master's degree	59,200	68,800

Source: Statistics Canada, Table 98-10-0411-01



Between 2025 and 2029, 69 per cent of all job openings in Manitoba will require some post-secondary education and/or managerial experience.<sup>110</sup> More recent projections place this at over 70 per cent – indicating that jobs will increasingly require higher levels of education, skills and training.

Across Canada, approximately 67 per cent of individuals 25 to 64 have attained a post-secondary diploma or degree. In Manitoba, about 59 per cent of individuals in the same age group have a post-secondary diploma or degree. Manitoba places 10th amongst all provinces and territories for highest level of educational attainment.<sup>111</sup>

More Manitobans are participating in postsecondary education than ever before, a trend that is also observed at the national level. Even so, work to address barriers to accessing post-secondary education must continue to close the participation gap between Manitoba and the national average.

#### IN 2023-24,

### 39 per cent

of Manitobans aged 18–24 participated in college or university, compared to 45 per cent nationally.

#### THIS IS UP FROM 2022-23 WHEN

### 33 per cent

of Manitobans 18–24 participated in post secondary, with the national rate of participation at 43 per cent.

#### MANITOBA IS RANKED 6TH

amongst 13 provinces and territories.112

#### **Apprenticeship**

Apprenticeships combine hands-on training with classroom technical learning, allowing people to gain practical skills, industry-recognized credentials, and valuable work experience while earning a wage. Unlike other academic routes, apprenticeships allow individuals to earn an income while learning, which supports greater financial independence. Over the long term, apprenticeships lead to better job security, higher earning potential, and opportunities for career advancement and entrepreneurship.

#### In 2024-25:

Manitoba registered 2,730 new apprentices, for a total of 11,628 active apprentices.

 This includes 1,427 female apprentices and 1,676 Indigenous apprentices, as well as 866 active apprentices in the High School Apprenticeship Program, including 496 new registrations.

Apprentice enrollment increased for females and Indigenous apprentices compared to 2023-24, including

- a five per cent increase for females in nontraditional trades
- a 12 per cent increase in Indigenous apprentice enrollment<sup>107</sup>

In addition, there were 1,148 newly certified journeypersons who achieved their Certification of Qualification through the apprenticeship and trade qualification pathways, a 5 per cent increase from 2023-24.<sup>107</sup> This growth reflects a strengthening of Manitoba's skilled trades workforce, contributing to improved employment outcomes, higher earning potential, and greater job security.

Improving access to, and success in education and career opportunities throughout the lifespan can help all Manitobans achieve better economic and health outcomes. Supporting enhanced employability and job prospects leads to better income stability and financial security for individuals and their families.





## Community Belonging and Social Connectedness

Social relationships and a sense of belonging are linked to both physical and mental health and are keys to forming cohesive societies. Cohesive societies tend to experience higher well-being, growth and resilience.<sup>113</sup> In recent years, the percentage of people reporting a strong, or somewhat strong sense of belonging to the local community has been increasing.

In Manitoba, people report feeling a stronger, or somewhat stronger sense of belonging to local community than the average Canadian does.

MB Q4 2021 CAN Q4 2021

49.8 % 45.4 %

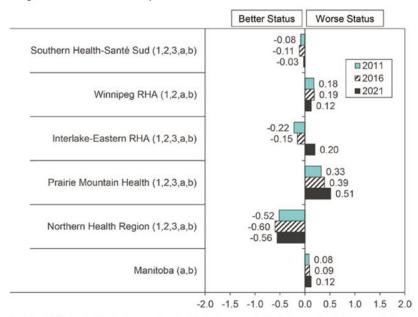
MB Q4 2024 CAN Q4 2024

**57.1** % **53.5** %<sup>114</sup>

The social deprivation index is a measurement of relationship status. It measures the percentage of the population aged 15 years and older who are separated, divorced or widowed, the proportion of the population that lives alone, and the proportion of the population that has moved at least once in the past five years.<sup>3</sup> A lower (negative) score indicates better status while a higher (positive score) indicates worse status.

In 2021, only the Winnipeg Health Region had better scores compared to the previous time period.<sup>3</sup> Generally, the Northern Health Region has the lowest score ('less deprivation'), however, the score in 2021 was significantly worse than in 2016. Prairie Mountain Health had the highest scores ('more deprivation') in all three time periods and experienced significantly more deprivation each period.<sup>3</sup>

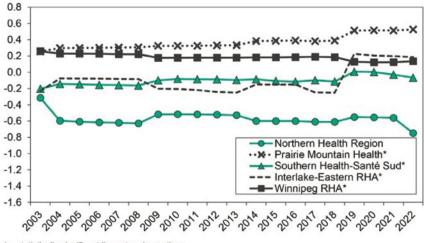
Figure 2.18: Social Deprivation by Health Region, Canadian Census Years 2011, 2016, and 2021 Average score on MCHP's Social Deprivation Index. Lower values indicate better status



- statistically significant difference from the Manitoba average in the first, second or third time period
- statistically significant difference between the first and second time period
- statistically significant difference between the second and third time period
- data suppressed due to small numbers

Figure 2.19: Social Deprivation by Health Region, 2003 to 2022 Average score on MCHP's Social Deprivation Index. Lower values indicate better status

Over time, social deprivation scores have significantly decreased in Winnipeg, while they increased in Southern Health-Santé Sud, Prairie Mountain Health and Interlake-Eastern regions. The scores in Interlake-Eastern dramatically increased between 2018 and 2019, remaining elevated in 2022.3



statistically significant linear trend over time.

Income, equity, and social connectedness are deeply intertwined determinants of health. When individuals and communities are excluded economically or socially, their health suffers. But when people have access to resources, opportunities, and supportive social networks, they are more likely to thrive.

Reducing inequities and fostering a stronger sense of belonging must be seen not only as economic or social goals, but as core strategies for improving population health and building a more resilient province.

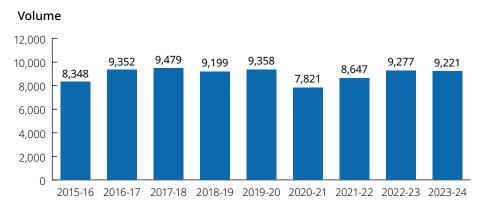


## **Justice**

The justice system can both reflect and contribute to societal inequities, ultimately affecting poor health outcomes. From community safety to incarceration and re-entry, interactions with the justice system shape people's physical and mental health, often in ways that reinforce existing disadvantage.

In 2023-24, there were 9,221 charges laid in Manitoba's Provincial Court for serious, violent offences.<sup>115</sup> After decreasing between 2020 and 2022, the number of charges for serious crimes is on the rise and is nearly back to pre-pandemic levels.<sup>115</sup>

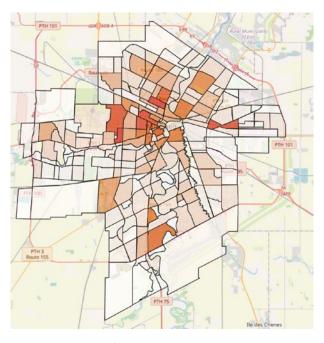
#### NUMBER OF SERIOUS CRIMES IN MANITOBA - ANNUAL AVERAGE



Source: Manitoba Justice

Social and economic disadvantage is strongly associated with crime. Offenders are more likely to be unemployed or employed in low-paying, unskilled jobs.<sup>57</sup> The maps below show the overlap between the density of crime in a neighbourhood between April 2024 and March 2025, and areas of higher poverty for the city of Winnipeg.<sup>116</sup>

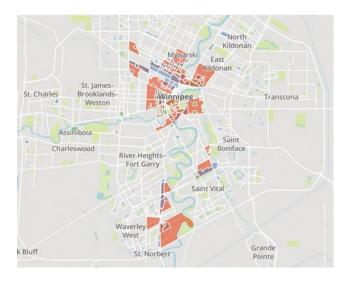
## CRIME DENSITY BY NEIGHBOURHOOD WINNIPEG, APRIL 2024 – MARCH 2025



Source: Winnipeg Police Service

Incarceration has profound and lasting effects on health. People in custody face higher rates of chronic disease, mental illness, and infectious diseases such as tuberculosis, Hepatitis C, and HIV.<sup>117</sup> For example, 31 per cent of tested inmates in federal correctional facilities had Hepatitis C, which is substantially higher than in the general population.<sup>118</sup> Mental health is especially affected, with elevated rates of depression, anxiety, post-traumatic stress, and suicidal ideation.<sup>117</sup> These impacts are intensified for people who enter the justice system with a history of trauma, substance use, or housing instability.

## MAP OF HIGHER POVERTY AREAS WINNIPEG



Source: City of Winnipeg





The period immediately following incarceration is associated with extremely high rates of overdose, hospitalization, and death.<sup>117</sup> Barriers to stable housing, employment, and health-care access upon re-entry often reinforce a cycle of marginalization that increases the likelihood of reincarceration. The health harms of incarceration extend beyond individuals to their families and communities, particularly children, who may experience parental separation, financial hardship, and emotional trauma. In this way, incarceration functions as both a health outcome and a driver of future health inequities.

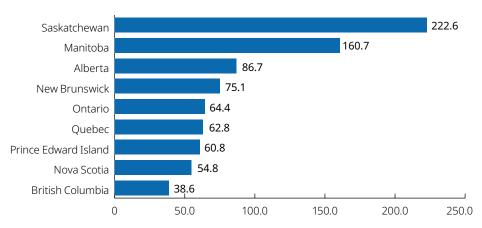
"Many people end up in adult detention after the child welfare, education, social services and health systems fail them." <sup>57</sup>

For women, these challenges are often compounded by poverty, caregiving responsibilities, and homelessness. Police-reported data from 2022 reveals that rates of violence against women in remote regions, can be over four times higher than in more accessible areas. 119 Many women in custody have experienced intimate partner violence, childhood abuse, or have been involved in child welfare systems. These experiences contribute to higher rates of mental illness, substance use, and chronic health conditions among incarcerated women.

In 2022-23, Manitoba had the second-highest incarceration rate among provinces in Canada at 160.71 people per 100,000, compared with 71.59 per 100,000 nationally in 2022-23.<sup>120</sup>

#### INCARCERATION RATES IN PROVINCIAL/TERRITORIAL SYSTEMS 2022-23120

#### Rates per 100,000 adults



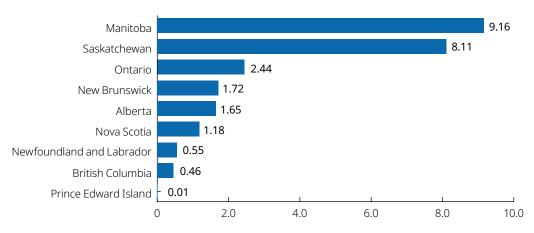
Source: Statistics Canada

Among youth, Manitoba's incarceration rate is the highest among all provinces.

In 2022-23, 9.16 out of every 10,000 young people were incarcerated in Manitoba, nearly four times higher than the national average of 2.52.120

#### INCARCERATION RATES PER IN PROVINCIAL/TERRITORIAL SYSTEMS 2022-23120

#### Rates per 10,000 young persons



Source: Statistics Canada



#### **Recidivism**

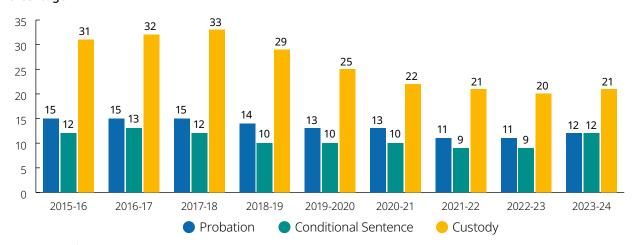
Recidivism is an important measure of the effectiveness of criminal justice system efforts to promote rehabilitation, reintegration and public safety.<sup>121</sup> Generally reducing recidivism also reduces crime. There is no national consensus on the definition of recidivism and therefore, comparisons between jurisdictions should not be made.<sup>121</sup>

In Manitoba, recidivism reflects how often a person is convicted of a new offence and is returned to provincial custody within two years of release from jail or other correctional supervision.<sup>122</sup> Rates of recidivism amongst adults in custody have decreased over time.

In 2023-24, 21 per cent of adults leaving custody are convicted of a new offence and returned to provincial custody within two years of release.<sup>122</sup>

#### ANNUAL RATES OF ADULT RECIDIVISM IN MANITOBA 2015-16 TO 2023-24

#### Percentage



Source: Manitoba Justice

Indigenous peoples are vastly over-represented in the incarcerated population comprising 77 percent of adult, and 84 per cent of youth prisoners in 2022-23, while representing only 18 percent of the overall population.<sup>120</sup> Black people and People of Colour are also over-represented, as are people of low socio-economic status.<sup>57</sup> The link between justice and health is often hidden, but it is both profound and preventable. Creating safer communities and reducing incarceration requires upstream investment in education, housing, mental health supports, and poverty reduction.

## **Health Care and Health System Impacts**

Access to good health care is a vital part of a healthy and thriving society. The health-care system alone cannot prevent or adequately address the rising rates of chronic diseases, mental illnesses and other health challenges that are rooted in the conditions of our daily lives. To create lasting improvements in health and well-being, health-care must be paired with creating economic, social and physical environments that support health in the first place.

Having access to health care requires more than just physical accessibility. The care available must also be timely, affordable, high-quality and culturally responsive. Barriers can happen in any or all domains and are not experienced equally by all populations.



#### **Examples of Barriers to Health Care**

- · no, or limited access to primary care
- long wait times for a health-care appointment
- health care workforce shortages
- long wait times for urgent or emergency care
- cost including time off work, transportation, and travel expenses
- caretaking, including care for the young, elderly, and other family members
- a lack of reliable transportation
- experiences of discrimination and/or racism
- limited health literacy and education
- language barriers
- stigma
- unreliable internet access for virtual care



In Manitoba overall, there has been a decrease in the percentage of people visiting a physician or nurse practitioner at least once per year.<sup>3</sup>

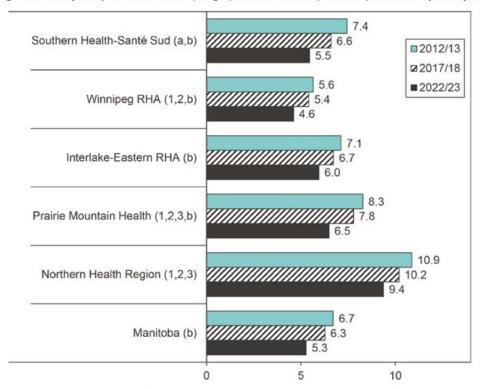
2017-18 2022-23

80.4% 77.4%

Use of physician and nurse practitioner services varies substantially by health region. Residents of the Winnipeg Regional Health Authority are significantly more likely, while residents of the Northern Health Region are considerably less likely, to access a health care provider, compared to the provincial average.<sup>3</sup>

Figure 7.1: Use of Hospitals by Health Region, 2012/13, 2017/18, and 2022/23

Age- and sex-adjusted percent of residents (all ages) with at least one inpatient hospitalization stay in the year



<sup>1,2,3</sup> statistically significant difference from the Manitoba average in the first, second or third time period statistically significant difference between the first and second time period

b statistically significant difference between the second and third time period

s data suppressed due to small numbers

One contributing factor to the decrease in visits may be the number of health care providers available. Manitoba's rank on physicians per capita has declined over time. In 2002, Manitoba ranked 4th amongst all provinces, but by 2022, Manitoba had dropped to the 2nd lowest number of physicians per capita in Canada.<sup>123</sup>

#### **IN 2022**

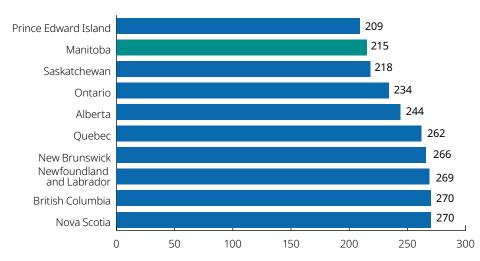
MB – 215 physicians per 100,000 residents

CAN – 247 physicians per 100,000 residents<sup>123</sup>



#### **NUMBER OF PHYSICIANS**

#### Rates per 100,000 residents



Source: Canadian Institute for Health Information

In 2023, fewer Manitobans had a regular health-care provider compared to 2022.<sup>124</sup>

903,600

878,000

2022

2023

Travel presents significant challenges for rural and remote populations in Manitoba seeking health-care services. Vast geographical distances between communities, health centres, and specialized health services mean Manitobans can face expensive journeys of hours to days to receive health services. A high travel burden can contribute to delayed diagnoses, care, and health disparities between urban and rural populations in Manitoba.

In 2022-23, over 80 percent of all visits to physicians and nurse practitioners occurred in the district where the patient lived. However, this is strongly affected by high values (>97 per cent) for Winnipeg.<sup>3</sup>

Across regions, results vary dramatically. In Prairie Mountain, over 90 per cent of visits occur within a patient's home district or health region.<sup>3</sup>

Residents of Southern Health-Santé Sud and Interlake Eastern received less than 40 per cent of visits in their home district, but a significant portion still occurred within their home health region. Winnipeg was a major influence on receiving care outside of the region, likely reflecting that many residents of these regions get care in the city because they live close to, work in, or regularly visit, the city.<sup>3</sup>

In the Northern Health Region, 63.7 per cent of visits occur in a home health district, which is a considerable decrease from 71.2 per cent in 2017-18.<sup>3</sup> This decrease appears to be the result of a shift in the percentage of visits made to other health regions, mainly in Wininpeg.<sup>3</sup>



Photo courtesy Travel Manitoba

# Determinants of Health and Health System Impact

Social determinants of health, including poverty and homelessness have a significant impact on the people experiencing them, but they also contribute significantly to demands on the health-care system. In Manitoba, the percentage of residents hospitalized at least once each year is significantly associated with income in both urban and rural areas. <sup>40</sup> Those from the lowest, rural income quintile are the most likely to be hospitalized, while those from the highest urban income quintile are the least likely. <sup>40</sup>

#### Use of Hospitals by Income Quintile, 2022-23

#### Age- and sex-adjusted percent of residents (all ages) with at least one inpatient hospitalization

Income Quintile	Adjusted Percent
Rural 1 (lowest)	6.99
Urban 5 (highest)	3.75

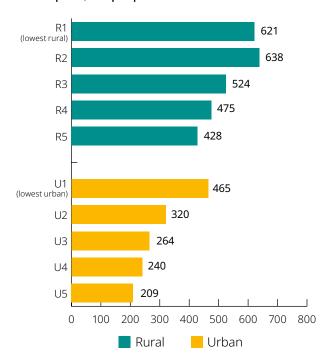
If all Manitobans had the same hospitalization rate as the highest income quintiles (rural and urban), then 17,450 hospitalizations could have been avoided in 2022-23, representing roughly 24 per cent of all hospitalizations.<sup>40</sup>

Similar trends are seen with emergency department (ED) presentations. Utilization is highest in the lowest income group (R1 and U1) and lowest in the highest income group (R5 and U5). In rural Manitoba, emergency room use is higher in every income group relative to urban Manitobans.<sup>125</sup>

Manitobans in the lowest income rural areas use emergency departments at nearly three times the rate of Manitobans from the highest income urban areas.<sup>125</sup>

## NUMBER OF EMERGENCY DEPARTMENT VISITS BY INCOME QUINTILE, 2023

#### Visits per 1,000 people



Source: SharedHealth Manitoba



Over time, the number of people experiencing homelessness presenting to EDs for care has increased. At Health Sciences Centre (HSC), from 2017 to 2024, monthly registrations recorded as having no fixed address increased from 205 cases to 709 cases, representing an increase from 3.9 to 14.6 per cent of all HSC ED presentations.<sup>126</sup>

The 2024 point-in-time counts of homelessness in Winnipeg found high rates of emergency care and hospital usage. Of the over 1,500 people surveyed:

- 54.3 per cent used the emergency department
- 48.5 per cent were admitted to hospital
- 44.4 per cent used emergency medical services (ambulance)<sup>79</sup>

Access to health care is essential for diagnosing, treating, and managing illness, but it is not the most important determinant of health. The health care system often bears the downstream consequences of upstream inequities in housing, income, education, food security, and other social determinants of health. Improving access to care remains a critical goal, especially for underserved populations. Still, even the most efficient and equitable health system cannot compensate for systems that fail to prevent illness in the first place. To truly improve population health, access to health care must be paired with bold, coordinated multisectoral action on the social and structural factors that shape health.

## **Healthy Built Environments**

Healthy built environments encompass all the environments in which people live, work and play and describes how the design of these environments affects health and well-being 127 Just as water and sanitation system design shaped health in the 19th-century, the design and connection of our cities, towns and neighbourhoods shapes health today. Everything from streets and sidewalks, parks, housing, food systems, and transit systems influences rates of chronic disease, injury, and mental health challenges. Our built environments can either promote health and equity or entrench disadvantage.

Promoting healthy behaviours and improving chronic disease prevention and care hold the greatest potential to enhance individual and population health status. The design of neighbourhoods, transportation networks, housing, food systems, parks, and natural spaces, as well as many planning

processes significantly impact the physical, mental, and social well-being of community members.<sup>128</sup>
Despite a shared beginning and strong evidence that community design plays a significant role in health and well-being, there is often limited interaction between public health and planners today.<sup>128</sup>

In communities without reliable internet and cell phone service, safe water, healthy and affordable food, reliable transit, or options for recreation, the opportunities for health are limited. These gaps disproportionately impact low-income families, seniors, people with disabilities, and those living in rural and remote areas. A healthy built environment promotes health across neighbourhood design, housing, food systems, transportation networks, and natural environments. Neighbourhoods can be designed to address these needs to enhance connectivity.



Communities require diverse housing that is affordable, high-quality, and supports the needs of all populations. Everyone deserves access to healthy, affordable food options and communities benefit from protecting and building the capacity of local and traditional food systems. The design of transportation infrastructure changes the way we connect and the capacity for people of all ages and abilities to engage in active transportation. Preserving our natural environments, across both urban and rural settings is essential for community wellbeing and ensuring sustainability for generations



Source: BC Centre for Disease Control

Building healthy communities is a multi-sectoral approach to improving population health and well-being, promoting physical activity, mental health, and social well-being, preventing injury and increasing health equity.<sup>127</sup>

## **Lifestyle Behaviours**

Lifestyle behaviours are often seen as individual choices, yet they are deeply influenced by the environments in which people live, work, play and grow. Physical activity levels, diet, alcohol and cannabis use, and smoking are shaped by education, income, housing, community safety, access to services, colonial policies, structural racism, and more. Focusing solely on individual responsibility risks obscuring the structural factors that constrain or enable healthy living. To improve population health and reduce inequities, we must address the conditions that drive lifestyle behaviours in the first place.

**Physical Activity** 

Increasing the physical activity levels of Manitobans holds great potential to improve population health status and reduce demand on the health-care system. Being physically active reduces the risk of over 25 chronic conditions including cardiovascular disease, diabetes, high blood pressure, stroke, cancer, osteoporosis, and depression.<sup>129,130</sup> Physical activity also enhances mental health and promotes opportunities for stress relief and social connection.

Physical inactivity has substantial societal costs. In 2022, the annual direct and indirect health costs associated with physical inactivity in Canada has been estimated at \$3.9 billion.<sup>130</sup> It has been estimated that if just 10 per cent of people living in Canada were to move more, health-care costs from chronic conditions such as heart disease and type 2 diabetes, could be reduced by \$629 million annually.<sup>131</sup>

In 2021, less than 60 per cent of Manitoba adults aged 18 years and older reported being physically active the recommended 150 minutes per week, with activity levels declining with age.

18 - 34 YEARS

59.6 per cent

35 - 49 YEARS

57.2 per cent

**50 - 64 YEARS** 

52.5 per cent

**65 YEARS AND OVER** 

38.0 per cent<sup>132</sup>





Individuals with higher levels of education and incomes tend to report being more physically active.

## IN 2021, FOR MANITOBANS 18 YEARS OF AGE AND OLDER...

## 62.9 per cent

in the highest income quintile self-reported being physically active at least 150 minutes per week, compared to 48.4 per cent in the lowest income quintile.<sup>133</sup>

### 53.8 per cent

of those with a post-secondary education reported being physical active at least 150 minutes per week, compared to 39.4 per cent for people who had not graduated from high school.<sup>133</sup>

Becoming an active adult has its roots in childhood with physical activity participation during adolescence being a strong predictor of activity in early adulthood.<sup>134</sup> In Canada, in 2024, 61 per cent of children and youth aged five to 17 were not meeting the national guidelines for 60 minutes of moderate to vigorous physical activity daily.<sup>135</sup>

Participation in sport is one way children and youth can engage in physical activity that can be monitored at the local level over time. Beyond improved physical and mental health, there are several secondary benefits of sport participation including providing social connection, a sense of community, and opportunities for personal growth. Sports also foster the development of lifelong skills such as communication, cooperation and teamwork and are a key contributor to vibrant and inclusive communities and a prosperous economy.<sup>130</sup>

#### IN MANITOBA...

### 75 per cent

of children aged five to 19 years participate in organized physical activity and sport

Boys are more likely to participate in sport than girls:

Boys - 77%, Girls 72%<sup>136</sup>

Children aged five to 12 years are more likely to participate than those aged 13 to 19.

Five to 12 - 83%Thirteen to  $19 - 66\%^{136}$ 

Participation in sport is a mechanism for higher education, career advancement and income potential. Removing barriers to sport participation is one way to promote diversity and inclusion and improve health outcomes. There are many under-represented groups facing barriers to sport participation including girls, Indigenous youth, newcomers, and those experiencing a disability.

Girls who play sports often become women who lead.

A staggering 94 per cent of women who hold C-suite executive level positions were former athletes.

85 per cent of women who played sports attribute their career success to the skills they developed through sports.<sup>137</sup>

For children, factors such as household income, parents' education level, parents' activity level, and the availability and affordability of quality programming can influence the rate at which children join and stay in sports. This reinforces the idea that health promotion should be considered across all policy levels to support health and wellbeing for all Manitobans.

Participation in sports for children and youth aged five to 19 increases with parents' education level and income.<sup>136</sup>

Less that post-secondary education – 68%

Post-secondary education – 77%

#### Household income level

<\$60,000 per year - 61%

 $\geq$ \$100,000 per year – 81%<sup>136</sup>



#### **Food and Nutrition**

Adequate nutrition is fundamental to good health and well-being across the lifespan. Consuming a healthy diet helps to prevent malnutrition and many chronic health conditions including high blood pressure, high cholesterol, overweight/obesity and certain cancers.<sup>138</sup>

Individuals, families and communities have nutrition security when they have the physical, social and economic access to sufficient, affordable, safe, and nutritious food that meets their dietary needs and preferences for a healthy, active life.<sup>139</sup> The economy has a direct impact on nutrition security. Fresh fruits and vegetables are becoming less affordable. According to the Consumer Price Index from April 2024 to April 2025, the cost of fresh fruit and vegetables increased 9.3 per cent.<sup>140</sup>

#### **IN 2023, ONLY**

### 20.6 per cent

of Manitobans 18 years and older reported consuming five or more fruits and vegetables per day. This is down substantially from 28.6 per cent in 2015, and lower than the Canadian average for both time periods.<sup>141</sup>



Many social and economic factors, including income, food prices, individual preferences and beliefs, cultural traditions and geographical and environmental aspects, influence food choices.142 Generally, a diet that supports health and well-being is higher in fruits and vegetables, whole grains, legumes, seeds and nuts and lower in animal-based foods, especially fatty and processed meats.143 There is a causal link between the rise of chronic diseases and a shift towards a more Westernized diet consisting of high levels of ultra-processed foods, fatty and processed meats, saturated fats, refined grains, salt and sugars, but lacking in fresh fruits and vegetables.142,144 Diets high in sugars, saturated and trans-fats, low-fibre foods and highsugar drinks increase the risk for endometrial, breast and colorectal cancers.145 Creating healthy food environments, in public settings, such as schools and recreation centres, can play an important role in shifting cultural norms and preferences for healthy foods, promoting health and preventing chronic disease.

#### Health in All Policies in Action

When students are hungry, their ability to learn is impacted. Nutritional deficiencies resulting from food insecurity are associated with poor performance on language comprehension tests and inability to follow direction in the preschool years, and inattention and poor memory in school-aged children.<sup>72</sup>

A universal school nutrition program was established for all students enrolled in public schools in Manitoba in 2024.



#### **Alcohol Use**

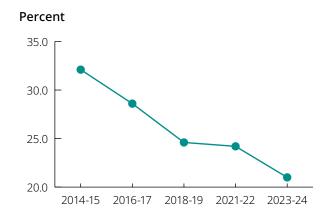
Alcohol is a widely used legal psychoactive substance that is a leading cause of death, disability and social problems, including certain cancers, cardiovascular disease, liver disease, unintentional injuries and violence. The costs of alcohol use are substantial and far outweigh government revenues associated with alcohol sales. In 2020, the estimated cost of alcohol use, including lost productivity, direct health-care costs, criminal justice, and other direct costs, in Canada was \$19.7 billion. This exceeds provincial and federal government revenue from alcohol sales by \$6.4 billion. This 'alcohol deficit' has grown from \$2.9 million in 2007.

In 2023, for Manitobans aged 15 years and older...

- 76.2 per cent reported consuming one or more alcoholic drinks in the past 12 months
- 62 per cent reported consuming one or more alcoholic drinks in the past 30 days
- 45.3 per cent reported consuming one or more alcoholic drinks in the past seven days<sup>148</sup>

Past 30-day alcohol use by students in grades 7 to 12 in Manitoba is going down.<sup>149</sup>

## PAST 30-DAY ALCOHOL USE BY MANITOBA STUDENTS IN GRADES 7 TO 12



Source: Health Canada, Canadian Student Alcohol and Drugs Survey, 2008-2024

At a population level, much of the risk for substance use-related harm from alcohol lies with moderate users, as this group represents the largest proportion of the population that uses substances.

While the use of alcohol is normalized within society, over 15 chronic diseases/conditions are attributed entirely to alcohol use and research is increasingly showing that **any** amount of alcohol can present risks to health.<sup>150</sup>

- Three to six drinks per week increase the risk of developing several types of cancer.<sup>150</sup>
- Seven or more drinks per week significantly increases the risk of heart disease or stroke.<sup>150</sup>

Unlike other health behaviours, alcohol consumption increases with education level and income for past 7-day, 30-day and 12-month consumption.

#### IN 2023...

### 71.7 per cent

of Canadians with a bachelor's degree or above consumed 1 or more alcoholic drinks in the past 30 days, compared to 56.2 per cent with an education level up to, and including, high school graduation.<sup>148</sup>

### 78.5 per cent

of households making over \$150,000 reporting drinking in the past 30 days compared to 46 per cent with an income of \$0-\$19,999.148



### **Cannabis**

Cannabis is a commonly consumed, legal drug often used for recreational purposes. Using cannabis can cause a variety of short and long-term effects on a person's body and mind. In the short-term, use can lead to feeling high, a sense of well-being, relaxation and heightened sensory experiences (e.g.,sight, taste, smell, sound), but not all effects may be desirable.<sup>151</sup> Unwanted or negative effects include confusion, sleepiness, anxiety, fear or panic and a reduced ability to remember, concentrate, pay attention and react quickly.<sup>151</sup> Cannabis use can also result in psychotic episodes characterized by paranoia, delusions and hallucinations.<sup>151</sup>

In 2024, for Manitobans 16 years and older...

- 27 per cent reported using cannabis for non-medical purposes in the past 12 months.<sup>152</sup>
- 6 per cent reported daily, or almost daily use in the past 12 months.<sup>152</sup>

According to the Liquor, Gaming and Cannabis Authority of Manitoba, the most common reasons for using cannabis were to relax, reduce pain or help with sleep.<sup>153</sup>

Cannabis use is becoming increasingly burdensome on the health-care system. From 2007 to 2020, a Canadian study found that the overall rate of cannabis-attributable inpatient hospitalizations and emergency department visits increased by 120 per cent and 88 per cent, respectively.<sup>154</sup> This increase was driven in part by hospitalizations due to psychotic disorders and emergency department visits for acute intoxication in children and youth. <sup>154</sup>

With frequent (daily or weekly) long-term use, cannabis can harm your memory, concentration, intelligence and your ability to think and make decisions.<sup>151</sup> Those who start using cannabis early in adolescence are at greater risk because the brain is still developing.<sup>155</sup> Early and frequent use of cannabis makes it more likely to become addictive and harm your mental health.<sup>155</sup> Teens and young adults that use cannabis early and often have more difficulty studying and are more likely to drop out of high school or university.<sup>155</sup>

Some of the long-term harms of cannabis use can last from several days to months or longer and some may not be fully reversible after cannabis use stops.<sup>151</sup> Smoking cannabis can have long-term effects similar to the effects of smoking including risks to lung health such as bronchitis, lung infections, chronic cough and increased mucus build-up in the chest.<sup>151</sup>



# **Smoking and Vaping**

Commercial tobacco use remains the leading cause of preventable disease and death in Manitoba, with over 1,500 Manitobans dying each year from tobacco-related illnesses. <sup>156</sup> Despite a reduction in rates over time, smoking continues to be costly. In 2020, the health-care costs of tobacco use in Manitoba exceeded \$196 million. <sup>156</sup>

If 25 per cent of Manitobans who smoke were to quit, \$45 million in annual health-care costs could be saved.<sup>157</sup>

IN 2023...

# Nine per cent

of Manitobans 18 years and over reported current daily smoking, slightly above the national average of 8.7 per cent.<sup>141</sup>

Smoking rates in Manitoba vary by age and Indigenous identity. In 2022, Manitobans aged 25 to 44 were the most likely to smoke (17.5 per cent) while those aged 15 – 19 were the least likely (5.9 per cent).<sup>158</sup>

### IN 2022,

# 19 per cent

of Manitobans 15 years and over who identify as Indigenous reported current daily smoking. Rates are higher for First Nations Peoples and lower for Métis.

21.8 per cent for First Nations Peoples

16.6 per cent for Métis<sup>159</sup>

### **Nicotine**

Nicotine is a toxic and highly addictive chemical found naturally in the tobacco leaf and is present in tobacco products and most vaping products. It can be harmful to health, particularly when consumed in excessive amounts. When inhaled, nicotine moves quickly through the body and can cause several reactions, including an increase in heart rate and blood pressure, altered brain waves and muscle relaxation. Youth may be especially susceptible to the harmful effects of nicotine, including addiction, because brain development continues throughout adolescence and into early adulthood.

# Vaping IN 2022,

# 7.8 per cent

of Manitobans 15 years and older reporting vaping in the past 30 days, compared to the national average of 5.8 per cent.  $^{158}$ 

In Manitoba, youth and young adults are more likely to report past 30-day vaping than older people.

- 15 19 years 17.9 per cent
- 20 24 years 22.1 per cent
- 25 44 years 8.5 per cent
- 45 years and older 3.5 per cent<sup>158</sup>

Past 30-day use of e-cigarettes amongst students in grades 7 to 12 is on the rise in Manitoba.

# 16.7 per cent

2021-22

# 18.4 per cent

2023-24

Lifestyle behaviours are profoundly shaped by the circumstances in which people live. Education, income, housing, and community environments all influence whether healthy options are available, affordable, and realistic. An approach focused only on individual behavioural change will fall short if it ignores these structural realities. Lasting improvements in population health require upstream investments and policy decisions that make it easier for Manitobans of every background and income to be active, eat well and limit, or avoid the use of alcohol, cannabis and tobacco.



# Trust, Truth and Health: The Role of Disinformation in Today's Public Health Landscape

Today, there are more ways than ever to access information. While the internet has made accessing news and information easier, it has also created more opportunities for misinformation to spread. Many Canadians now rely on online platforms as their main source of information with almost 6 in 10 getting their news and information from the internet (33 per cent) or social media (24 per cent). Links have been found between social media use and the likelihood of believing health-related misinformation and conspiracy theories. 163

In 2023, 59 per cent of Canadians reported being very, or extremely, concerned about misinformation online.<sup>162</sup>

Misinformation describes the spread of inaccurate information with no intention to cause harm, compared to disinformation where there is intent to deceive, mislead, manipulate or damage people, organizations or countries.<sup>164</sup>

An extensive amount of information about everything from health to finance and other issues affecting our families and communities (e.g., elections) can be found online. Mis/disinformation is especially harmful when it concerns health. The spread of inaccurate information can create confusion and cause the delay of important decisions that can impact health and well-being.

The COVID-19 pandemic showed the destructive power of misinformation and disinformation, not just in eroding public trust, but in producing measurable harm. Misinformation contributed to increased morbidity and mortality during the pandemic, particularly among already disadvantaged groups. The spread of false information online and in communities further fractured trust in public institutions and deepened existing divides.<sup>165</sup>

Addressing misinformation and disinformation is critical to protecting public health. This will require clear and transparent communication, engagement with trusted community voices and coordinated action across sectors to rebuild and sustain trust and confidence in public health messaging.

# **Summary**

Health begins in the early years of life, in the safety and stability of our homes, in the food we can afford, in the quality of education we receive, and in the opportunities available to us. The disparities in health outcomes we see are not coincidental or inevitable. Addressing issues, such as food insecurity and homelessness, closing gaps in access to education and health care, requires reconciliation in policy and sustained cross-sector collaboration grounded in equity.

Measuring what makes us healthy means widening the lens to focus on the determinants of health and health equity. It requires treating education policy, housing supply, and early childhood programs, as health policy. It requires boldness to look upstream and a shared commitment to act. When we measure and value the conditions that create health, not just the diseases that emerge in their absence, we move closer to building a Manitoba where everyone has the opportunity to live a long, healthy, and meaningful life.



# Chronic Disease



Chronic diseases represent the greatest burden on the health of Manitobans and the health-care system.

They often progress slowly, but their impact is farreaching: shortening lives, reducing quality of life, straining families and communities, and consuming a disproportionate share of health-care resources.

IN 2022-23,

# 56.2 per cent

of Manitobans aged 40 and over had at least one chronic condition.<sup>166</sup>

These conditions, including heart disease, diabetes, cancer, and others, account for the majority of deaths and hospitalizations in the province.<sup>3</sup> Cancer and circulatory diseases (including heart disease and stroke) alone account for nearly half of deaths before age 75 in Manitoba.<sup>3</sup>

Chronic disease rates follow predictable, deeply embedded patterns of inequity. Income is one of the most powerful predictors of chronic disease that shapes not only who develops chronic illness, but also when it occurs, how severe it becomes, and what treatment and prevention options are available. As income rises, the likelihood of developing a chronic disease falls. This pattern is consistent, well-documented, and reflects the unequal distribution of health opportunities across Manitoba.<sup>3</sup>

Risk factors driving rates of chronic disease, including smoking, poor nutrition, physical inactivity and alcohol consumption, are often framed as individual choices, but they are deeply tied to social and economic conditions. These risk factors were also discussed in the Measuring What Makes Us Healthy section.

### **Risk Factors**

Smoking remains one of the most significant contributors to chronic disease and premature death in Manitoba. It is linked to more than two dozen diseases and conditions, including heart disease, certain cancers and lung and respiratory problems. People who smoke are also at increased risk for premature death, but for every premature death caused from tobacco-related disease, at least 30 people who smoke live with a smoking-related illness.<sup>167</sup>

Diet accounts for approximately 10 per cent of all cancer cases in Canada, independent of obesity.<sup>145</sup> Adequate fruit and vegetable intake reduces the risk of developing esophageal, stomach, lung, pancreatic and prostate cancer.<sup>145</sup> It has been estimated that increasing fruit and vegetable intake by 10 per cent by 2029 could prevent 2,081 cancers in Canada by 2042.<sup>145</sup>

A Canadian study found that between 15 and 39 per cent of chronic illnesses were directly attributable to physical inactivity. <sup>168</sup> Implementation of daily physical activity and exercise routines are linked with risk reductions of:

**80** per cent for cardiovascular disease<sup>168</sup>

90 per cent for type 2 diabetes<sup>168</sup>

per cent for cancer<sup>168</sup>

Alcohol use is attributable to over 25 chronic diseases and conditions. Alcohol use can contribute to certain cancers, neuropsychiatric conditions, several cardiovascular and digestive diseases and is associated with over 200 other diseases and conditions. Alcohol is the second leading cause of all substance-related deaths in Manitoba.

Obesity is a complex chronic disease related to excess and/or dysfunctional body fat. As with most chronic diseases, there is a complex involvement of genetics, behavioral factors, and environmental factors. Obesity is also a risk factor for chronic diseases such as hypertension, cardiovascular disease, stroke, type 2 diabetes, osteoarthritis, and several cancers, and mental health conditions, such as depresssion.<sup>170</sup>

# IN 2019-2020, THE ESTIMATED PREVALENCE OF OBESITY IN MANITOBA

for people age 18 years and older was

# 32.7 per cent<sup>170</sup>

Trauma and adverse childhood experiences (ACEs) have an important role not only in mental health, but also in physical health in adulthood.

Adults with four or more ACEs are two to 2.3 times more likely to have a stroke, cancer or heart disease, compared to adults with no ACEs.<sup>171</sup>

These risk factors all demonstrate how the root causes of chronic diseases extend far beyond individual responsibility and why the burden of chronic diseases impacts Manitobans unequally.





# **Diabetes**

In 2024, the direct cost of diabetes to the health-care system in Manitoba was estimated at \$145 million.<sup>4</sup>

Diabetes can lead to serious complications including heart disease, stroke, kidney failure, blindness, infection and amputations. Diabetes contributes to:

30% of strokes
Leading cause of blindness
40% of heart attacks
50% of kidney failure requiring dialysis
70% of all nontraumatic leg and foot amputations

In 2022-23, Manitoba had the highest prevalence of diabetes of all Canadian provinces. The prevalence of diabetes in Manitoba is 34 per cent higher than the national average.<sup>172</sup>

MB - 917 per 100,000 people

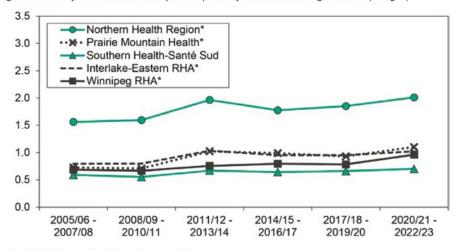
Canadian average of 686 per 100,000 people.<sup>172</sup>

In 2024, 11 per cent or 152,080 Manitobans are estimated to be living with diabetes (type 1 and type 2 diagnosed).<sup>4</sup> That figure is estimated to increase to 210,190, or 13 per cent by 2034. When estimated cases of undiagnosed type 2 diabetes are included, that figure increases to 15 per cent or 216,410 people in 2024 and 18 per cent or 281,970 people by 2034.<sup>4</sup>

Source: Diabetes Canada

In Manitoba, the incidence of diabetes has been steadily increasing over time, and in all health regions, except Southern Health-Santé Sud, where it has remained stable.<sup>3</sup>

Figure 4.10: Incidence of Diabetes by Health Region, 2005/06-2007/08 to 2020/21-2022/23 Age- and sex-adjusted incidence rate per 100 person-years at risk among residents (all ages)

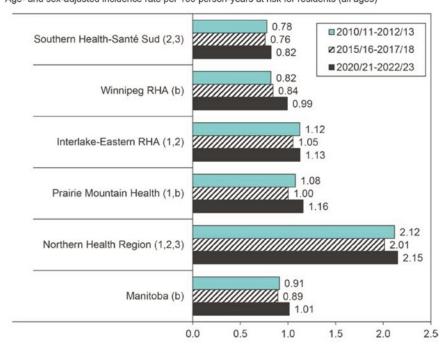


<sup>\*</sup> statistically significant linear trend over time.

The incidence of diabetes in the Northern Health Region is more than double that of the provincial average.<sup>3</sup>

Figure 4.9: Incidence of Diabetes by Health Region, 2010/11-2012/13, 2015/16-2017/18, and 2020/21-2022/23

Age- and sex-adjusted incidence rate per 100 person-years at risk for residents (all ages)



 <sup>1,2,3</sup> statistically significant difference from the Manitoba average in the first, second or third time period
 a statistically significant difference between the first and second time period

b statistically significant difference between the second and third time period

s data suppressed due to small numbers

Children in First Nations communities are at higher risk of being diagnosed with type 2 diabetes, 25 times that of non-First Nations children in Manitoba.<sup>173</sup> Self-reported age-standardized prevalence rates of diabetes for adults 18+ years are 2.2 times higher in First Nations People off reserve and 1.3 times higher in Métis than in the non-Indigenous population.<sup>174</sup>

Rates of diabetes are inversely correlated to income and education level.

In Manitoba, from 2020-21 to 2022-23, the ageadjusted incidence rate of diabetes between the lowest and highest incomes quintile was...

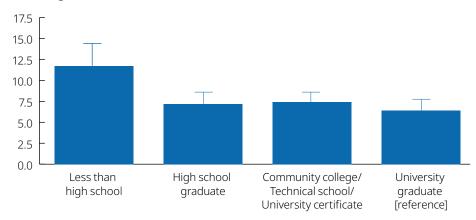
1.8 times higher in urban areas

times higher in rural areas 40

The self-reported age-standardized prevalence of diabetes for Manitobans aged 20+ who have not completed high school is 1.8 times higher than for those with a university education.<sup>174</sup>

# DIABETES, EXCLUDING GESTATIONAL (SELF-REPORTED), ADULTS (18+ YEARS), AGE-STANDARDIZED RATE, PREVALENCE, MANITOBA





Education (respondent, aged 20+)

Source: Health Canada, Health Inequalities Data Tool

# **Chronic Kidney Disease and Dialysis**

Diabetes increases the risk of developing chronic kidney disease. People living with diabetes in Manitoba are 12 times more likely to be hospitalized with end-stage kidney disease and diabetes accounts for 50 per cent of kidney failure requiring dialysis.<sup>4</sup>

In Manitoba, 7,623 people are being treated for chronic kidney disease<sup>175</sup>

1,854 adults in Manitoba are receiving life-sustaining dialysis.<sup>175</sup>

There are 348,000 dialysis treatments done in Manitoba in one year.<sup>175</sup>

# Cardiovascular Disease

In Manitoba, cardiovascular disease is responsible for one in four deaths (25.3 per cent) and is the second leading cause of premature death.<sup>90</sup>

Cardiovascular diseases share the common risk factors of hypertension, diabetes, high cholesterol, tobacco use, physical inactivity, unhealthy diet and excessive alcohol use.<sup>176</sup>

The Northern Health Region sees disproportionately high rates of cardiovascular disease, compared to the provincial average. This region has almost double the rate of heart attacks, 28.8 per cent more strokes, and an ischemic heart disease incidence rate 47 per cent higher than average.<sup>3</sup>

# **Hypertension (High blood pressure)**

Overall, the prevalence of high blood pressure has remained stable over the past decade. However, it increased significantly in the Northern, Interlake-Eastern, and Prairie Mountain regions.<sup>3</sup>

In 2022-2023, 25.6 per cent of residents (age 19+) were diagnosed with hypertension.<sup>3</sup>

The prevalence of hypertension was the highest in Northern Health Region at 41.2 per cent and lowest in Winnipeg Region at 24.9 per cent.<sup>3</sup>

There are significant associations between income level and the prevalence of hypertension in both urban and rural areas. Prevalence is highest among residents from lower income areas.<sup>3</sup>

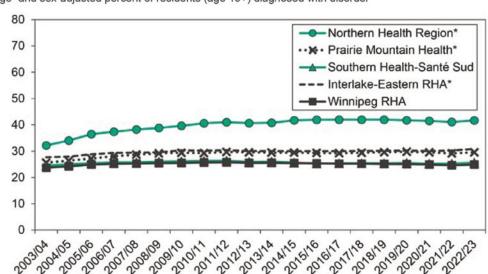


Figure 4.2: Prevalence of Hypertension by Health Region, 2003/04 to 2022/23 Age- and sex-adjusted percent of residents (age 19+) diagnosed with disorder

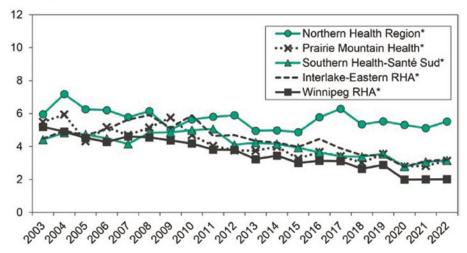
statistically significant linear trend over time.

# **Acute Myocardial Infarction (Heart Attack)**

The provincial rate of hospitalizations and deaths from heart attacks has decreased significantly over time.<sup>3</sup> This trend has been seen across health regions and appears to be the most dramatic in the Winnipeg Region.<sup>3</sup>

From 2008-2012, the average rate of heart attack was 4.35/1,000 residents (age 40+), compared to 2.67/1,000 from 2018-2022.<sup>3</sup>

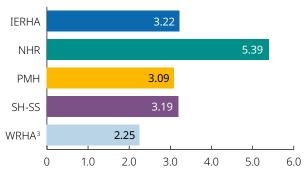
Figure 4.24: Acute Myocardial Infarction (AMI) Rates by Health Region, 2003 to 2022 Age- and sex-adjusted average annual rate of death or hospitalization for heart attack per 1,000 residents (age 40+)



\* statistically significant linear trend over time.

# RATES OF HEART ATTACK BY HEALTH REGION FROM 2018-2022

# Rate per 1,000 (age 40+)



Source: Manitoba Centre for Health Policy, 2024 RHA Indicators Atlas Heart attack rates are strongly associated with income levels for urban and rural residents, with those from lower income quintiles experiencing higher rates.

# Rates of heart attack per 1,000 residents (age 40+) by income quintile from 2018-2022:

Rural 5 (highest) – 2.63	Urban 5 – 1.6
Rural 1 (lowest) – 3.92	Urban 1 – 3.04 <sup>40</sup>

The rate of heart attack for those with an unknown income was 4.47.40



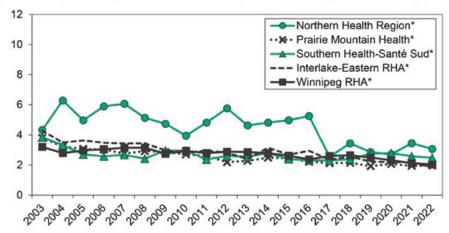
### **Stroke**

The rate of hospitalizations and deaths from strokes has decreased over time for Manitoba overall, and in all regions.<sup>3</sup> The Northern Health Region has experienced greater variation in rates compared to other regions.<sup>3</sup>

From 2018-2022 the average rate of stroke per 1,000 residents (age 40+) was 2.32, down from 2.8 in 2008-2012.

Figure 4.26: Stroke Rates by Health Region, 2003 to 2022

Age- and sex-adjusted average annual rate of death or hospitalization for stroke per 1,000 residents (age 40+)

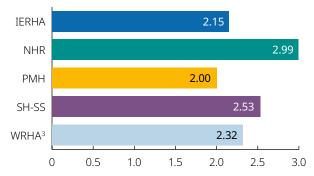


statistically significant linear trend over time.



# REGIONAL RATES OF STROKE FROM 2018-2022

### Rate per 1,000 (age 40+)



Source: Manitoba Centre for Health Policy, 2024 RHA Indicators Atlas

Rates in the Northern Health Region are significantly higher, while rates in Prairie Mountain Health are significantly lower than the provincial average.<sup>3</sup>

Stroke rates are strongly associated with incomes levels for urban and rural residents.<sup>40</sup>

# Rates of stroke per 1,000 residents (age 40+) by income quintile from 2018-2022:

Rural 5 (highest) – 1.92	Urban 5 – 1.52	
Rural 1 (lowest) – 2.54	Urban 1 – 2.70 <sup>40</sup>	

The rate of stroke for those with an unknown income was 8.94.40

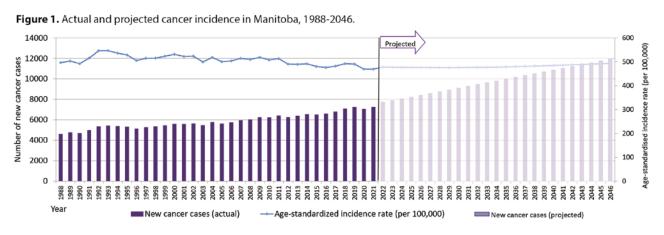


# **Cancer**

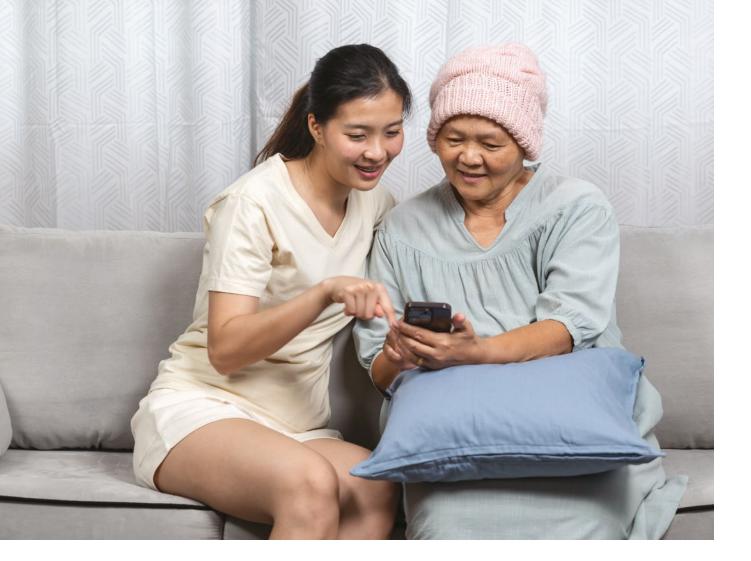
A combination of increasing incidence of new cases each year and the fact that many people now survive cancer longer means that the number of people living with cancer in Manitoba is greater than ever before.<sup>177</sup>

In 2022, 7,235 Manitobans were diagnosed with cancer.<sup>178</sup> This number is expected to increase to over 11,700 by 2045.<sup>177</sup>

The chart below shows the actual and projected incidence of cancer in Manitoba from 1988-2046. It shows an increase in the number of new cancer diagnoses by about two percent per year over the next 10 to 20 years. The increasing number of cancer diagnoses is largely due to an aging population. The incidence rate has remained stable.<sup>177</sup>



Source: CancerCare Manitoba



Despite there being more people surviving longer with cancer, there are nearly 2,700 cancer-related deaths in Manitoba every year.<sup>177</sup> Cancer is also the leading cause of premature death in Manitoba.<sup>3</sup>

# In Manitoba, in 2021, the top four most diagnosed cancers were:

Breast (female only) - 999

Prostate - 982

Lung and bronchus – 901

Colorectal – 897<sup>177</sup>

# The top four cancers account for 52 per cent of all cancers in Manitoba.<sup>177</sup>

Income level has a significant impact when it comes to cancer diagnosis rates. The rate of cancer for those in the lowest income quintile is more than two times that of the highest quintile.<sup>179</sup>

### **Risk Factors**

Cancer shares common risk factors with other chronic diseases. In Manitoba, the most common modifiable risk factors for cancer are tobacco use, physical inactivity, low fruit consumption and excess weight.<sup>177</sup>

Approximately four in 10 cases of cancer can be prevented through healthy living and policies that protect the health of Manitobans.<sup>180</sup>

Not all risk factors have the same impact on cancer. The number of cancer cases diagnosed in Manitoba due to modifiable risk factors in 2015 include:

Tobacco – 1,100 cases

Physical Inactivity – 400 cases

Low fruit intake – 240 cases

Excess weight – 220 cases<sup>180</sup>



# Screening

Cancer screening involves checking for cancer before any signs or symptoms appear. For cervix and colon screening it can also find pre-cancers, which can be removed before developing into cancer. Cancer screening makes it more likely to detect cancer earlier which can improve chances of survival and prevent complications associated with advanced disease.177 Population-based cancer screening programs in Manitoba includes breast, cervix and colon cancer.

### FROM JULY 1, 2020, TO DEC. 31, 2022...

- **59 per cent** of women aged 50-74 years of age had breast cancer screening within 30 months. This is below the national target of 70 per cent.<sup>177</sup>
  - Regional rates vary from a low of 47 per cent in Northern Health Region to a high of 63 per cent in Prairie Mountain Health.177
- 51 per cent of Manitobans 50 74 years of age were up to date on colon cancer screening.<sup>177</sup>
  - Regional rates vary from a low of 37 per cent in Northern Health Region to a high of 53 per cent in Prairie Mountain Health.177

### FROM JULY 1, 2019, TO DEC. 31, 2022...

- **61 per cent** of women age 21-69 had been screen for cervical cancer within 42 months. This is below the national target of 80 per cent.177
  - Regional rates vary from a low of 46 per cent in Northern Health Region to a high of 64 per cent in Interlake Eastern. 177

### **Chronic Disease Prevention**

Chronic disease prevention is most effective when broad-based policies focused on the economic and social conditions at the base of the health impact pyramid (see pg. 3) are implemented. Improving income, educatsion, housing, poverty, and access to safe environments that promote healthy lifestyle behaviours and where access to harmful substances, including alcohol are limited, reduces risk factors and creates the conditions in which healthier lives are possible. While clinical care and individual behaviour change play important roles, they cannot reverse the upstream drivers that give rise to chronic illness in the first place, nor can they be expected to impact these conditions at the population level.

# **Summary**

The prevalence and disparities of chronic disease in Manitoba have roots in all sectors. While chronic diseases are the most significant burden on the health of Manitobans and the health-care system, the knowledge that they share common risk factors presents an opportunity for multi-sectoral action to improve outcomes for all.



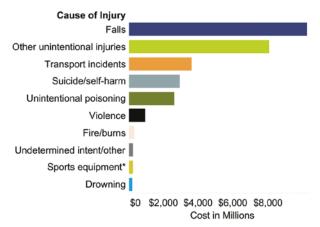
Injury



Injuries represent a hidden epidemic. They are the leading cause of death for Canadians from ages one to 44<sup>181</sup> and are the third leading cause of premature death across all ages in Manitoba.<sup>182</sup>

In 2018, the economic cost of injuries in Canada was \$29.4 billion – \$25 billion for unintentional injury and \$3.8 billion for intentional injury. Falls and other unintentional injuries are responsible for the majority of injury-related costs.

Total Costs in Millions (\$000,000s) by Cause of Injury, Canada, 2018



\*Injuries from struck by/against sports equipment

Source: Parachute

# IN 2022-23, INJURIES ACCOUNTED FOR...

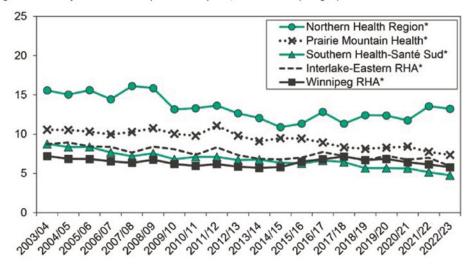
# 11,863 hospitalizations and 701 deaths

in Manitoba.<sup>182</sup>

That year, injuries were the fourth leading cause of acute care hospital days and inpatient hospitalization in the province.<sup>3</sup>

Since 2003-04, rates of hospitalizations for injuries have decreased in Manitoba overall, and in all regions.<sup>3</sup> Rates in all regions declined significantly from 2017-18 to 2022-23, except in Northen Health Region where there was an increase.<sup>3</sup>

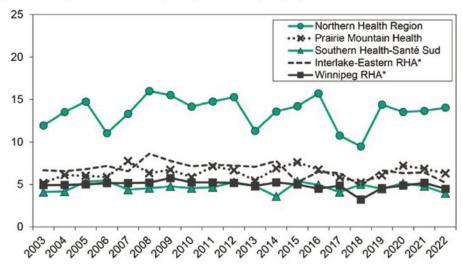
Figure 7.34: Hospitalization Rate for Injury by Health Region, 2003/04 to 2022/23 Age- and sex-adjusted rate of hospitalizations per 1,000 residents (all ages)



\* statistically significant linear trend over time.

There has been a significant decrease in the injury death rates over time in Manitoba overall.<sup>3</sup> Decreases were significant in Winnipeg and Interlake Eastern regions, while no trend was observed in other regions.<sup>3</sup>

Figure 3.24: Injury Mortality Rate by Health Region, 2003 to 2022 Age- and sex-adjusted rate of deaths per 10,000 residents (all ages)



\* statistically significant linear trend over time.

Data on injury-related hospitalizations and mortality consistently demonstrates the unequal risk that some populations face due to disparities in the conditions that make a healthy life possible.

In Manitoba, from 2012-13 to 2016-17, Indigenous peoples had an injury hospitalization rate

# 2.7 times higher

than non-Indigenous people.<sup>183</sup>

# **Unintentional Injury**

Unintentional injury, commonly referred to as "accidents," are unexpected incidents in which harm was not intended.

Injuries can occur anywhere, but the greatest proportion happen at home, in play and in travel. Falls and transport-related injury are the two leading causes of unintentional injury hospitalization and death in Manitoba.<sup>182</sup>

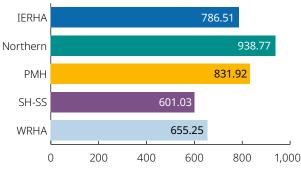
### **IN MANITOBA, IN 2023-24...**

There were 10,277 hospitalizations for unintentional injuries equating to a rate of 708.6 per 100,000 residents.<sup>182</sup>

Rates in the Northern Health Region were 32 per cent higher than the provincial average.<sup>182</sup>

# 2023-24 HOSPITALIZATION RATE FOR UNINTENTIONAL INJURY BY HEALTH REGION<sup>182</sup>

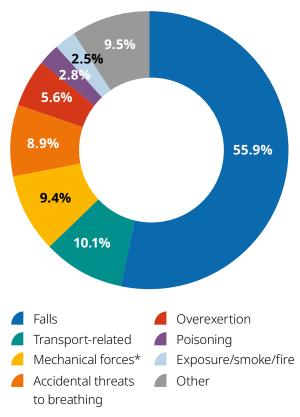
### Rate per 100,000



Source: Manitoba Health, Seniors and Long-Term Care

Falls were the leading cause of hospitalization, accounting for 55.9 per cent of all unintentional injury hospitalizations.<sup>182</sup>

# PERCENTAGE OF ALL UNINTENTIONAL INJURY HOSPITALIZATIONS 2023-24



<sup>\*</sup> Injury caused by external forces such as impact, compression, tension or shear.



### **IN MANITOBA, IN 2022-23...**

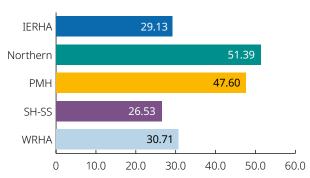
474 Manitobans died as a result of unintentional injuries, equal to a rate of 33.2 per 100,000.182

Falls and transport-related injuries accounted for over 63 per cent of these fatalities. 182

The Northern Health Region and Prairie Mountain Health experienced higher rates of unintentional injury mortality than other areas of the province.<sup>182</sup>

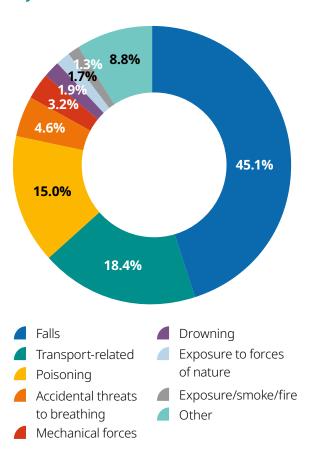
# UNINTENTIONAL INJURY MORTALITY RATE BY HEALTH REGION 2022-23182

### Mortality rate per 100,000



Source: Manitoba Health, Seniors and Long-Term Care

# PERCENTAGE OF ALL UNINTENTIONAL INJURY DEATHS 2022-23





# **Falls**

Falls have consistently been the leading cause of injury-related hospitalization in Manitoba from 2019-20 to 2023-24.182 Manitobans aged 65+ represent over 60 per cent of these hospitalizations.182

### IN 2023-24...

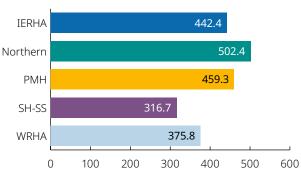
# **396.5** people

per 100,000 were hospitalized from falls in Manitoba. 182

Rural regions, except for Southern Health-Santé Sud, see higher rates of hospitalization due to falls compared to the provincial average.<sup>182</sup>

# REGIONAL RATES OF FALL-RELATED HOSPITALIZATION IN 2023-24<sup>182</sup>

### Rate per 100,000



The burden of injury for falls has a disproportionate impact on young children and older adults in Manitoba. 182

In children, falls are the number one cause for injury hospitalizations, emergency department visits and acquired disabilities.<sup>184</sup> Falls from playground equipment are the leading cause of fall-related injury in children up to age 14.<sup>184</sup>

### IN 2023-24,

# 45.4 per cent

of unintentional injury hospitalizations for children aged 0 to nine were a result of falls. 182

Falls also makes up the largest proportion of mortality due to unintentional injury, at 45.1 per cent in 2022-23.182

Of those deaths, 92.9 per cent occurred within the 65+ age group. The Prairie Mountain Health region of Manitoba experiences the highest rate of fall mortality, at 26.63 per 100,000, compared to a provincial rate of 14.99. All other rural regions of Manitoba fall below the provincial rate.



# **Transport-related Injuries**

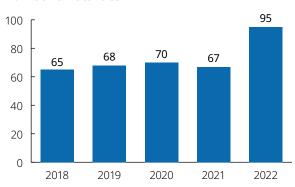
Transport-related injuries, involving any type of vehicle by land, air or water, are the second leading cause of injury-related hospitalization and death in Manitoba. It is estimated that collisions cost the province over \$2 billion each year.

Every hour in Manitoba, on average there are 11 transportation collisions on public roadways involving motor vehicles, pedestrians and/or cyclists. 186

In 2022, 103,066 collisions were reported to Manitoba Public Insurance.<sup>186</sup> Of those, 90 collisions involved a fatality, with an additional 6,955 involving an injury.<sup>186</sup> That year, the number of deaths from motor vehicle collisions was 27 per cent higher than the five-year average.<sup>186</sup>

# ANNUAL PUBLIC ROADWAY TRAFFIC COLLISION FATALITIES IN MANITOBA<sup>186-190</sup>

### Number of fatalities



Source: Manitoba Public Insurance

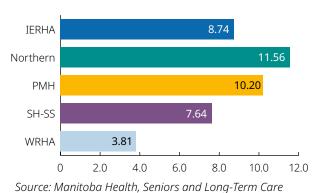


The rate of mortality by transportation-related injury is higher in rural regions, compared to Winnipeg. These incidents extend beyond public roadways to include private property, off-road collisions, and those occurring on First Nations communities.

In 2022-23, an average of 6.09 per 100,000 people died in transport collisions in Manitoba. 182

# NUMBER OF TRANSPORT-RELATED FATALITIES PER REGION<sup>182</sup>

### Rate per 100,000 people



# **Workplace Injury**

In Manitoba, workplaces must meet specific occupational safety requirements and are subject to inspections that can result in improvement orders and stop work orders when safety standards are not met. The time loss injury rate has been generally trending downward in Manitoba since 2015, due in part to prevention and enforcement efforts.<sup>191</sup>

In 2024-25, workplace safety and health officers conducted 5,820 targeted inspections of workplaces and industries throughout the province. 64 per cent resulted in orders.

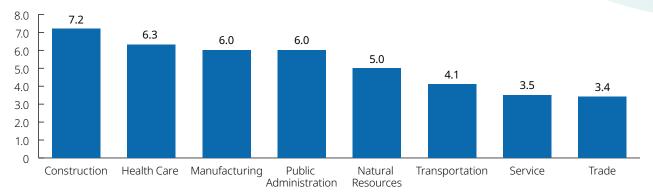
12,191 individual improvement orders

413 stop work orders<sup>192</sup>

In 2024, the injury rate for Manitoba workplaces was 4.9 per 100 full-time workers, and the time loss injury rate was 2.6 per 100 full-time workers.<sup>191</sup>

### 2024 WORKPLACE INJURY RATES BY SECTOR<sup>191</sup>

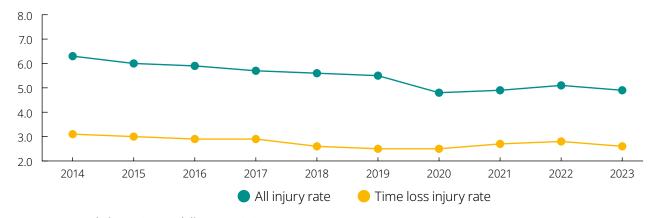
### Rate for every 100 full-time workers for a calendar year



Source: Workers Compensation Board (WCB) of Manitoba

### INJURY AND TIME LOSS INJURY RATES 2014 TO 2023

### Rate for every 100 full-time workers for a calendar year



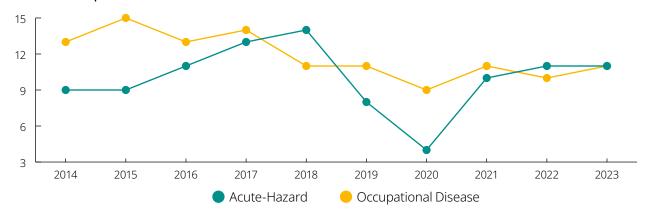
Source: WCB Workplace Injury and Illness Statistics Report

Workplace safety and health legislation, regulations and strategies are regularly reviewing and updated, but fatalities can and do still occur in the workplace.

In 2023, there were 11 acute hazard fatalities and 11 fatalities from occupational disease accepted by the Workers Compensation Board of Manitoba. 193

### ACUTE-HAZARD AND OCCUPATIONAL DISEASE FATALITIES 2014 TO 2023

### Number of accepted work-related fatalities



Source: WCB Workplace Injury and Illness Statistics Report

# **Unintentional Injury Prevention**

Injuries are often seen as an inevitable part of life, but most injuries are predictable and preventable. Preventing injuries is a form of harm reduction. Wearing helmets while riding bikes or all-terrain vehicles, and life jackets while boating are examples of harm reduction practices.

# **Injury Prevention Strategies**

- Engineering: development and modification of products, structures and our environment to make them safer
- **Enforcement:** safety standards including laws, regulations and policies
- Education: information and skill training<sup>194</sup>
- **Economic:** fine and fees, insurance rebates<sup>195</sup>

Knowledge of potential risks and harm reduction strategies alone does not stop injuries from occurring. Attitudes on harm reduction strategies are largely shaped by one's own environment and those around them. Factors, such as lower income levels and residence in rural communities that have fewer resources can impact access to safety-related harm reduction equipment, further demonstrating how injuries and the factors that contribute to

them are experienced disproportionately across the population.

The predictable and preventable factors that contribute to unintentional injuries can be broken down using the Haddon Matrix. The following example shows the confluence of factors involved in motor vehicle collisions and the resulting impacts.<sup>196</sup>

# **Haddon Matrix Applied to the Problem of Motor Vehicle Crashes**

Phases	Factors				
	Host	Agent/Vehicle	Physical Environment	Social Environment	
Pre-event (Before the crash occurs)	<ul><li>Driver vision</li><li>Alcohol impairment</li><li>Driver experience/ ability</li></ul>	<ul><li> Maintenance of brakes, tires</li><li> Speed of travel</li><li> Load characteristics</li></ul>	<ul> <li>Adequate roadway markings</li> <li>Divided highways</li> <li>Hazardous intersections</li> <li>Road curvature</li> <li>Adequate roadway shoulders</li> </ul>	<ul> <li>Public attitudes on drinking and driving</li> <li>Impaired driving laws</li> <li>Graduated licensing</li> <li>Speed limits</li> <li>Support for injury prevention efforts</li> </ul>	
Event (During the crash)	<ul> <li>Spread out energy in time and space with seat belt and/or airbag use</li> <li>Child restraint use</li> </ul>	<ul> <li>Vehicle size</li> <li>Crashworthiness of vehicle—'crush space', integrity of passenger compartment, overall safety rating</li> <li>Padded dashboards, steering wheels, etc.</li> </ul>	<ul> <li>Guard rails, median barriers</li> <li>Presence of fixed objects near roadway</li> <li>Roadside embankments</li> </ul>	<ul> <li>Adequate seat belt and child restraint laws</li> <li>Enforcement of occupant restraint laws</li> <li>Motorcycle helmet laws</li> </ul>	
Post-event (After the crash)	<ul><li>Crash victim's general health status</li><li>Age of victims</li></ul>	Gas tanks designed to maintain integrity during a crash to minimize fires	<ul> <li>Availability of effective EMS systems</li> <li>Distance to quality trauma care</li> <li>Rehabilitation programs in place</li> </ul>	<ul> <li>Public support for trauma care and rehabilitation</li> <li>EMS training"</li> </ul>	

Source: Injury Prevention: Meeting the Challenge, AJPM, 1989; Christoffel T, Gallagher S. Injury Prevention and Public Health, Gaithersburg, MD, 1999.



# **Intentional Injury**

Intentional injury includes self harm and violence/ assault, including intimate partner violence. Due to its strong connections with mental health, self harm and suicide is discussed in the section on mental health and substance use.

### **IN MANITOBA, IN 2023-24...**

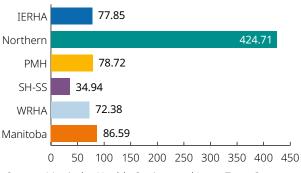
# 1,256 hospitalizations

were caused by intentional injury.<sup>182</sup>

Hospitalization rates for intentional injury vary across the province. Rates in Southern Health-Santé Sud are the lowest, while rates in Northern are the highest.

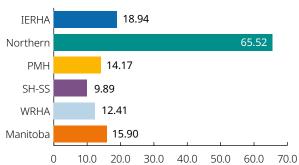
# 2023-24 HOSPITALIZATION RATE FOR INTENTIONAL INJURY BY HEALTH REGION<sup>182</sup>

### Rate per 100,000



# INTENTIONAL INJURY MORTALITY RATE BY HEALTH REGION 2022-23182

### Rate per 100,000



IN MANITOBA IN 2022-23...

There were

# 227 fatalities

caused by intentional injury.<sup>182</sup>



### **Intimate Partner Violence**

Intimate Partner Violence (IPV), also referred to as gender-based violence or domestic violence, impacts people of all genders, ages and socioeconomic, racial, educational, ethnic, religious and cultural backgrounds. <sup>197</sup> IPV disproportionately affects women. Indigenous women are at significantly higher risk, with 61 per cent experiencing IPV in their lifetime since the age of 15, compared to 44 per cent of non-Indigenous women. <sup>197</sup>

### IN 2023...

Manitoba's rate of police-reported IPV was the second highest of all provinces, behind only Saskatchewan.<sup>198</sup>

Canada – 354 per 100,000

MB - 628 per 100,000

SK - 710 per 100,000.198

In 2022-23, all regions of Manitoba had assault-related mortality rates of between 2.18 and 2.83 per 100,000, with the exception of the Northern Health Region, where the rate was about 10 times higher, at 24.41 per 100,000.182

# **Summary**

Preventing injuries is not solely a matter of individual awareness or behavior. It requires collective action and policy alignment across sectors to address both intentional and unintentional injuries. Injuries are shaped by the environment in which we live, learn, work

and play. Those environments are shaped by decisions in housing, education, transportation, employment, and urban planning, among others. By applying this broader lens, Manitoba can create safer conditions that reduce injury risk and better protect those most at risk.



# Mental Health and Substance Use



Individuals experiencing mental illness are twice as likely to develop substance use disorders and those with substance use disorders are three times more likely to develop mental illness.<sup>202</sup>

Mental health and substance use are distinct, but they share root causes and can be co-occurring. Experiences of poverty, racism, discrimination, homelessness, colonization, disability, and/or early trauma increase the likelihood of poor mental health or substance use challenges. These factors disproportionately affect certain populations,

including Indigenous peoples and 2SLGBTQIA+ people, contributing to persistent inequities in mental health.<sup>199-201</sup> Understanding the root causes of mental illness and substance use is essential, not only for treatment and support, but for prevention, resilience-building, and long-term well-being.

### **Protective Factors**

While the factors mentioned previously can increase the likelihood of developing mental illness or substance use disorders, there are also protective factors that can promote well-being and mitigate harms. Promotion of protective factors must address not only individual resilience but also the social and structural barriers that limit access to protective factors, such as:

- having a positive role model<sup>203</sup>
- supportive and consistent caregiving environments<sup>203</sup>
- having a strong attachment to family, school and community<sup>203</sup>
- having goals and dreams<sup>203</sup>
- being involved in meaningful, well-supervised activities (e.g., sports, volunteer work).<sup>203</sup>
- interventions including physical activity, and mental health self-management tools such as cognitive behavioural therapy<sup>204, 205</sup>

# **Mental Health**

Just like physical health is more than an absence of disease, mental health is more than the absence of mental illness. Mental health exists on a complex spectrum that is experienced differently from one person to the next. Recognizing that everyone will experience changes in their mental health and well-being throughout life helps to reduce stigma and highlights the need for accessible, timely, and compassionate supports for all Manitobans.

Mental health is a necessary resource that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community.<sup>206</sup> When demands exceed a person's resources and coping abilities, their mental health can be negatively affected. Mental health and mental illness are distinct concepts. Someone may experience lower mental health and not have a

mental illness, just as someone who has a diagnosed mental illness, may experience good mental health. A mental illness is a recognized, medically diagnosable illness that results in significant impairment of a person's mental, emotional or relational abilities.<sup>207</sup>

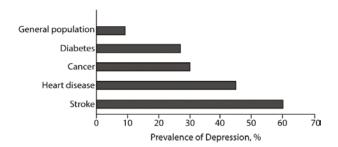
Mental and physical health are deeply interconnected, highlighting the need for integrated, person-centred approaches to care. This connection is evident in the relationship between mental health and chronic conditions. For example, poor mental health is a risk factor for chronic conditions, people with serious mental health conditions are at high risk of experiencing chronic physical conditions and people with chronic physical conditions are at risk of developing poor mental health.<sup>208</sup>





There are several chronic diseases associated with higher rates of depression, including diabetes, cancer, heart disease and stroke. One study found the prevalence of depression to be between three and six times higher in people with certain chronic diseases compared to the general population.<sup>209</sup>

# PREVALENCE OF DEPRESSION IN MAJOR CHRONIC ILLNESSES<sup>209</sup>



Source: Voinov, Richie and Bailey, 2013

# **Self-rated Mental Health**

In 2023, 23.8 per cent of Manitobans reported their mental health as fair or poor, compared to 19.6 per cent of all Canadians.<sup>210</sup>

While anyone can experience mental health challenges, in Canada, Indigenous peoples, 2SLGBTQIA+ individuals, and persons with disabilities, difficulties or long-term conditions are more likely to rate their mental health as poor to fair.<sup>211</sup>

Indigenous identity – 26.1 per cent

Persons with a disability, difficulty or longterm condition – 32.1 per cent

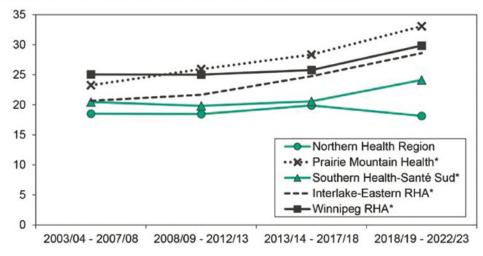
2SLGBTQIA+ people – 48.4 per cent <sup>211</sup>

# **Mood and Anxiety Disorders**

Mood and anxiety disorders include depression, episodic mood disorders (bipolar disorder, manic episode), anxiety (anxiety disorders, phobic disorders, obsessive-compulsive disorders), dissociative and somatoform disorders, or adjustment reaction.<sup>3</sup> Overall, the prevalence of mood and anxiety disorders in residents aged 10 years and older has been increasing over time in Manitoba.<sup>3</sup> Rates have been increasing in all regions, except Northern Health Region where it has remained stable.<sup>3</sup>

Figure 5.2: Prevalence of Mood and Anxiety Disorders by Health Region, 2003/04-2007/08 to 2018/19-2022/23





\* statistically significant linear trend over time.

IN MANITOBA, FROM 2018-19 TO 2022-23

# 28.7 per cent of residents aged 10+

had a mood or anxiety disorder.<sup>3</sup> Rates are the highest in Prairie Mountain Health (33 per cent) and Winnipeg (29.8 per cent), and lowest in the Northern Health region (18.0 per cent).<sup>3</sup>



### **Youth Mental Health**

Evidence shows that approximately 70 per cent of mental health problems begin before the age of 18, underscoring the urgent need for early, traumainformed, culturally safe, and accessible supports for youth. <sup>212</sup> Indigenous youth and 2SLGBTQIA+ youth face disproportionately high rates of mental health challenges. These disparities are linked to a range of factors, including adverse childhood experiences (ACEs), social discrimination, and systemic inequities.

# IN CANADA, IN 2023,

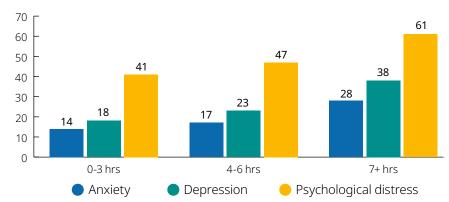
40.3 per cent of Canadian youth aged 16 to 24 reported having anxiety, and 32.3 per cent had depression.<sup>213</sup>

2SLGBTQIA+ youth are nearly twice as likely to meet criteria for a mental health disorder compared to cisgender, heterosexual youth (56 per cent versus 29 per cent).<sup>214</sup>

A growing challenge in youth mental health comes in the form of widespread and early use of digital media, including smartphones, online gaming, and social media. While digital connectivity can offer benefits, it also creates new pathways for bullying, social comparison, and exclusion, often amplifying stress during critical stages of development. A recent survey of Canadian youth highlighted this phenomenon, showing that longer periods of screen time were closely associated with higher rates of depression, anxiety, and psychological distress.<sup>215</sup>

# YOUTH REPORTING MODERATE TO SEVERE MENTAL HEALTH SYMPTOMS BY DAILY SCREEN TIME

### Percentage



Source: Mental Health Research Canada, April 2025

Twenty-three per cent of Canadian youth aged 16 to 24 reported seven or more hours of daily screen time.<sup>215</sup>

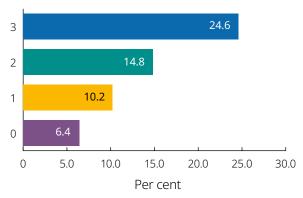


# **Connection to Determinants of Health**

Social and economic conditions contribute to more than of 50 per cent of our mental health.<sup>201</sup> The places where we live, grow, work, and play influence how we see ourselves and the world, offering the potential to nourish and/or harm our sense of identity, purpose, and connection. Conditions that increase the likelihood of poor mental health outcomes include ACEs, homelessness and justice system involvement.

ACEs, including intergenerational trauma, have a profound impact on brain development and longterm mental health. The higher the number of ACEs, the higher the risk for developing mental illness.<sup>216</sup>

# **INCIDENCE OF MENTAL ILLNESS BY NUMBER OF ACEs<sup>216</sup>**



Source: Danielsdóttir HB, Aspelund T, Shen Q, et al. Adverse Childhood Experiences and Adult Mental Health Outcomes. JAMA Psychiatry. 2024

Individuals reporting homelessness also see disproportionate rates of mental illness. Of those actively experiencing homelessness, between 30 and 40 per cent report having a mental illness, with higher likelihood of having severe mental illness that requires substantial intervention, such as schizophrenia.<sup>217</sup>

People who have been homeless at any point in their lives are two to three times more likely to report their mental health as poor.218

The justice system often serves as a downstream response to unmet needs, particularly for those facing poverty, trauma, racism, and mental illness. In Canadian federal correctional facilities, 70 per cent of men and 79 per cent of women have at least one diagnosis of a mental illness, learning disability or intellectual disability.<sup>219</sup>

Adults who have been either accused of, or have been a victim of, a crime are more likely to experience mental illness as compared to the general population. 220

Accused of a crime - 26.1 per cent

Victim of a crime – 38.9 per cent





## **Intentional Self Harm and Suicide**

Self-harming behaviours and suicide are a significant concern in Canada. Each year, there are approximately 20,000 hospitalizations due to self-harm and 4,500 deaths by suicide in Canada.<sup>221</sup>

In 2023, Manitoba had the second highest rate of death by suicide of all Canadian provinces, 16.8 per 100,000, compared to 11.1 per 100,000 for all of Canada.<sup>221</sup>

IN 2023-24,

# 1,257 hospitalizations

in Manitoba were due to intentional injury, with 30.5 per cent attributed to self-harm. 182

IN 2022-23.

# 227 fatalities

in Manitoba were due to intentional injury. Suicides accounted for 75.8 per cent of these fatalities.<sup>182</sup>

Self-harm is not the same as suicide, and the majority of people who self-injure do not have suicidal thoughts when self-injuring.<sup>222</sup> While they are not the same, self-harm can sometimes be associated with increased suicidality.<sup>222</sup>

Risk Factors for Self-harming Behaviours

- loss of a parent
- childhood illness or surgery
- childhood sexual or physical abuse
- family substance abuse
- negative body image perceptions
- lack of impulse control
- childhood trauma
- neglect
- lack of strong family attachments<sup>222</sup>

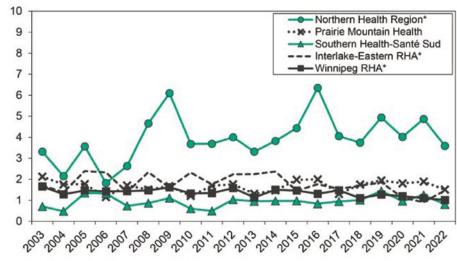
In Manitoba overall, the rate of suicide has not changed over time. Rates have varied by health region, with a significant decrease in Winnipeg and Interlake Eastern and a significant increase in Northern region.<sup>3</sup> From 2018 to 2022, suicide rates in the Northern region were 3.1 times higher than the Manitoba average.<sup>3</sup>

In Manitoba, males experience a higher burden, at more than twice the rate of females.<sup>182</sup>

Male – 16.9/100,000

Female – 7.24/100,000

Figure 3.32: Suicide Rate by Health Region, 2003 to 2022 Age- and sex-adjusted rate of deaths per 10,000 residents (age 10+)



\* statistically significant linear trend over time.

National data shows that First Nations and Inuit youth aged 15 to 24 are more likely to die by suicide.

- First Nations youth die by suicide approximately six times more often than non-Indigenous youth.<sup>223</sup>
- Suicide rates for Inuit youth are 24 times the national average.<sup>223</sup>

Among First Nations youth, those with parents or grandparents who were exposed to the residential school system are significantly more likely to experience suicidal thoughts, compared to peers whose families were not directly affected.<sup>224</sup> The lifetime risk of suicidal ideation for individuals living on-reserve increases by 46 per cent when one of their previous generations (e.g., parent or grandparent) was exposed to the residential school system.<sup>224</sup>

 Individuals living on-reserve with two previous generations of exposure (e.g., parent and grandparent) are 35 percent more likely to report a suicide attempt compared to those with one generation of exposure.<sup>224</sup>

All aspects of life influence mental health, but the patterns outlined above reveal deep societal inequities, particularly among those most affected by trauma, poverty, racism, discrimination, and loneliness. These same inequities are also evident when examining patterns of substance use, highlighting the interconnected nature of social determinants and the need for multisectoral action.

# **Substance Use**

Substance use encompasses legal and illegal substances, including drugs and alcohol, and may involve various methods of consumption such as ingestion, inhalation, or injection. Most Manitobans use substances from time to time. Substance use can range from an occasional drink of alcohol to higher risk use as a means of coping with life circumstances, to meeting the criteria for a substance use or alcohol use disorder, sometimes referred to as addiction.

### NON-USE LOWER-RISK USE **BENEFICIAL USE** HIGHER-RISK USE ADDICTION (Substance use disorder) Use that can have positive Avoiding use of substances Use that has minimal impact Use that has a harmful and A treatable medical condition (abstinence) health, social, or spiritual that affects the brain and to a person, their family, negative impact to a person, effects friends and others their family, friends and others involves compulsive and continuous use despite Example: No drugs, tobacco negative impacts to a person, or alcohol Example: Taking medication Example: Drinking following Example: Use of illegal drugs, their family, friends and others as prescribed, ceremonial/ the low-risk alcohol drinking impaired driving, binge religious use of tobacco guidelines, cannabis use drinking, combining multiple (such as smudging) according to the lower-risk substances, increasing Example: When someone cannot cannabis use guidelines frequency, increasing quantity stop using drugs, tobacco or alcohol even if they want to A person may move back and forth between the stages over time



Substance use is estimated to have cost the Canadian economy \$49.1 billion across sectors in 2020 alone.<sup>225</sup>

# CRIMINAL JUSTICE - \$10 BILLION

- policing
- courts
- correctional services

# **LOST PRODUCTIVITY - \$22.4 BILLION**

- lost value of work due to premature deaths
- long- and short-term disability

### **HEALTH-CARE - \$13.4 BILLION**

- emergency visits
- prescription drugs

# **OTHER DIRECT COSTS - \$3.3 BILLION**

- research and prevention
- motor vehicle collision damage
- workers' compensation

The general prevalence of smoking, vaping, alcohol and cannabis consumption, and the health impacts of their use are described in the Measuring What Makes Us Healthy section of this report. This section will focus on the prevalence of diagnosed substance use disorder and harms related to substance use, including alcohol.



### **Substance Use Disorder**

Substance use disorder can include a range of substance use, including alcoholic or drug psychoses, alcohol or drug dependence or nondependent abuse of drugs.

In Manitoba, for the five-year period from 2018-19 to 2022-23, 4.9 per cent of residents aged 10 years and older were diagnosed with a substance use disorder.<sup>3</sup>

### IN 2022-23

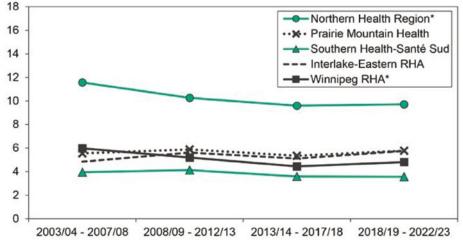
# 60,103 Manitobans

were living with a diagnosis of a substance use disorder.<sup>40</sup>

The prevalence of substance use disorder is significantly associated with income. Manitobans from the lowest income quintiles are more likely to be diagnosed with substance use disorder across both urban and rural areas.<sup>3</sup>

Over time, the prevalence of substance use disorder has decreased in Manitoba overall, and in the Winnipeg and Northern Health regions, while remaining relatively stable in all other regions.<sup>3</sup> Rates in the Northern Health Region are nearly double the provincial average.<sup>3</sup>





statistically significant linear trend over time.

According to national data, Manitobans have a higher lifetime rate of substance use disorders than the national average (24.5 per cent versus 20.7 per cent).<sup>226</sup>



# **Connection to Determinants of Health**

Rates of substance use are disproportionately high amongst those experiencing chronic homelessness.<sup>227</sup> While estimates vary by city and region, research suggests that of those experiencing homelessness, 36.7 per cent have an alcohol use disorder and 27.7 per cent have a drug use disorder.<sup>217</sup>

In 2024, 71.1 percent of people experiencing homelessness, that were surveyed in Winnipeg reported substance use.<sup>79</sup>

The socioeconomic conditions that can lead to justice system involvement, are compounded when substance use disorder is present. In Canadian federal offenders, the lifetime prevalence of alcohol use/dependence was 70 per cent, and 53 per cent for substance dependence. <sup>228</sup> Substance use is one of the most reliable predictors of whether individuals will re-offend. A recent study in British Columbia found that 70 per cent of previous offenders who used drugs were reincarcerated within three years of release. <sup>229</sup> Attending treatment after release acts as a protective factor against recidivism.

The connection between substance use and ACEs is so strong that ACEs can predict problematic substance use. <sup>230</sup> For example, among First Nations peoples who reported misuse of opioids, 91 per cent stated they had attended a residential school. <sup>231</sup> Those who attended residential schools are three times more likely to have an alcohol use disorder and are three times more likely to engage in illicit substance use or prescription drug abuse at least monthly. <sup>231</sup>

The disproportionate impact of substance use among First Nations, Métis, and Inuit peoples is rooted in the enduring legacy of colonialism, systemic racism, and intergenerational trauma. Policies such as residential schools, the Sixties Scoop, the overrepresentation of Indigenous children in foster care, and ongoing systemic discrimination in health, justice, education, and social systems have contributed to elevated exposure to ACEs, poverty, and loss of cultural connection. These cumulative harms increase the risk of substance use disorders, but they are not inevitable. Indigenous communities have also shown incredible strength, cultural resilience, and leadership in developing healing-centred, community-driven responses. To address these disparities meaningfully, prevention and treatment strategies must be rooted in truth, reconciliation, and Indigenous self-determination.

# **Substance-related Harms**

Despite widespread normalization of alcohol use in western society, alcohol use is far from harmless and is responsible for the largest economic burden of all substances.<sup>232</sup> In 2020, health-care costs attributable to alcohol use in Manitoba were over \$247 million.<sup>156</sup>

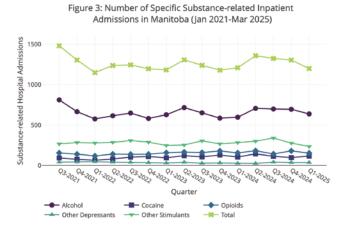
Alcohol is the leading cause of substance-related emergency department (ED) visits and in-patient hospitalizations in Manitoba.

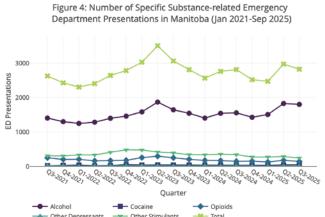


# IN 2024, ALCOHOL ACCOUNTED FOR

5,929 ED presentations, or 55.6 per cent of all substance-related presentations to EDs.

2,688 in-patient hospitalizations, or 51.9 per cent of all substance-related in-patient hospitalizations.<sup>233</sup>







# Fetal Alcohol Spectrum Disorder (FASD)

When alcohol is consumed during pregnancy, it can result in the development of FASD, which is the most common developmental disability in Canada.

FASD affects approximately 58,000 Manitobans.<sup>234</sup>

When people with FASD do not have access to appropriate supports, they are more likely to experience adverse outcomes such as poor educational achievement, criminal justice system involvement, mental health disorders, substance use disorders, unemployment, and housing instability.<sup>234</sup> The social and economic costs of these challenges are estimated to be \$1.8 billion annually in Canada.<sup>235</sup> Conversely, people with FASD achieve more positive outcomes if their needs and challenges are addressed early on in life and they have access to supports throughout their lives.<sup>235</sup>



### **Substance-related Deaths**

While alcohol use contributes to the majority of emergency department presentations and hospitalizations related to substance use, stimulants are now the leading cause of substance-related deaths in the province.<sup>233</sup> The upward trend in substance-related deaths in Manitoba is being driven by an increase in stimulant use, both with, and without, opioids.<sup>233</sup>

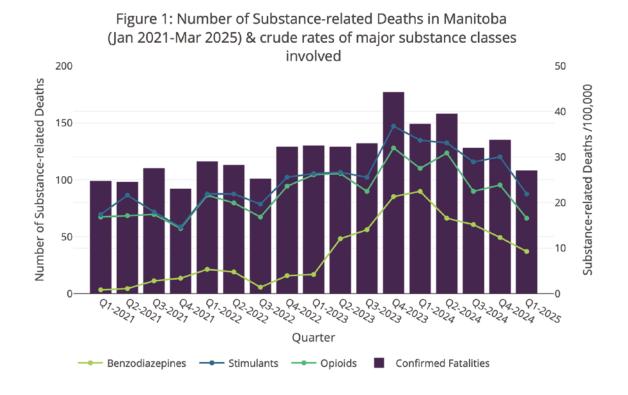
In 2024, there were 570 substance-related deaths in Manitoba.<sup>233</sup>

# Of the 108 substance-related deaths between January and March 2025

72.2 per cent involved stimulants (mainly methamphetamine and cocaine).

54.6 per cent involved opioids.

30.6 per cent involved benzodiazepines.<sup>233</sup>



### **Naloxone**

Naloxone is a safe, life-saving medication that can reverse opioid overdose or poisoning. However, it is ineffective against benzodiazepines and stimulants. This severely reduces the chances of reversing overdoses when multiple substances are ingested. In 2023, 30 per cent of opioid-related deaths in Canada involved benzodiazepines.<sup>236</sup>

# **Harm Reduction**

Harm reduction includes any policy or practice that aims to reduce the negative consequences of substance use without the requirement of abstinence. Examples of harm reduction approaches for substance use include:

- supervised consumption sites, which provide monitored environments for people to use drugs while offering access to health care, social supports, and pathways to recovery.
- drug checking which helps community members to screen their drugs for contaminants and take steps to reduce harms when toxic or unexpected drugs are present. 237
- the distribution of sterile needles which helps prevent the transmission of bloodborne infections, such as Hepatitis C and HIV, among people who inject drugs.

Harm reduction strategies can build trust, reduce the spread of infectious diseases, foster connection for people who are often marginalized, and in some cases, prevent overdoses. They are a critical part of a compassionate, evidence-informed public health system.

# Summary

Negative mental health and substance use outcomes are not the result of individual weakness or isolated choices. They reflect the environments in which people live, the trauma they have experienced, and the opportunities available to them. As this report has shown throughout, disparities in health outcomes are deeply rooted in structural inequities. Addressing these issues requires not only treatment but also compassion and coordinated cross-sector action for structural change. Real progress depends on investing in the foundational conditions that allow all Manitobans to thrive, especially those who have been structurally disadvantaged or excluded.



# Environmental Health



Human health and well-being are inextricably linked to the environment. From the air we breathe to the water we drink, the environment provides the foundation for life. When environmental conditions deteriorate due to pollution, climate change, or ecosystem disruption, so, too, does health. Hazards in our environment from physical, chemical, biological, social or psychosocial factors can increase the risk of illness and disease including poor mental health, cancer, heart disease and asthma.<sup>238</sup>

Most environmental health issues focus on educating and protecting the public from risks that may result in unsafe water, food and air. The Public Health Agency of Canada estimates that one in eight, or about 4,000,000 people, get sick from food-borne illness in Canada every year.<sup>239</sup> Salmonella is the most reported cause of food-borne illness in Canada.<sup>240</sup>

### IN 2023...

there were 6,281 confirmed cases of Salmonella in Canada, accounting for 38.4 per cent of all enteric illness.<sup>240</sup>

there were 155 confirmed cases of salmonella in Manitoba.<sup>240</sup>

Public health inspectors play a crucial role in preventing injury and illness and promoting well-being by identifying, evaluating and mitigating exposure to hazards. They are responsible for over 13,000 facilities across Manitoba. The potential risk determines the frequency of inspection, so not all facilities are inspected annually.

# IN 2024, PUBLIC HEALTH INSPECTORS COMPLETED 12,960 INSPECTIONS

Care facilities – 1,124

Swimming pools - 965

Food - 10,671

Recreational camps – 38

Personal services\* – 162

Care facilities – child care, residential care

<sup>\*</sup>Winnipeg facilities only<sup>241</sup>

# Water

Water is an invaluable resource at the heart of the health and well-being of all living things. It makes up about 60 per cent of human body weight and is necessary to maintain normal function. Water supports a variety of human uses including drinking water supply, agriculture (e.g., irrigation, livestock watering), food production and processing, power generation, wastewater treatment, and recreation. It also provides vital habitats for diverse plant, animal and aquatic life, helping to sustain healthy ecosystems.

Contaminated waters in lakes, rivers, streams and wetlands may pose serious risks to the environment and public health. Children and youth are disproportionately at risk of gastrointestinal illness from water as they are more likely to spend more time in the water, swallow more water when swimming and have developing immune and digestives systems. <sup>242</sup> Exposure to harmful algae blooms and other pathogens can cause generalized illness, skin irritations, and in more serious cases, neurological effects. <sup>242</sup>

Generally, recreational water illness (RWI) is underreported and under-diagnosed in Canada as people may not seek medical care and illnesses may be misattributed to food-borne exposures.<sup>242</sup> While there is a lack of data in Canada, evidence from the U.S. has estimated 90,000,000 cases of RWI each year, costing between US\$2.2 – 3.7 billion annually.<sup>242</sup>



# **Water Quality Index (WQI)**

The WQI ranks the water quality of rivers, streams and lakes by a single value ranging from zero to 100. Monitoring of the WQI allows the tracking of changes over time and ranks the suitability of water for uses such as drinking, recreation, irrigation, livestock watering and aquatic life. Manitoba's target is for the index to be greater than, or equal to, 80 (good to excellent). Over the last decade, the annual average WQI has remained above the target of 80, meaning that the water quality in the province is stable.

### **WQI CATEGORIES:**

Excellent (95-100), Good (80-94), Fair (65-79), Marginal (45-64), and Poor (0-44)

In 2024, the average Water Quality Index in the province was 85.<sup>243</sup>

# **Drinking Water**

Access to clean, safe and reliable drinking water is crucial for maintaining good health. Contaminated water can lead to a wide range of adverse health outcomes, many of which can be severe and long lasting, including certain cancers, cardiovascular and kidney problems, reduced immunity and fertility, and behavioural and developmental effects in children.<sup>244</sup>

Drinking water can be impacted by chemical, bacterial, and physical contaminants. Boil water advisories (BWA) may be issued when bacterial testing results exceed acceptable limits.

# The number of BWAs changes daily. As of March 31, 2025...

There were 142 active BWAs in Manitoba, affecting 10 per cent of over 1,300 water systems in Manitoba.

Of these, 67 per cent (95 BWAs) were classified long-term, having been in effect for one year or more.<sup>245</sup>

Ending long-term BWAs is a complex process. In 2024-25, 427 BWA's were rescinded in Manitoba, including 22 that were long-term.<sup>245</sup>



# **Climate Change**

Manitoba's climate is changing, but unlike the past, when changes happened slowly over thousands of years, today's climate is changing rapidly. Human activity, such as the burning of fossil fuels and the conversion of land for forestry and agriculture, which increase greenhouse gas emissions, are contributing to changes in climate in less than 100 years. <sup>246</sup> A changing climate has direct impacts on human health (e.g., extreme heat, air quality), but also has indirect effects, such as influencing Manitoba's economic opportunities and stability, which, in turn, affects human health. Climate change also adds to the mental health burden of Manitobans.

Manitoba, much like the rest of Canada, is warming at approximately twice the global rate.<sup>247</sup> Due to climate change, Manitobans can expect hotter summers, changes in precipitation patterns, increased unpredictability of weather and a higher frequency of extreme events such as storms, floods and forest fires.<sup>248</sup> Many people reading this report will remember the 1997 "flood of the century" in southern Manitoba, or the more recent October 2019 snowstorm that caused significant and costly damage to City of Winnipeg trees and the power grid. Climate change has increased the severity and frequency of these extreme events that impact sectors from agriculture and health to tourism and the economy.

Throughout the spring and summer of 2025, Manitoba experienced the worst wildfire season on record in the past 30 years. The provincial government declared a provincial state of emergency on two separate occasions, and many municipalities and First Nations communities declared their own local states of emergencies.

As of September 10, 2025:

Nearly 2.15 million hectares of area had been burned.<sup>249</sup>

The total number of wildfires was 428.249

The 20-year average for wildfires on this date is 360.<sup>250</sup>

There were over 32,000 registered evacuees, which was the worst year for evacuations since 1950.

# **Cost of Climate Change**

The costs of climate change are substantial and continue to rise. The built and natural environment, public health and safety, labour productivity and the economy are all affected. Climate preparedness is crucial for reducing the unnecessary economic costs associated with hazards and their impacts, ultimately leading to protected and resilient communities and healthy individuals.

Manitoba is expected to suffer \$4 billion annually in direct economic losses, or \$2,235 per capita due to climate change (2050's).<sup>251</sup>

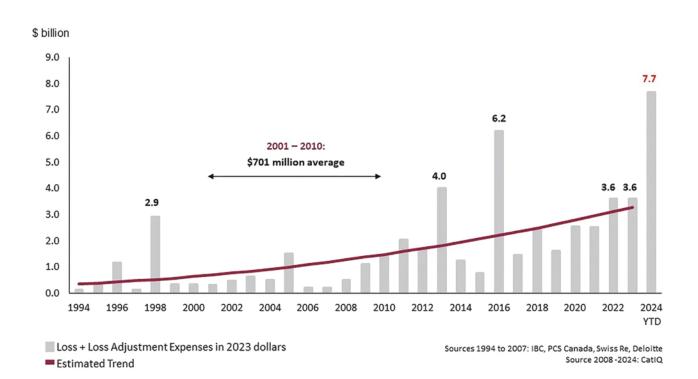


Every \$1 invested in climate adaptation measures now is estimated to save \$13 to \$15 in costs across the economy.<sup>252</sup>

The cost of property loss is steadily increasing. Summer of 2024 was the most destructive season in Canadian history for insured losses due to severe weather. As of September 2024, the year-to-date total over \$7.7 billion, over 10 times the annual average from 2001-2010.<sup>253</sup>

Increasing losses due to climate change have a direct impact on the affordability of home and property insurance. The costs outlined here do not include the harm to individuals, families and communities who must deal with the physical, social, mental and financial stress due to evacuations, disruptions to work and school, the loss of a home or business, and the lengthy process to rebuild what was lost.

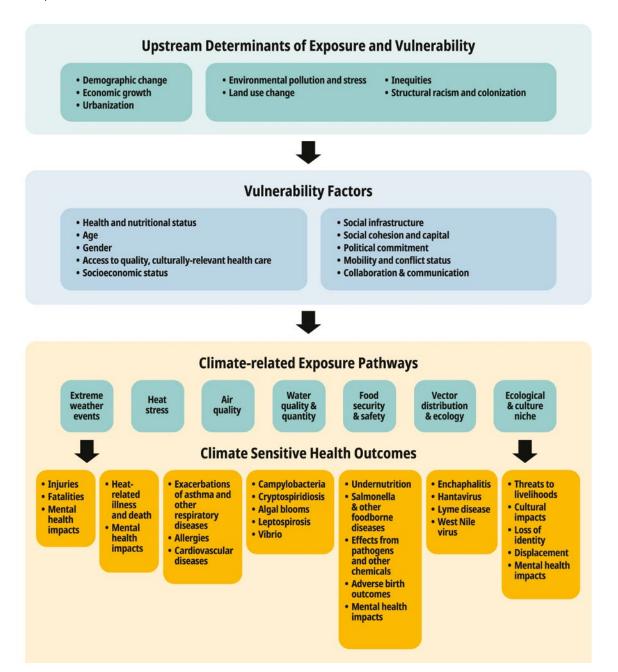
# CATASTROPHIC LOSSES IN CANADA IN \$000,000,000, 1994 TO 2024 AND TREND



# **Climate Change and Health**

Health and well-being can be affected by climate change both directly and indirectly. The following image shows different pathways through which climate change affects health. Direct impacts can include exacerbations of asthma and other respiratory diseases, heat-related illness, injuries and mental health <sup>254</sup> Indirect impacts can include more air and water pollution, displacement, and greater risks to food insecurity. <sup>254</sup> Poor air quality, rising temperatures and extreme heat, and the expansion of zoonotic diseases will be discussed in further detail here.

Climate change affects everyone, but not equally. Racism, poverty, and geographic remoteness make certain populations more vulnerable, due to existing health and social inequities, especially among Indigenous peoples, women, people of low socio-economic status, youth and older adults.<sup>255</sup> Without adaptation that considers the unique vulnerabilities and strengths of these social groups, climate change is likely to increase health and social inequities.





# **Air Quality**

Most people are exposed to air pollution every day. Even though air pollution levels are low in Canada compared to other countries, addressing air quality issues is necessary to protect health.<sup>256</sup>

Poor air quality can be cause by a variety of sources, however, wildfire smoke is a key natural source of outdoor air pollution. Poor air quality due to wildfire smoke can cause a wide range of health effects, ranging from mild to severe, even at very low levels <sup>257</sup>

Milder and more common symptoms of smoke exposure include headaches, mild cough, production of mucus and nose, throat, eye and sinus irritation.<sup>257</sup> More serious but less common symptoms include dizziness, wheezing, chest pains, asthma attacks, shortness of breath and an irregular heart beat. Exposure to wildfire smoke can also lead to stroke, heart attacks, premature death and reproductive and developmental effects, such as low birth weight.<sup>257</sup> During periods of heavy smoke, everyone is at risk, regardless of their age or health.

The Air Quality Health Index (AQHI) is a scale from one to 10+ designed to help people understand what the air quality around you means for your health. The higher the number, the greater the health risk associated with air quality.<sup>258</sup>

As of July 8, 2025, the City of Winnipeg, the only Manitoba location for which data is available, experienced 23 days where the maximum AQHI was 7 or higher. Eight of the 23 days (35 per cent) had a maximum AQHI of 11.<sup>259</sup>

# Heat

Extreme heat can increase the risk of a wide range of health outcomes. In the short term, it can lead to heat rash, heat syncope (fainting), heat exhaustion and heat stroke. Morbidity and mortality due to cardiovascular events, respiratory conditions, kidney diseases, adverse pregnancy outcomes, mental disorders and interpersonal assaults are also associated with extreme heat.<sup>260–264</sup>

In general, certain groups are considered at increased risk of extreme heat including older adults, infants and young children, pregnant people, Indigenous peoples, people involved in strenuous outdoor exercise, people who work outdoors, people living in rural and remote areas, people living in situations of lower socioeconomic status, people experiencing homelessness, and those with existing illness or chronic conditions such as cancer, diabetes and lung or heart conditions.<sup>257,265</sup> People in these groups may have a greater exposure to extreme heat, be more biologically susceptible to extreme heat, or have fewer resources to adapt to extreme heat. All of these factors can increase the risk of poor health outcomes when the temperature is high.<sup>266</sup>



# **Heat Warnings**

Threshold for maximum temperature or humidex.<sup>267</sup>

	Temperature	Humidex
Northern Manitoba	29°C	34
Southern Manitoba	32°C	38



In Manitoba, analysis of health data from 2004-2023 found a five per cent increase in the all-cause mortality rate on days humidex values reached, or exceeded, the above threshold for at least one day compared to mortality rates on days with typical temperatures. Although exposure to extreme heat can be a risk to everyone, certain groups tend to be disproportionately affected.

# In Manitoba, between 2004-2023, there was increased heat day all-cause emergency department visits for:

- people living in the least green neighbourhoods (3-4 per cent increase)
- people living in the most socially deprived neighbourhoods (6-7 per cent increase)
- people receiving Employment Income Assistance (3-4 per cent increase)
- people living in the most materially deprived neighbourhoods (three per cent increase)<sup>268</sup>

# There was also an increase in heat day mortality for

- people living in the least green neighbourhoods (14-19 per cent increase)
- people in the most socially deprived neighbourhoods (23-28 per cent increase)<sup>268</sup>

# **Heat Projections**

The following maps illustrate projected changes in the number of hot and humid days in Manitoba. The data compare modeled historical conditions (1971–2000) to projected future conditions (2041–2070) under a high-emissions scenario\*\*\* (SSP5-8.5). The table provides values for five Manitoba locations, showing both the median number of days and a range (from the 10th to 90th percentiles) to capture uncertainty across climate models.<sup>269</sup>

Overall, the projections suggest a substantial increase in the number of days with humidex values over 35 across southern and central Manitoba. For example, Winnipeg is projected to experience a median of 42 such days per year between 2041–2070, compared to just 10 days in the historical baseline. Locations farther north, such as Thompson, show an increase in values similar to the historical baseline from Brandon and Winnipeg.<sup>269</sup>

These changes have implications for heat-health planning, infrastructure resilience, and public safety, especially in communities unaccustomed to prolonged periods of heat and humidity.

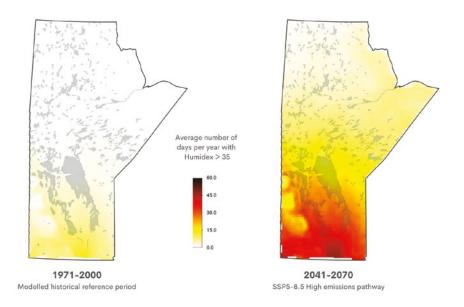
Projected Number of Days with Humidex > 35 <sup>269</sup>		
	1971-2000 Historical Baseline*	2041-2070 Projected Future Period*
Winnipeg 10th – 90th percentiles	Median – 10	Median – 42
	9 to 11	33 to 53
<b>Brandon</b> 10th – 90th percentiles	Median – 9	Median – 38
	7 to 10	30 to 48
<b>Winkler</b> 10th – 90th percentiles	Median – 12	Median – 46
	10 to 14	38 to 58
<b>Dauphin</b> 10th – 90th percentiles	Median – 6	Median – 31
	9 to 11	24 to 42
Thompson 10th – 90th percentiles	Median – 1	Median – 8
	0 to 1	5 to 14

<sup>\*</sup> Thirty-year time periods are used to represent climate normals, consistent with international standards (e.g., the World Meteorological Organization), and help smooth out year-to-year variability. https://climatedata.ca/interactive/30-years-data/

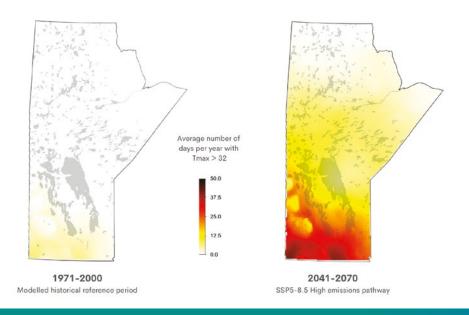
<sup>\*\*</sup> Percentiles represent the range of projected values across an ensemble of 26 CMIP6 climate models. The 10th percentile reflects a lower estimate (cooler outcome), while the 90th percentile reflects a higher estimate (hotter outcome). The median (50th percentile) is the central estimate. https://climatedata.ca/resource/modelled-historical-data/

<sup>\*\*\*</sup> The SSP5-8.5 emissions scenario reflects a future with continued high greenhouse gas emissions, rapid economic growth, and intensive fossil fuel use. It is used to explore climate risks under a very high warming pathway, particularly useful for assessing high-impact planning needs. https://climatedata.ca/resource/understanding-shared-socio-economic-pathways-ssps/

# **Projected Number of Days per Year with Humidex > 35**



# Projected Number of Days per Year with Maximum Temperature >32 °C



# **Zoonotic Disease**

There is an increasing recognition that human health is interconnected to the health of animals and the environment. Changes in these relationships can increase the risk of new human and animal diseases developing and spreading. Zoonotic diseases, or zoonoses, are communicable diseases that spread between animals and humans, such as Lyme disease, West Nile virus, salmonella, avian influenza and rabies.<sup>270</sup> Zoonoses are common, and anyone can get sick from them, but some groups are at

greater risk of serious illness and death from certain diseases, including children under the age of five, adults over the age of 65, people with weakened immune systems and pregnant women.<sup>271</sup>

Over 30 new human pathogens have been detected in the last 30 years, 75 per cent of which have originated in animals.<sup>272</sup>

# **Vector-borne Disease**

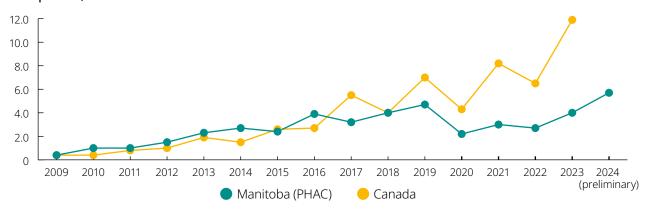
There are many vector-borne diseases spread by insects that are affecting the health of humans and animals. In Manitoba, the cold climate acts as a protective measure from certain vector-borne diseases for a portion of the year. However, climate change is increasing the risk. West Nile virus and Lyme disease provide two examples of the increasing risk of vector-borne diseases. Warming temperatures create conditions for the geographic spread, changing seasonal distribution and number of ticks that carry Lyme disease and mosquitos that transmit West Nile virus.<sup>273</sup>

Lyme disease is transmitted to humans through the bite of an infected black-legged tick and can cause a range of symptoms in humans.<sup>274</sup> In Manitoba, the range of blacklegged ticks continues to expand and is now established throughout much of southern Manitoba, south of the 53rd parallel. Lyme disease is the most frequently reported vector-borne disease in Canada.<sup>274</sup>

The incidence per 100,000 population of all Lyme disease cases reported annually has been increasing in Canada and Manitoba.<sup>274–277</sup>

### **HUMAN REPORTED LYME DISEASE CASES FROM 2009 TO 2024**

# Rate per 100,000



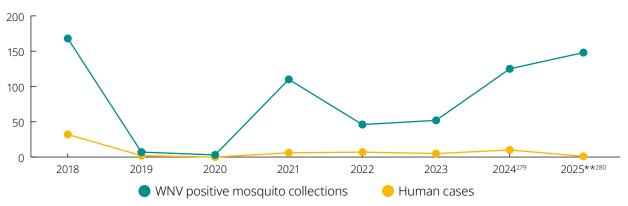
Source: Health Canada and Manitoba Health, Seniors and Long-Term Care

<sup>\*</sup> The national surveillance case definition for Lyme disease was revised in 2016 and in 2024 which may have impacted surveillance data and is important to consider when interpreting trends.

West Nile virus (WNV) is spread by infected Culex tarsalis mosquitos. The virus can cause severe headache, high fever, mental confusion, muscle weakness, coma and paralysis.<sup>278</sup> Severe illness can occur in all age groups, but older adults and persons with weakened immune systems are at

the greatest risk. There is no vaccine, cure or specific treatment for WNV.<sup>278</sup>The risk of WNV is greatest in southern Manitoba from mid-July through the end of August when the infected mosquito populations are the greatest.<sup>278</sup>

### NUMBER OF HUMAN REPORTED LYME DISEASE CASES FROM 2009 TO 2025\*



Source: Manitoba Health, Seniors and Long-Term Care

# One Health

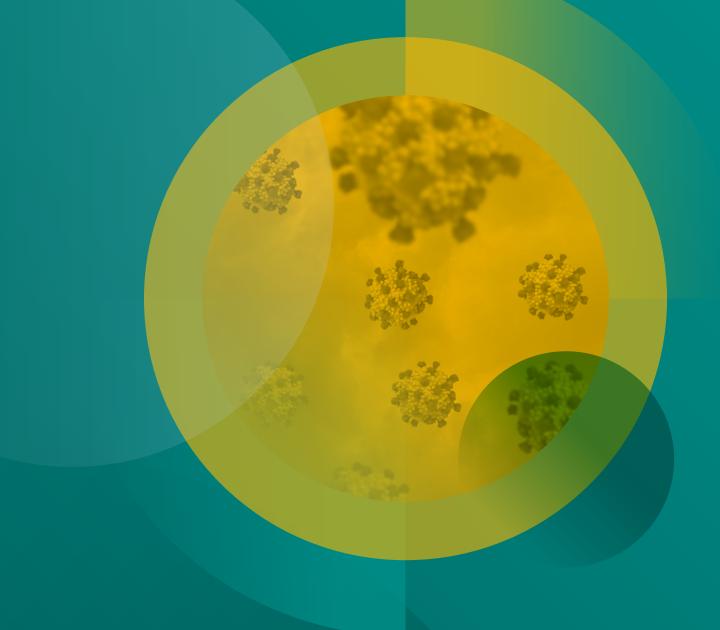
One Health is a multisectoral approach that seeks to optimize the health of humans, animals and the environment.<sup>272</sup> The management of the risk of rabies provides an example of the One Health approach in Manitoba. Multiple sectors collaborate to monitor exposures, communicate relevant information and ensure work is not duplicated with the overall goal of maintaining zero cases of human rabies while minimizing domestic animal cases in Manitoba. Antimicrobial resistance is another important One Health topic that is discussed in the communicable disease section.

# **Summary**

Environmental health is public health. As climate change accelerates and environmental pressures intensify, the need to protect our shared environment becomes increasingly urgent, particularly for those in more susceptible groups.

<sup>\*</sup>As of September 11, 2025.

<sup>\*\*</sup> Related to travel outside of Manitoba.



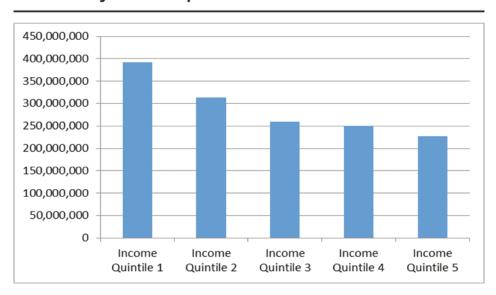
# Communicable Disease

Communicable diseases, while no longer the main driver of ill health, continue to influence health outcomes and strain the health-care system in Manitoba today. Pathogens, including viruses, bacteria, fungi, and parasites, all cause diseases that can spread from person to person through water, food, air, bodily fluids, contaminated objects, as well as from animals or insects.

Communicable diseases provide yet another example of how the poorest populations bear a disproportionate burden of poor health outcomes. The figure below shows hospital expenditures for communicable diseases by income quintile. The lowest income quintile accounts for 27 per cent of costs compared to 16 per cent for the highest income quintile.<sup>281</sup>

Communicable diseases are estimated to cost \$8.3 billion each year in Canada.<sup>281</sup>

Figure 2: Hospital expenditures on communicable diseases by income quintile

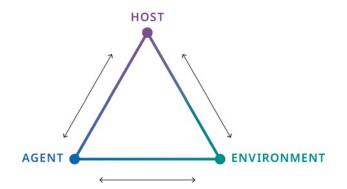


This section focuses on communicable diseases that are spread from person to person, such as sexually transmitted and blood-borne infections (STBBIs), tuberculosis, vaccine-preventable diseases, and respiratory illnesses. Zoonotic diseases (or diseases and infections that can be spread from animals to humans) are discussed in the previous section on environmental health.



# **Agent-Host-Environment Model**

Disease does not arise from the presence of an infectious agent in isolation. It emerges from the interaction between the agent (the virus, bacteria, or other pathogen), the host (the individual who may become infected), and the environment (the social, psychological and physical conditions that influence transmission and susceptibility). These three factors interact dynamically, reinforcing one another in ways that can entrench health inequities. Understanding how communicable diseases spread and why certain populations bear a disproportionate burden is crucial to choosing effective clinical and policy interventions.



# **Monitoring Communicable Diseases**

In Manitoba, health-care providers and laboratories are required to report over 60 communicable diseases to public health when they are detected. This reporting enables timely outbreak identification and response, long-term monitoring of disease trends, and the development of targeted prevention strategies. Just as importantly, this process helps identify populations that are disproportionately affected, allowing public health to respond not just to pathogens, but to the contexts that enable them to thrive.



# Sexually Transmitted and Blood-Borne Infections (STBBIs)

Sexual health, including the prevention and management of STBBIs, is a critical aspect of overall health. These infections can be transmitted to anyone through sexual activity and/or contact with infected blood or blood products, such as during injection drug use, pregnancy and birth.

Stigma related to STBBIs creates significant barriers to prevention, testing, and treatment. Increasing education, including health literacy and targeted support for populations disproportionately impacted can reduce these barriers. Normalizing discussions on STBBIs as part of routine health care is critical to raise awareness and knowledge for prevention, reduce stigma and foster sexual health equity in Manitoba.

# **Human Immunodeficiency Virus (HIV)**

HIV attacks the body's immune system. With treatment, people with HIV can live long, healthy lives. HIV is spread through bodily fluids, including blood, semen, vaginal fluids, and breast milk, but cannot be spread through hugs, kisses, or sharing food. If left untreated, HIV can progress to acquired immunodeficiency syndrome (AIDS) where the immune system becomes too weak to fight off infections that it would normally be able to fight, leaving individuals at risk of life-threatening infections and cancers.<sup>282</sup>

# IN 2023, MANITOBA'S RATE OF HIV WAS

# 19.3 per 100,000

population, similar to Saskatchewan at 19.4 per 100,000 and **over three times** the national rate of 6.1 per 100,000.<sup>283</sup>

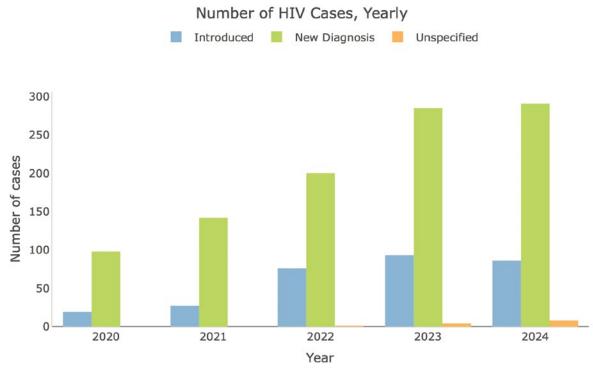
# **Treatment as Prevention**

HIV treatment is a highly effective strategy to prevent HIV transmission. Taking daily antiretroviral drugs can reduce the viral load in the body. People living with HIV who have suppressed viral loads have virtually no risk of transmitting HIV to their sexual partners. This is known as treatment as prevention or "Undetectable = Untransmittable".<sup>284</sup>

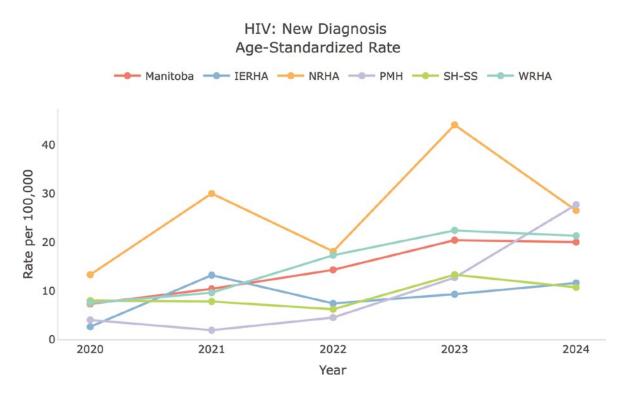
Post-Exposure Prophylaxis and Pre-Exposure Prophylaxis medications can also prevent the transmission of HIV.

Rates of HIV have been increasing in Manitoba. Newly diagnosed cases nearly tripled over the past five years from 98 in 2020 to 287 in 2024.<sup>285</sup>

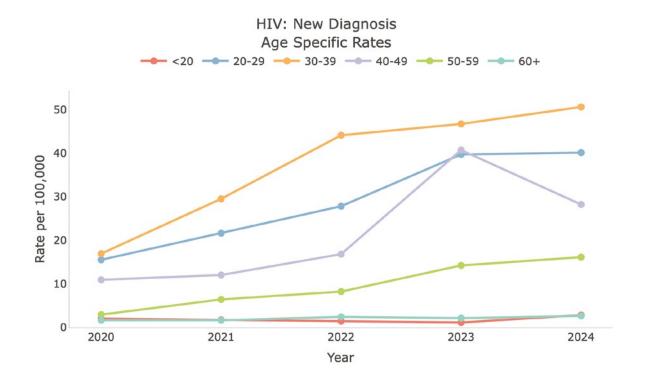




Generally, rates of HIV are the highest in the Northern Health Region, but rates have been increasing in Prairie Mountain Health in recent years. While the rates of HIV are higher in these regions, the largest number (64 per cent) of cases are diagnosed in the Winnipeg region. <sup>285</sup>



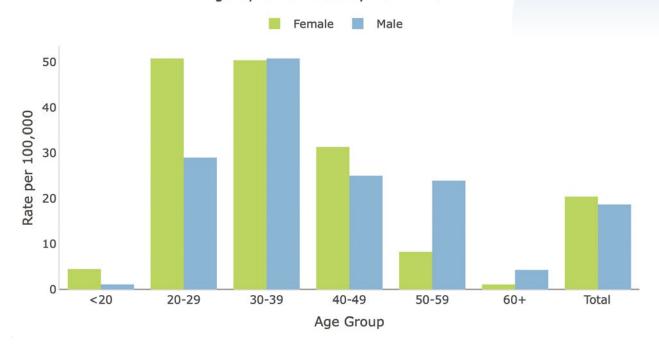
People aged 30-39 have the highest rates of HIV in Manitoba, followed by those aged 20-29. 285



Overall, in 2024, females are slightly more likely than males to be diagnosed with HIV, 60 per cent of diagnoses for those aged 20-29 occur in females.<sup>285</sup> STBBI testing during pregnancy may be one contributing factor to higher case counts in females aged 20-29.







# **Risk Factors and Inequity**

Syndemics of injection drug use, mental illness, homelessness, and the ongoing impacts of racism and colonial policies put people at increased risk of acquiring an HIV infection.<sup>286</sup> As such, Indigenous peoples in Manitoba are disproportionately impacted by HIV, compared to the general population.<sup>287</sup>

Injection drug use can put individuals at higher risk of getting HIV if needles are shared, or if substance use leads to unprotected sexual contact. In 2023, injection drug use was the largest driver of HIV transmission in the province, accounting for 64 per cent of cases in males and 81.2 per cent of cases in females.<sup>288</sup> Injection drug use and

heterosexual sex are the two main risk factors for HIV infection in females.

Individuals experiencing homelessness, whether prolonged, episodic, or anywhere in between, face higher risks of STBBIs due to the conditions surrounding them.<sup>289</sup> In Manitoba, between 2018 and 2021, people experiencing homelessness accounted for approximately 35 per cent of new HIV cases.<sup>289</sup> Of this group, 70 per cent had at least one STBBI before their HIV diagnosis, compared to 43.9 per cent of people not homeless.<sup>290</sup> Among individuals recently diagnosed with HIV, coinfection with Hepatitis C is also common, reflecting shared risk environments such as homelessness, incarceration, injection drug use and poverty.<sup>291</sup>



Testing and access to treatment are crucial aspects of UNAIDS' 95-95-95 targets established to combat HIV/AIDS globally. These goals aim for 95 per cent of people living with HIV to know their status, 95 per cent of those diagnosed with HIV to be on ART treatment, and 95 per cent of those on ART treatment to have suppressed viral loads.<sup>292</sup>

The systemic issues that contribute to HIV transmission in Manitoba, including injection drug use, homelessness, and stigma, present barriers to the achievement of these goals. Without addressing factors such as injection drug use and homelessness, the number of new cases of HIV is likely to continue increasing.

# **Syphilis**

Syphilis is caused by bacteria and is spread by contact with syphilis lesions through sexual contact, pregnancy and childbirth. A person can have a syphilis infection without noticing any symptoms for years, which reinforces the importance of regular STBBI testing for people who are sexually active. Early treatment with antibiotics can cure the infection and prevent further damage, but it cannot reverse damage that has already occurred. If left untreated, syphilis can progress to a widespread infection throughout the body. Untreated infections can lead to a host of serious complications many years later, such as damage to the brain, heart and other organs, and can become life threatening.<sup>293</sup>

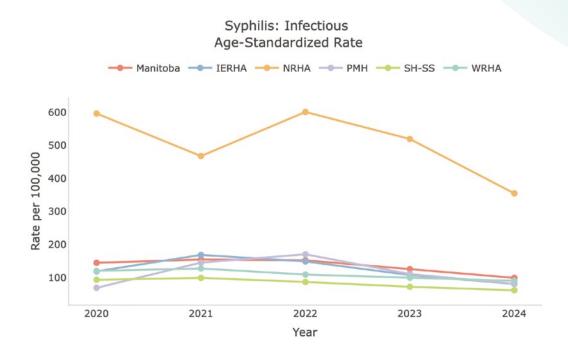
# IN 2024, MANITOBA REPORTED

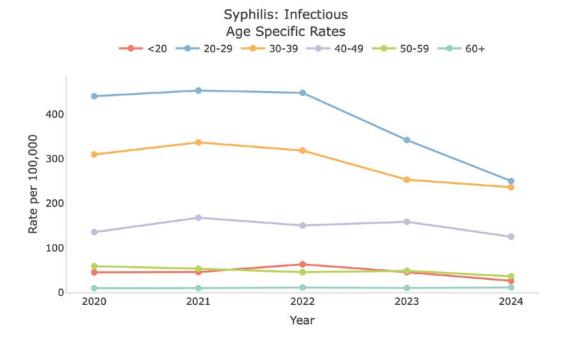
# 1,943 cases of syphilis.

1,423 infectious cases, 194 non-infectious cases and 326 unspecified.  $^{285}$ 



Rates of infectious syphilis continue to be disproportionately high in the Northern Health Region and for people aged 20 – 39. Rates of infectious syphilis are similar for males and females overall, but rates in females aged 20-29 are nearly double that for males of the same age. <sup>285</sup>

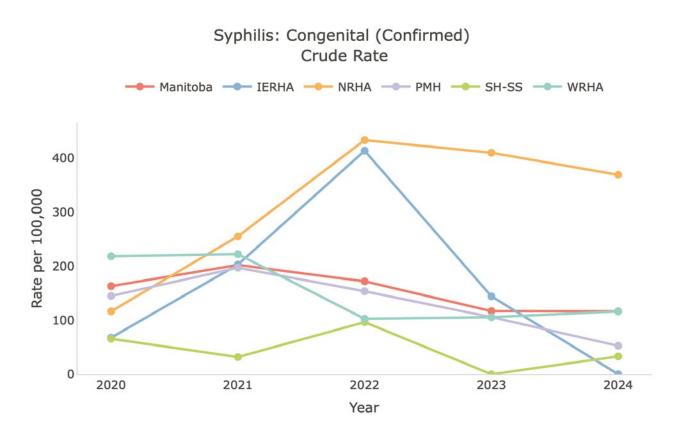


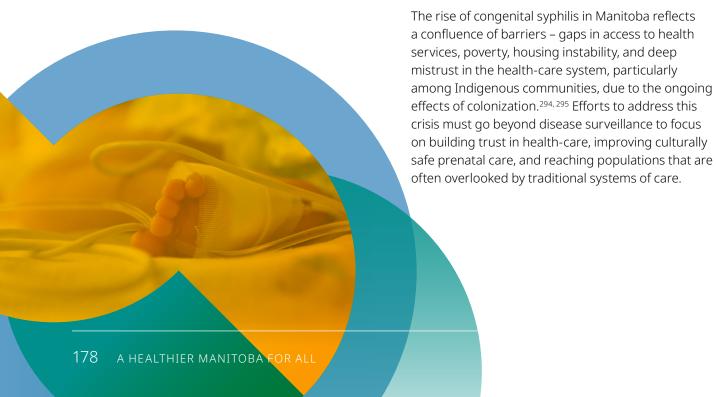


# **Congenital Syphilis**

Infants being born with congenital syphilis is a preventable tragedy. Congenital syphilis can cause serious health problems for infants. Having syphilis during pregnancy can also cause miscarriage, preterm birth, and stillbirths. It is entirely preventable with adequate prenatal care and timely screening and treatment during pregnancy.

In 2024, there were 49 confirmed, or probable, cases of congenital syphilis in Manitoba.<sup>285</sup> For confirmed cases, rates are far higher than the provincial average in the Northern Health Region.

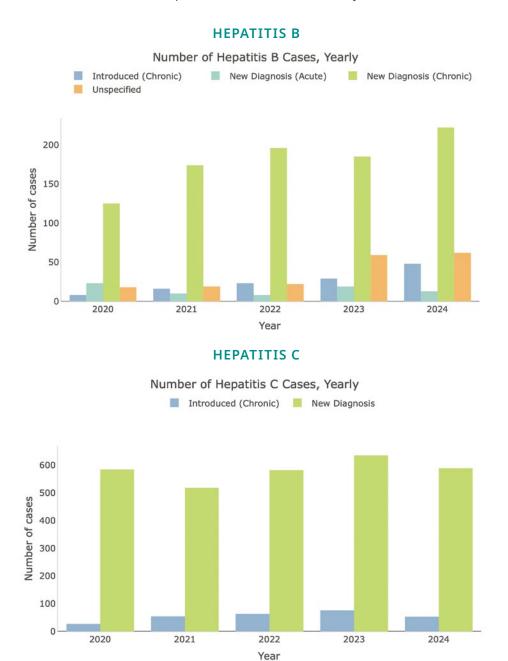




# **Hepatitis B and Hepatitis C**

Hepatitis B and C are viral, blood-borne infections that can lead to serious long-term health outcomes, such as liver disease and cancer.<sup>296</sup> They are both spread through sexual contact and by sharing items where blood is present, such as needles.

Rates of Hepatitis B and C in Manitoba remain high. In 2024, Manitoba there were 235 new cases of Hepatitis B (222 chronic and 13 acute) and 592 new cases of Hepatitis C. Between 2020 and 2024, Hepatitis B cases in Manitoba nearly doubled.<sup>285</sup>



Every year, cases of Hepatitis B and C are introduced to Manitoba from other jurisdictions. In 2024, there were 27 introduced cases of Hepatitis B and 51 of Hepatitis C.<sup>285</sup> These numbers represent chronic cases only.

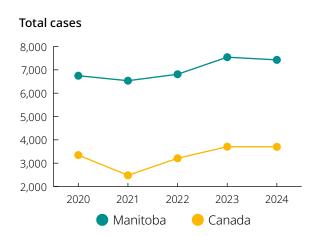


# **Chlamydia and Gonorrhea**

Chlamydia and gonorrhea are the most common sexually transmitted infections in Manitoba. While both are caused by bacteria, and are curable with antibiotics, they often present with no symptoms, especially in women, making routine testing essential to prevention and timely treatment. Untreated chlamydia and gonorrhea infections can lead to pelvic inflammatory disease, infertility, chronic pain, and increased susceptibility to HIV.<sup>297</sup>

In Manitoba, in 2024, there were 7,427 cases of chlamydia and 3,701 cases of gonorrhea.<sup>285</sup> Most cases were in young adults aged 20 to 29, with women accounting for more than half of all diagnoses.<sup>285</sup>

# CHLAMYDIA AND GONORRHEA IN MANITOBA, 2020-2024



Source: Manitoba Health, Seniors and Long-Term Care

The tools to address STBBIs exist, including vaccines, curative treatments, and harm reduction supply distribution, but are not equally accessible to all. A public health response must pair clinical interventions with social strategies – reducing stigma, expanding harm reduction services, education and outreach, and providing culturally safe care for those most at risk.

# **Tuberculosis**

Tuberculosis (TB) continues to affect some of the most structurally marginalized populations in Manitoba. It is often described as a social disease with medical consequences, as it thrives in the conditions shaped by poverty, racism, and systemic neglect. Overcrowded housing, food insecurity, and limited access to timely, culturally safe health care are central to understanding who is most at risk and why. For example, in 2021, 17.1 per cent of Indigenous peoples in Canada resided in overcrowded housing, nearly twice the rate of non-Indigenous peoples, at 9.4 per cent.<sup>298</sup>

The rate of TB in Manitoba is over two times higher than the Canadian average. In 2023...

MB - 11.9 per 100,000 people<sup>299</sup>

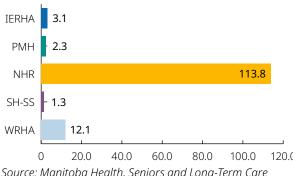
CAN - 5.5 per 100,000 people<sup>299</sup>

In 2024, the rate of TB in the Northern Health Region was over eight times the rate for Manitoba as a whole.<sup>299</sup> From 2015 to present, Indigenous Manitobans have consistently represented the largest proportion of active TB cases, demonstrating a sustained, disproportionate burden.<sup>299</sup> In addition to this prolonged unequal impact, over the past

three years, there has been a concerning upward trend of active TB cases in Indigenous peoples.<sup>299</sup>

# **TUBERCULOSIS RATE BY REGION IN 2024**

# Age-Standardized Rate per 100,000



Source: Manitoba Health, Seniors and Long-Term Care

Over the past three years, there have also been increases in co-infection of tuberculosis and HIV.300 These infections share underlying determinants of health, such as homelessness and substance use, resulting in an increased likelihood for individuals with one infection to develop the other.<sup>300</sup> Approximately 30 per cent of Manitobans with active TB in 2024 reported problematic substance use.300



# Immunization and Vaccine-preventable Diseases

Vaccines are among the most effective and transformative public health interventions in history. Effective immunization programs have meant that children, families and communities in Manitoba no longer suffer the severe, and sometimes fatal consequences of diseases such as smallpox, polio, mumps, rubella, tetanus and diphtheria, to name a few.

Generally, childhood vaccination rates in Manitoba have declining for over 10 years. The greatest decline has been in rural regions, while trends in Winnipeg remain stable.<sup>182</sup>

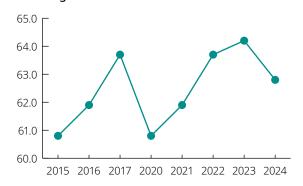
# 2024 Childhood Vaccination Coverage at Age 7\*

\* For children continuously registered with Manitoba Health, Seniors and Long-Term Care from two months of age.

# DIPHTHERIA, PERTUSSIS, AND TETANUS

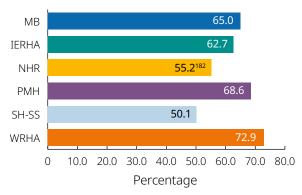
# **Provincial Coverage**

# Percentage vaccinated



Source: Manitoba Health, Seniors and Long-Term Care

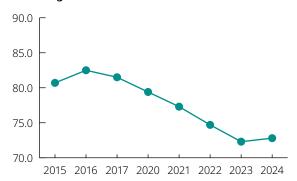
# **Regional Coverage**



### **MEASLES AND MUMPS**

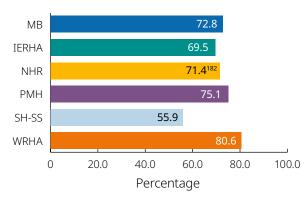
# **Provincial Coverage**

# Percentage vaccinated



Source: Manitoba Health, Seniors and Long-Term Care

# **Regional Coverage**

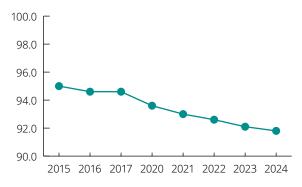


Source: Manitoba Health, Seniors and Long-Term Care

# **RUBELLA COVERAGE**

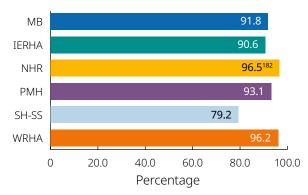
# **Provincial Coverage**

# Percentage vaccinated



Source: Manitoba Health, Seniors and Long-Term Care

# **Regional Coverage**

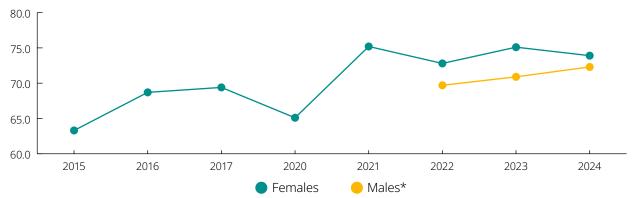


# **HPV Coverage at Age 17**

Human papillomavirus (HPV) is a highly prevalent virus that is expected to impact 75 per cent of individuals in their lifetimes, if unvaccinated.<sup>301</sup> HPV can lead to serious diseases such as cervical, anal, and oropharyngeal cancers.<sup>301</sup> HPV immunization rates among individuals aged 17 have been increasing over the past decade. At the current rate, HPV vaccination is expected to result in cervical cancer elimination in Canada (fewer than four cases per 100,000 females) in the next 15 to 25 years.<sup>301</sup>

### **HPV COVERAGE IN MANITOBA**

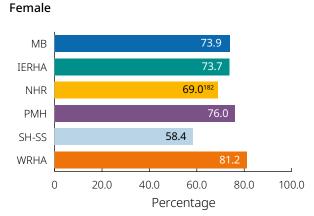
# Percentage vaccinated



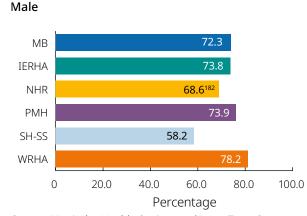
Source: Manitoba Health, Seniors and Long-Term Care

\*Males became eligible for the HPV vaccine in September 2016.

### **HPV COVERAGE AT AGE 17**



Source: Manitoba Health, Seniors and Long-Term Care





# **Preventable Outbreaks**

Gaps in vaccine coverage are now being reflected in a growing number of outbreaks. While outbreaks are often driven by localized clusters in under vaccinated populations, they pose broader risks to the health-care system and vulnerable populations, particularly infants, immunocompromised individuals, and those without reliable and timely access to health care. These events underscore the importance of achieving high immunization coverage across all regions and communities.

Challenges in accessing vaccines, a lack of trust in health-care providers or institutions, and the belief that vaccine-preventable diseases do not pose a serious threat are factors contributing to lower vaccination rates.302 Each of these factors is influenced by broader forces, including misinformation and disinformation. Addressing these root causes is critical, not only to restoring vaccine coverage but also to rebuilding public confidence in the systems designed to protect health. Current outbreaks are occurring in diseases that are highly transmissible and require higher vaccination coverage to prevent. However, with declining vaccination rates amongst certain populations, less transmissible diseases such as diphtheria or polio could return.

### **Pertussis**

In 2023 and 2024, Manitoba experienced a pertussis (whooping cough) outbreak, with over 550 confirmed or probable cases. Cases remained elevated in 2025, with close to 90 additional confirmed or probable cases identified up to Sept. 1, 2025. The majority of cases were in children under the age of five years. Pertussis causes cold-like symptoms in addition to severe coughing spells, with young infants at risk of experiencing more severe symptoms, such as breathing difficulties, pneumonia, seizures and death. 304

As of September 1, 2025, this outbreak has led to over 300 emergency department visits, 55 hospitalizations, 13 intensive care unit admissions and two deaths in unimmunized infants (under age one). Twelve of the 13 ICU admissions were for infants.<sup>303</sup>

# **Measles**

Once considered eliminated in Canada, measles has spread to Manitoba as part of a multi-jurisdictional outbreak occurring nationally that began in 2024.<sup>305</sup>

# In Manitoba, as of August 30, 2025, there have been...

207 confirmed or probable cases

11 hospitalizations

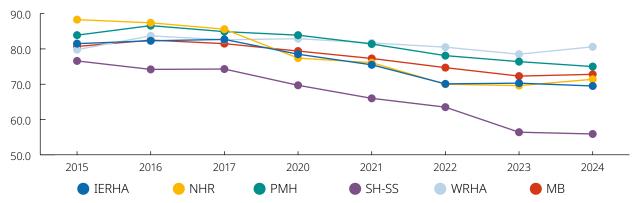
2 ICU admissions.306

Unvaccinated children are disproportionately affected.<sup>305</sup> Over 78 per cent of cases were in Southern Health–Santé Sud, which continues to have the lowest overall measles immunization coverage of all health regions.



# MEASLES VACCINATION COVERAGE AT AGE 7\* 182

# Percentage vaccinated



<sup>\*</sup> For children continuously registered with Manitoba Health, Seniors and Long-Term Care from two months of age.



# **Respiratory Viruses**

Respiratory viruses, including COVID-19 and influenza, continue to impose a significant burden on Manitoba's health-care system, particularly during the fall and winter months. Not all respiratory-related emergency department visits are caused by respiratory viruses, but monitoring the volume and trend of these visits provides a useful estimate of the current risk to the population posed by respiratory viruses.

In 2024-25, there were over 71,599 respiratory-related emergency department visits.<sup>307</sup>

There are certain populations at increased risk of severe outcomes from respiratory viruses including: children under the age of five, people who are pregnant, adults 65 years of age and older, people living with other chronic health conditions, individuals of any age who are residents of nursing homes and other chronic care facilities and Indigenous peoples. Vaccination is an effective way to reduce the risk of severe outcomes from respiratory diseases.

# COVID-19

### In 2024-25, there were...

- 3,936 cases of COVID-19 identified in Manitoba.
- 1,262 people hospitalized
- 19 people were admitted to the ICU due to COVID-19
- five deaths from COVID-19<sup>307</sup>

People aged 65+ made up over 72 per cent of all cases.<sup>307</sup>

In the 2024-25 season, 50.3 per cent of adults 65+ were vaccinated for COVID-19 compared to 16.3% overall. 307

# **Influenza**

# In 2024-25, there were...

- 4,867 cases of influenza identified in Manitoba.
- 1,500 people hospitalized
- 33 people admitted to the ICU due to influenza
- eight deaths from influenza.<sup>307</sup>

People aged 65+ made up over 45 per cent of all cases.<sup>307</sup>

In the 2024-25 season, 58.1 per cent of adults 65+ were vaccinated for influenza compared to 23.2 per cent overall. 307



# **Antimicrobial Resistance (AMR)**

AMR is a process where bacteria, viruses, fungi, or parasites evolve to withstand the drugs used to treat them. The result is that medicines become less effective, and infections become difficult or impossible to treat, which increases the risk of disease spread, severe illness, disability and death.<sup>308</sup> This makes AMR a global threat that undermines decades of progress in treating communicable diseases.

In 2018, antimicrobial resistance was estimated to cost the Canadian health-care system over \$1.4 billion annually.<sup>309</sup> Without intervention, this cost is projected to rise sharply over the next decade.

In Manitoba, rising resistance patterns have been identified in several pathogens of concern, including drug-resistant *Staphylococcus aureus*, E. coli, and Klebsiella pneumoniae. The threat is particularly acute in settings with high antibiotic use, frequent person-to-person transmission, and limited infection control infrastructure.

Addressing AMR requires cross-sectoral coordination, encompassing surveillance, stewardship, and education across health care, agriculture, and environmental health. It also demands an equity lens – the overuse of antibiotics in one part of the system and under-access in another together contribute to worsening outcomes.

# **Summary**

Communicable diseases are no longer the primary burden on Manitoba's health-care system, but they remain a powerful signal of health equity challenges. Their presence, distribution, and resurgence are shaped, not just by pathogens, but by systems. Addressing these

conditions by building trusted relationships with communities, improving housing, income support, and education policies to close health gaps are as essential to public health today as was the removal of the Broad Street pump handle in Dr. Snow's time.



# Final Thoughts and Recommendations



# **Toward a Healthier Manitoba for All**

Health begins in our homes, schools, and communities. It is shaped by factors such as income, housing, education, nutrition, access to clean air and water, safe environments, and meaningful relationships. It is enhanced or diminished by the policies we make across every sector of society.

From chronic disease and mental illness to homelessness and substance use, to unsafe drinking water and climate change, the health challenges outlined in this report are urgent, and they are unequally distributed. The current disproportionate impact is not inevitable. Policies, environments, and social conditions shape them.

The health disparities presented in this report do not arise by chance, nor will they be reduced solely by health-care interventions. The health-care system is frequently responding to the visible outcomes of often invisible inequities. The evidence presented in this report invites us to reflect critically on the structural factors that shape health inequities and to work together in pursuit of meaningful change. It also offers hope – that by aligning our policies, institutions, and priorities, we can fundamentally improve the health and well-being of all Manitobans.

# Recommendations

# 1. Adopt a Formal Health in All Policies (HiAP) Framework

To build on Manitoba's growing commitment to health equity, there is an opportunity to formalize a Health in All Policies approach across government. This can be achieved through:

- governance mechanisms to assess health impacts across all sectors
- transparent processes for health impact assessments in policy planning
- cross-departmental accountability structures, including public reporting
- dedicated resources, staff training, and capacity-building across ministries

# 2. Support Distinctions-Based Indigenous Health Status Reporting

Recognizing the unique rights, histories, and experiences of First Nations, Métis, and Inuit peoples, Manitoba is encouraged to:

- co-develop and support distinctions-based health status reports for Indigenous populations
- ensure these are led by Indigenous governance structures and supported by provincial data-sharing agreements
- invest in Indigenous data sovereignty and culturally safe indicators of well-being

# 3. Institutionalize Determinants of Health Measurement and Reporting

Manitoba could drive effective health equity policy and monitor progress by implementing a standardized, ongoing system for measuring the social, economic, environmental, and structural determinants of health. This includes:

- regular cross-sector data collection and public reporting
- integrated health equity dashboards to inform planning
- clear short, medium, and long-term goals for closing health gaps
- inclusion of indicators such as housing adequacy, food insecurity, educational attainment, and income inequality

# A Call to Collective Action

The path to a healthier Manitoba cannot be walked by the health sector alone. It will require a whole-of-government and whole-of-society approach, grounded in equity, evidence, and empathy. Health is a shared responsibility. When we provide additional focus on the most marginalized, fewer people get left behind and everyone benefits.

This report helps us understand our current state of health and identifies key areas where collective action can move us forward. Let us acknowledge our shared reality and recognize the profound interconnections that shape health and work together toward meaningful and lasting change.

Together, we can continue to build a province in which every person has the opportunity to live a healthy and fulfilling life.



# References

# References

- 1. Frieden TR. A Framework for Public Health Action: The Health Impact Pyramid. *American Public Health Association*. 2010;100(4). Accessed April 23, 2025. https://pubmed.ncbi.nlm.nih.gov/20167880/
- 2. National Collaborating Centre for Determinants of Health. Health. 2025. Accessed March 18, 2025. https://nccdh.ca/learn/glossary/
- 3. Nickel N, Dahl L, The Need To Know Team, et al. The 2024 RHA Indicators Atlas.; 2025.
- 4. Diabetes Canada. *Diabetes in Manitoba 2024 Backgrounder.*; 2024. Accessed October 5, 2025. https://www.diabetes.ca/getmedia/e065eead-3993-40e0-8aa8-fca4f925f66e/2024-Backgrounder-Manitoba.pdf
- 5. The World Health Organization. Constitution. 2024. Accessed December 5, 2024. https://www.who.int/about/governance/constitution
- 6. Public Health Agency of Canada. What is the Population Health Approach? February 7, 2012. Accessed September 18, 2025. https://www.canada.ca/en/public-health/services/health-promotion/population-health/population-health-approach.html
- 7. World Health Organization. Promoting well-being. https://www.who.int/activities/promoting-well-being.
- 8. World Health Organization. *Ottawa Charter for Health Promotion.*; 1986. Accessed March 18, 2025. https://www.canada.ca/content/dam/phac-aspc/documents/services/health-promotion/population-health/ottawa-charter-health-promotion-international-conference-on-health-promotion/charter.pdf
- 9. Let's Get Healthy California. Social Determinants of Health. 2016. Accessed May 11, 2025. https://letsgethealthy.ca.gov/sdoh/#
- 10. Health Canada. Social determinants of health and health inequalities. July 18, 2024. Accessed September 7, 2025. https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html
- 11. Lalonde M. *A New Perspective on the Health of Canadians.*; 1974. Accessed October 5, 2025. https://www.phac-aspc.gc.ca/ph-sp/pdf/perspect-eng.pdf
- 12. Employment and Social Development Canada. Canada and the Sustainable Development Goals. March 27, 2025. Accessed August 28, 2025. https://www.canada.ca/en/employment-social-development/programs/agenda-2030.html#sdg
- 13. United Nations Department of Economic and Social Affairs. The 17 Goals. Accessed April 23, 2025. https://sdgs.un.org/goals
- 14. Health Canada. Stigma: Why Words Matter. June 21, 2022. Accessed May 4, 2025. https://www.canada.ca/en/health-canada/services/publications/healthy-living/stigma-why-words-matter-fact-sheet.html
- 15. Public Health Agency of Canada. *Addressing Stigma: Towards a More Inclusive Health System*. The Chief Public Health Officer's Report on the State of Public Health in Canada 2019.; 2019. Accessed May 4, 2025. https://www.canada.ca/content/dam/phac-aspc/documents/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/addressing-stigma-what-we-heard/stigma-eng.pdf
- 16. Braveman P, Arkin E, Orleans T, Proctor D, Plough A. *What Is Health Equity?* And What Difference Does a Definition Make?; 2017. Accessed May 11, 2025. https://nccdh.ca/images/uploads/comments/RWJ\_Foundation What Is Health Equity.pdf
- 17. Ramsoondar N, Anawati A, Cameron E. Racism as a determinant of health and health care. Canadian Family Physician. 2023;69:594-598.
- 18. Health Transformation Southern Chiefs Organization Inc. *Decolonization: Recognizing First Nations Sovereignty 2024.* Accessed March 13, 2025. https://scoinc.mb.ca/wp-content/uploads/2024/07/SCO-report-Decolonization-Recognizing-First-Nations-Sovereignty-July-2024.pdf
- 19. Anderson DM. *Race, Ethnicity & Indigenous Identity Data Emergency Department Visits & Care Public Report.*; 2025. Accessed June 17, 2025. https://sharedhealthmb.ca/wp-content/uploads/REI-Data-Public-Report-June-17-2025-2.pdf

- 20. Dunlop ME. Health Policy. https://www.thecanadianencyclopedia.ca/en/article/health-policy.
- Evans RG, Barer ML, Marmor TR, eds. Why Are Some People Healthy and Others Not? The Determinant of 21. Health of Populations. Walter de Gruyter; 1994.
- Manitoba Finance. Annual Report and Public Accounts for the Year Ended March 31, 2024.; 2025. Accessed 22. September 7, 2025. https://www.gov.mb.ca/asset\_library/en/proactive/20232024/publicaccounts/ AnnualReportPublicAccounts2023-2024.pdf
- 23. Manitoba Finance. Building One Manitoba - Budget 2025.; 2025. Accessed April 1, 2025. https://www.gov. mb.ca/asset\_library/en/budget2025/budget2025.pdf
- Tulchinsky TH, Varavikova EA. The New Public Health. A History of Public Health.; 2014. doi:10.1016/ 24. B978-0-12-415766-8.00001-X
- National Collaborating Centre for Infectious Diseases. Health Protection. https://nccid.ca/comprehen-25. sive-glossary/health-protection/.
- 26. Office of the Provincial Health Officer. Taking the Pulse of the Population - An Update on the Health of British Columbians.; 2019. Accessed March 18, 2025. https://www2.gov.bc.ca/assets/gov/health/aboutbc-s-health-care-system/office-of-the-provincial-health-officer/reports-publications/annual-reports/ pho-annual-report-2019.pdf
- 27. Canadian Public Health Association. Public Health in the Context of Health System Renewal in Canada. 2019. Accessed March 23, 2025. https://www.cpha.ca/public-health-context-health-system-renewalcanada
- Public Health Agency of Canada. Multisectoral Action 101. Accessed March 30, 2025. https://www. 28. canada.ca/content/dam/phac-aspc/documents/services/publications/science-research-data/multisectoral-action-101/multisectoral-action-101.pdf
- Fyfe J, Coad M, Williams C. The 4 Pillars Model of Health in All Policies Fact Sheet.; 2024. Accessed April 23, 29. 2025. https://chiaprt.org.au/uploads/common/Clean-Copy-\_-The-HiAP-4-Pillars-Model-Summary.pdf
- Working Together for Equity and Healthier Populations Sustainable Multisectoral Collaboration Based on 30. Health in All Policies Approaches.; 2023. Accessed October 6, 2025. https://iris.who.int/server/api/core/ bitstreams/a238ef33-582b-46f7-86c9-e9fcbe1f0ef7/content
- 31. Fyfe J, Coad M, Williams C. Transforming Public Policy Outcomes: Harnessing Multisectoral Collaboration Through a Health in All Policies Approach.; 2024. Accessed April 23, 2025. https://chiaprt.org.au/uploads/ common/Clean-Copy-HiAP-Advocacy-to-Government.pdf
- Manitoba Bureau of Statistics. Manitoba Quick Facts. Government of Manitoba. 2025. Accessed March 32. 24, 2025. https://www.gov.mb.ca/mbs/moreinfo.html?id=16
- 33. Statistics Canada. Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. November 15, 2023. Accessed April 1, 2025. https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?LANG=E&GENDERlist=1,2,3&STATISTIClist=1,4&D-GUIDlist=2021A000246&HEADERlist=31,30,19&SearchText=Manitoba
- Manitoba Bureau of Statistics. Demographic Estimates by Age and Gender July 2024.; 2024. Accessed April 34. 1, 2025. https://www.gov.mb.ca/mbs/publications/mbs510\_pop\_agegender\_bulletin\_2024\_a01.pdf
- Statistics Canada. Fertility indicators, provinces and territories Interactive dashboard. September 24, 35. 2025. Accessed July 8, 2025. https://www150.statcan.gc.ca/n1/pub/71-607-x/71-607-x2022003-eng.htm
- 36. Manitoba Bureau of Statistics. Demographic Estimates Quarterly January 2025.; 2025. Accessed April 1, 2025. https://www.gov.mb.ca/mbs/publications/mbs305\_pop\_bulletin\_2025\_m01.pdf
- Statistics Canada. Table 13-10-0114-01 Life expectancy and other elements of the complete life table, 37. three-year estimates, Canada, all provinces except Prince Edward Island. December 4, 2024. Accessed September 22, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1310011401
- Statistics Canada. Table 17-10-0160-01 Life expectancy at birth of Indigenous populations in Canada. 38. June 3, 2025. Accessed June 2, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1710016001
- Katz A, Kinew KA, Star L, et al. The Health Status of and Access to Healthcare by Registered First Nation 39. Peoples in Manitoba.; 2019.

- 40. Nickel N, Dahl L, The Need to Know Team, et al. The 2024 RHA indicators Atlas Online Supplement. Suppl. Preprint posted online 2025.
- 41. Statistics Canada. Table 13-10-0713-01 Infant deaths and mortality rates, by age group. February 19, 2025. Accessed June 3, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1310071301
- 42. Public Health Agency of Canada. *Key Health Inequalities in Canada: A National Portrait.*; 2018. Accessed June 3, 2025. https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/science-research-data/5.Infant\_Mortality\_EN\_final.pdf
- 43. Manitoba Advocate for Children and Youth. *Safe and Sound: A Special Report on the Unexpected Sleep-Related Deaths of 145 Manitoba Infants.*; 2020. Accessed August 12, 2025. https://manitobaadvocate.ca/wp-content/uploads/2023/05/SafeSleep-Report.pdf
- 44. Manitoba Advocate for Children and Youth. *Shifting the Lens. Understanding and Confronting Inequities in Sleep-Related Infant Deaths in Manitoba.*; 2024. Accessed June 3, 2025. https://manitobaadvocate.ca/wp-content/uploads/2024/10/MACY-Safe-Sleep-Report-2024-fin\_web.pdf
- 45. World Health Organization. *Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health: Final Report of the Commission on Social Determinants of Health.*; 2008. Accessed August 12, 2025. https://iris.who.int/bitstream/handle/10665/69832/WHO\_IER\_CSDH\_08.1\_eng.pdf? sequence=1
- 46. Valcin M. Opinion: Literacy is key to economic growth. *Financial Post*. https://financialpost.com/opinion/opinion-literacy-is-key-to-economic-growth. May 20, 2025. Accessed May 22, 2025.
- 47. Lane J, Murray TS. *Literacy Lost: Canada's Basic Skills Shortfall.*; 2018. Accessed May 22, 2025. https://cwf.ca/research/publications/report-literacy-lost-canadas-basic-skills-shortfall/
- 48. Statistics Canada. Table 14-10-0287-01 Labour force characteristics, monthly, seasonally adjusted and trend-cycle. April 2025. Accessed April 2, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410028701&pickMembers%5B0%5D=1.8&pickMembers%5B1%5D=3.1&pickMembers%5B2%5D=4.1&pickMembers%5B3%5D=5.1&cubeTimeFrame.startMonth=10&cubeTimeFrame.startYear=2024&cubeTimeFrame.endMonth=02&cubeTimeFrame.endYear=2025&referencePeriods=20241001%2C20250201
- 49. Statistics Canada. Table 37-10-0197-01 Employment rates of 25-to 64-year-olds, by highest level of education attained, age group and gender. May 1, 2025. Accessed May 22, 2025. https://www150.stat-can.gc.ca/t1/tbl1/en/cv.action?pid=3710019701
- 50. Yang Y, Niu L, Amin A, Yasin I. Unemployment and mental health: a global study of unemployment's influence on diverse mental disorders. Front Public Health. 2024:12.
- 51. Roelfs DJ, Shor E, Davidson KW, Schwatrz JE. Losing life and livelihood: A systematic review and meta-analysis of unemployment and all-cause mortality. Soc Sci Med. 2011;72(6):840-854. Accessed June 17, 2025. https://www.sciencedirect.com/science/article/abs/pii/S027795361100044X#:~:text=The%20 study%20is%20a%20random%20effects%20meta-analysis%20and,providing%20data%20on%20 more%20than%2020%20million%20persons.
- 52. Statistics Canada. Consumer Price Index (CPI). March 2025. Accessed April 3, 2025. https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=2301
- 53. Manitoba Bureau of Statistics. *Consumer Price Index Manitoba: Annual Supplement 2024.*; 2025. Accessed April 3, 2025. https://www.gov.mb.ca/mbs/publications/mbs504\_cpi\_2024\_a01.pdf
- 54. Public Health Agency of Canada. What Makes Canadians Healthy or Unhealthy? January 15, 2013. Accessed April 1, 2025. https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health/what-makes-canadians-healthy-unhealthy.html
- 55. Statistics Canada. Table 11-10-0190-01 Market income, government transfers, total income, income tax and after-tax income by economic family type. May 1, 2025. Accessed May 28, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110019001
- 56. Statistics Canada. Table 11-10-0055-01 High income tax filers in Canada. October 28, 2024. Accessed June 8, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1110005501
- 57. McCracken M, Plante C. *The Cost of Poverty in Manitoba*.; 2024. Accessed April 6, 2025. https://www.policyalternatives.ca/wp-content/uploads/2024/05/MB-Cost-of-Poverty-May22\_24.pdf

- Employment and Social Development Canada. A Time for Urgent Action: The 2024 Report of the National Advisory Council on Poverty.; 2024.
- Gustajtis B, Heisz A. Market Basket Measure poverty thresholds and provisional poverty trends 59. for 2021 and 2022. January 17, 2023. Accessed April 10, 2025. https://www150.statcan.gc.ca/n1/ pub/75f0002m/75f0002m2022008-eng.htm
- Employment and Social Development Canada. Economic & Social Inclusion Infographic 2021. 60. September 21, 2023. Accessed April 6, 2025. https://www.canada.ca/en/employment-socialdevelopment/corporate/reports/esdc-transition-binders/recovery-2021-infographic.html
- Statistics Canada. Canada's Official Poverty Dashboard of Indicators: Trends: May 2025. May 1, 2025. 61. Accessed May 28, 2025. https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2025019-eng.htm
- Statistics Canada. Table 11-10-0093-01 Poverty and low-income statistics by selected demographic 62. characteristics. May 1, 2025. Accessed May 28, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv. action?pid=1110009301
- 63. Dionne MA, Raymond-Brousseau L. Deep Income Poverty: Exploring Dimension of Poverty in Canada.; 2025. Accessed May 28, 2025. https://publications.gc.ca/collections/collection\_2025/statcan/ 75f0002m/75f0002m2025001-eng.pdf
- 64. Statistics Canada. Food insecurity among Canadian families, 2022. November 24, 2023. Accessed June 15, 2025. https://www150.statcan.gc.ca/n1/daily-quotidien/231114/dg231114a-eng.htm
- Bernhardt D. More than 171,000 workers earn less than living wage in Manitoba, report says. 65. CBC News. https://www.cbc.ca/news/canada/manitoba/living-wage-report-canadian-centre-policyalternatives-manitoba-1.7334588#:~:text=Show%20More-,One%20in%20four%20workers%20in%20 Manitoba%20struggles%20to%20afford%20basic,is%20the%20cost%20of%20housing. September 26, 2024. Accessed September 4, 2025.
- Li T, Fafard St-Germain A, Tarasuk V. Household Food Insecurity in Canada, 2022.; 2023. Accessed April 3, 66. 2025. https://proof.utoronto.ca/
- 67. Polsky JY. Trends in Household Food Insecurity from the Canadian Community Health Survey, 2017 to 2022.; 2022. Accessed April 28, 2025. https://www150.statcan.gc.ca/n1/en/pub/82-003-x/2024010/ article/00002-eng.pdf?st=UcgrsEQI
- Statistics Canada. Table 13-10-0834-01 Food insecurity by economic family type. May 15, 2025. Accessed 68. May 14, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv!recreate.action?pid=1310083401&selected-NodeIds=1D7,1D8,1D13,3D6,4D2&checkedLevels=0D1,0D3,1D1&refPeriods=20180101,20230101& dimensionLayouts=layout3,layout3,layout2,layout2,layout2&vectorDisplay=false
- Statistics Canada, Table 13-10-0835-01 Food insecurity by selected demographic characteristics. 69. May 1, 2025. Accessed May 14, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv!recreate.action? pid=1310083501&selectedNodeIds=2D19,2D20,2D21,2D22,2D23,2D24,2D25,2D26,2D28,2D30,3D6, 4D2&checkedLevels=0D1&refPeriods=20230101,20230101&dimensionLayouts=layout3,layout3, layout2,layout2&vectorDisplay=false
- Statistics Canada. Table 41-10-0063-01 Food security status of First Nations people living off reserve, Métis and Inuit by age group. August 14, 2024. Accessed May 14, 2025. https://www150.statcan.gc.ca/ t1/tbl1/en/cv!recreate.action?pid=4110006301&selectedNodeIds=2D2,2D5,2D6,5D3,6D2&checked Levels=0D1,1D1,2D1,2D2,3D1,4D3&refPeriods=20220101,20220101&dimensionLayouts=layout2,layout3, layout3,layout2,layout2,layout2&vectorDisplay=false
- Food Matters Manitoba. Why are Manitobans Food Insecure? Preprint posted online 2020. Accessed 71. February 23, 2025. https://foodmattersmanitoba.ca/wp-content/uploads/2022/11/Food-Insecurity-Series-Infographic-2.pdf
- 72. Ke J, Ford-Jones EL. Food insecurity and hunger: A review of the effects on children's health and behaviour. Paediatric Child Health. 2015;20(2).
- Harvest Manitoba. 2023-2024 Impact Report.; 2024. Accessed April 3, 2025. https://www.harvest 73. manitoba.ca/wp-content/uploads/2024/09/impact-report-2024-1.pdf
- 74. Statistics Canada. Housing Needs. December 3, 2024. Accessed April 2, 2025. https://www160.statcan. qc.ca/prosperity-prosperite/housing-logement-eng.htm

- 75. Statistics Canada. Table 46-10-0073-01 Persons in core housing need, by tenure including first-time homebuyer and social and affordable housing status, by province. April 3, 2025. Accessed April 2, 2025. https://doi.org/10.25318/4610007301-eng
- 76. World Health Organization. *WHO Housing and Health Guidelines*.; 2018. Accessed April 2, 2025. https://iris.who.int/bitstream/handle/10665/276001/9789241550376-eng.pdf?sequence=1
- 77. Reaching Home Thompson. Point-In-Time-Count. 2025. Accessed August 10, 2025. https://www.thompson.ca/p/point-in-time-count
- 78. LeTourneau M. *Everyone Counts 2024 Point-in-Time Homelessness Count.*; 2024. Accessed August 10, 2025. https://bnrc.ca/wp-content/uploads/2025/01/Everyone-Counts-2024-report.pdf
- 79. End Homelessness Winnipeg. 2024 Winnipeg Street Census or Point-in-Time Count Report.; 2025. Accessed August 28, 2025. https://endhomelessnesswinnipeg.ca/wp-content/uploads/2024-Winnipeg-Street-Census-Report\_Aug2025.pdf
- 80. Irwin L, Siddiqi A, Hertzman C. *Early Childhood Development: A Powerful Equalizer Final Report for the World Health Organization's Commission on the Social Determinants of Health.*; 2007. Accessed April 7, 2025. https://iris.who.int/bitstream/handle/10665/69729/a91213.pdf?sequence=1
- 81. Manitoba Families. *Annual Report 2023-24.*; 2025. Accessed May 25, 2025. https://www.gov.mb.ca/fs/about/pubs/fsar-2023-2024.pdf#page=29
- 82. Ontario Public Health. *Adverse Childhood Experiences (ACEs) Interventions to Prevent and Mitigate the Impact of ACEs in Canada.*; 2020.
- 83. Kenny et al. Inequities in child protective service contact among First Nations and non-First Nations parents in one Canadian province: a retrospective population-based study. BMC Public Health. 2025;25.
- 84. Brownell Marni et al. Impact of being taken into out-of-home care: a longitudinal cohort study of First Nations and other child welfare agencies in Manitoba, Canada. *The Lancet Regional Health Americas*. 2024;38. Accessed May 27, 2025. https://www.thelancet.com/journals/lanam/article/PIIS2667-193X(24) 00213-8/fulltext
- 85. Manitoba Families. *Manitoba's Poverty Reduction Strategy Annual Report 2023-2024.*; 2024. Accessed August 11, 2025. https://www.manitoba.ca/povertyreduction/pubs/poverty-reduction-annual\_report\_23\_24.pdf#:~:text=This%20annual%20report%20highlights%20the%20actions%20that%20contributed,in%20reducing%20poverty%20and%20social%20exclusion%20in%20Manitoba.
- 86. Manitoba Families. *Annual Report 2024-2025*.; 2025. Accessed October 27, 2025. https://www.gov.mb.ca/asset\_library/en/annualreports/2024\_2025/annual-report-fam-24-25.pdf
- 87. Brownell M, Nickel N, Turnbull L, et al. *The Overlap Between Child Welfare and Youth Criminal Justice Systems*: Documenting "Cross-Over Kids" in Manitoba.; 2020. Accessed May 22, 2025. http://mchp-appserv.cpe.umanitoba.ca/reference/MCHP\_JustCare\_Report\_web.pdf
- 88. Brownell M, Chartier M, Au W, et al. *The Educational Outcomes of Children in Care in Manitoba.*; 2015. Accessed May 11, 2025. http://mchp-appserv.cpe.umanitoba.ca/reference/CIC\_report\_web.pdf
- 89. Naaz A, Muneshwar KN. How Maternal Nutritional and Mental Health Affects Child Health During Pregnancy: A Narrative Review. Cureus. 2023;15(11).
- 90. Manitoba Health. *Annual Statistics 2020-2021.*; 2021. Accessed October 5, 2025. https://www.gov.mb.ca/health/annstats/as2021.pdf
- 91. Statistics Canada. Maternal Mental Health in Canada. June 24, 2019. Accessed April 15, 2025. https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2019041-eng.htm
- 92. Manitoba Education and Early Childhood Learning. *The Early Development Instrument Report 2022/2023 Manitoba Provincial Report.*; 2023. Accessed April 7, 2025. https://www.edu.gov.mb.ca/k12/grad\_rates/docs/2022\_23\_edireport\_provincial.pdf
- 93. Honourable Margaret Norrie McCain. Early Years Study 4: *Thriving Kids, Thriving Society.*; 2020. Accessed April 15, 2025. https://earlyyearsstudy.ca/wp-content/uploads/2020/02/EYS4-Report\_01\_15\_2020.pdf
- 94. Wadehre R and RJ. *Policy Brief: Advancing Health Equity within Canada's Child-Care Program.*; 2024. Accessed October 6, 2025. https://www.wellesleyinstitute.com/wp-content/uploads/2024/10/Policy-Brief-Advancing-health-equity-within-Canadas-child-care-program.pdf

- Manitoba Early Learning and Child Care. Canada-Manitoba Canada-Wide Early Learning and Child Care Agreement 2021-2026. Annual Report for 2024-25.; 2025.
- Manitoba Education and Early Childhood Learning. Annual Report 2024-25.; 2025. Accessed October 27, 96. 2025. https://www.gov.mb.ca/asset\_library/en/annualreports/2024\_2025/annual-report-eecl-24-25.pdf
- 97. Stanford J. Powering Growth: Economic Benefits from Canada's \$10-per-Day Early Learning and Child Care Program.; 2024. Accessed April 15, 2025. https://centreforfuturework.ca/wp-content/uploads/2024/11/ Child-Care-Economic-Benefits-Nov2024-FINAL.pdf
- 98. Harvest Manitoba. Voices 2024 Stories of Hunger and Poverty in Manitoba.; 2024. Accessed April 3, 2025. https://www.harvestmanitoba.ca/wp-content/uploads/2024/12/Harvest-Voices-2024.pdf
- 99. Public Health Agency of Canada. Key Health Inequalities in Canada - A National Portrait.; 2018. Accessed August 12, 2025. https://www.canada.ca/en/public-health/services/publications/science-research-data/ key-health-inequalities-canada-national-portrait-executive-summary.html
- 100. Manitoba Education and Early Childhood Learning. Manitoba K-12 Education Data Dashboard -Successful Grade 9 Credit Attainment. 2024. Accessed April 7, 2025. https://www.edu.gov.mb.ca/k12/ grad\_rates/gr9\_a.html
- 101. Manitoba Education and Early Childhood Learning. Manitoba K-12 Education Data Dashboard -Manitoba's Student-Tracked High School Graduation Rate. 2023. Accessed April 7, 2025. https://www.edu.gov.mb.ca/k12/grad rates/hs grad rates.html
- 102. Manitoba Education and Early Childhood Learning. Manitoba's Four-Year High School Graduation Rates September 2019 - June 2023. 2023. Accessed May 22, 2025. https://www.edu.gov.mb.ca/k12/ grad\_rates/docs/4year-sep2019-jun2023.pdf
- 103. Harding L, DeCaire R, Ellis U, Delaurier-Lyle K, Schillo J, Turin M. Language improves health and wellbeing in Indigenous communities: A scoping review. Language and Health. 2025;3(1).
- 104. Finlayson CM, Prior H, McGowan K, et al. *Health and Healthcare Utilization of Francophones in Manitoba/* La Santé et l'utilisation Des Services de Santé Des Francophones Du Manitoba.; 2012. Accessed May 26, 2025. http://mchp-appserv.cpe.umanitoba.ca/reference/MCHP\_franco\_report\_en\_20120513\_WEB.pdf
- 105. Assembly of Manitoba Chiefs. Annual Report 2024.; 2024. Accessed May 22, 2025. https://manitobachiefs.com/wp-content/uploads/2024/08/2024 AMC ANNUALREPORT FORMATTED D4.pdf
- 106. Manitoba Advanced Education and Training. Adult Learning and Literacy Branch. Preprint posted online
- 107. Manitoba Business Mining Trade and Jobs Creation. Annual Report 2024-2025.; 2025. Accessed October 27, 2025. https://www.gov.mb.ca/asset library/en/annualreports/2024 2025/annualreport-bmtjc-24-25.pdf
- 108. Statistics Canada. Table 13-10-0906-01 Health indicator statistics, annual estimates, by household income guintile and highest level of education. October 2, 2024. Accessed May 27, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1310090601
- 109. Statistics Canada. Table 98-10-0411-01 Employment income statistics by highest level of education: Canada, provinces and territories, census divisions and census subdivisions. October 4, 2023. Accessed April 29, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=9810041101
- 110. Manitoba Business Mining Trade and Jobs Creation. Manitoba Labour Market Outlook. Accessed April 29, 2025. https://www.gov.mb.ca/jec/lmi/outlook/index.html
- 111. Statistics Canada. Table 98-10-0386-01 Highest level of education by geography: Canada, provinces and territories. April 28, 2025. Accessed October 6, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/ tv.action?pid=9810038601
- 112. Statistics Canada. Table 37-10-0103-01 Participation rate in education, population aged 18 to 34, by age group and type of institution attended. April 28, 2025. Accessed October 6, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710010301
- 113. MacIsaac S, Schellenberg G. Economic and Social Reports: Unity in Canada: Experimental measures of feelings towards people with similar or different views. Accessed May 28, 2025. https://www150.statcan. gc.ca/n1/pub/36-28-0001/2025005/article/00004-eng.htm

- 114. Statistics Canada. Table 45-10-0052-01 Sense of belonging to local community by gender and province. April 7, 2025. Accessed April 6, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=4510005201
- 115. Manitoba Justice. Serious Crimes. 2025. Accessed June 11, 2025. https://www.gov.mb.ca/justice/cjsm/seriouscrimes.html
- 116. Winnipeg Policy Service. Winnipeg Police Service: Crime Map. 2025. Accessed June 11, 2025. https://app.powerbi.com/view?r=eyJrIjoiNGI3YTcwZGEtNGUzYy00ZDM4LTllMGQtZjAwMjZhZGExNTM0Ii-widCI6IjFkYWQ3MGIxLTkyNWEtNGQyMS1hN2MxLWFhOWNjNDMyNzc4MCJ9
- 117. Kouyoumdjian F, Schuler A, Matheson FI, Hwang SW. Health Status of prisoners in Canada. 2016;63(2):215-222. Accessed June 11, 2025. https://pmc.ncbi.nlm.nih.gov/articles/PMC4984599/
- 118. Zakaria D, Thompson JM, Jarvis A, Smith J. *Testing and Treatment for Human Immunodeficiency Virus and Hepatitis C Virus Infections among Canadian Federal Inmates (Full Report).*; 2010. Accessed September 21, 2025. https://www.canada.ca/en/correctional-service/corporate/library/research/glance/223.html
- 119. Burczycka M. Women's experiences of victimization in Canada's remote communities.
- 120. Statistics Canada. Correction services statistics: Interactive dashboard. March 4, 2025. Accessed June 11, 2025. https://www150.statcan.gc.ca/n1/pub/71-607-x/71-607-x2019018-eng.htm
- 121. Research and Statistics Division. Department of Justice Canada. Recidivism in the Criminal Justice System. January 20, 2023. Accessed September 9, 2025. https://www.justice.gc.ca/eng/rp-pr/jr/jf-pf/2020/aug01.html
- 122. Manitoba Justice. Recidivism. 2025. Accessed June 11, 2025. https://www.gov.mb.ca/justice/cjsm/recidivism.html
- 123. Doctor's Manitoba. *Physicians in Manitoba (2023).*; 2023.
- 124. Statistics Canada. Health Indicator Statistics, annual estimates. Statistics Canada. 2024. Accessed February 23, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1310090501
- 125. Performance and Monitoring. Emergency Department Presentations by Income Quintiles. *Sharedhealth Manitoba*. Preprint posted online 2023.
- 126. Performance and Monitoring. HSC Activity for Patients Experiencing Homelessness. Sharedhealth Manitoba. Preprint posted online 2024.
- 127. BC Centre for Disease Control. *Healthy Built Environment Linkages Toolkit: Making the Links between Design, Planning and Health, Version 2.0.*; 2018. Accessed April 23, 2025. http://www.bccdc.ca/pop-public-health/Documents/HBE\_linkages\_toolkit\_2018-compressed.pdf
- 128. Patterson B, Hilland J, Madden S, et al. 2021 Report on Health and Planning in Canada; 2021.
- 129. Anderson E, Durstine JL. Physical activity, exercise, and chronic diseases: A brief review. *Sports Medicine and Health Science*. KeAi Communications Co. 2019;1(1):3-10. doi:10.1016/j.smhs.2019.08.006
- 130. Canadian Fitness and Lifestyle Research Institute (CFLRI) and Canadian Parks and Recreation Association (CPRA). *The Price of Inactivity: Measuring the Powerful Impact of Sport, Physical Activity and Recreation in Canada.*; 2023. Accessed April 30, 2025. https://measuring-impact.ca/wp-content/up-loads/2023/11/CFLRI-CPRA\_Price-Inactivity-Full-Report-EN-FINAL.pdf
- 131. Participaction. Physical Activity in Canada. Participaction. Accessed February 23, 2025. https://www.participaction.com/the-science/key-facts-and-stats/
- 132. Statistics Canada. Table 13-10-0096-01 Health characteristics, annual estimates, inactive. doi: https://doi.org/10.25318/1310009601-eng
- 133. Statistics Canada. Table 13-10-0097-01 Health characteristics, annual estimates, by household income quintile and highest level of education, inactive. doi:https://doi.org/10.25318/1310009701-eng
- 134. Belanger M, Giroux MA, Registe PPW et al. Adolescent physical activity profiles as determinants of emerging adults' physical activity. *Int J Behav Nutr Phys Act*. 2025;22(35). Accessed October 6, 2025. https://link.springer.com/content/pdf/10.1186/s12966-025-01732-9.pdf
- 135. ParticipACTION. *Rallying for Resilience: Keeping Children and Youth Active in a Changing Climate. The 2024 ParticipACTION Report Card on Physical Activity for Children and Youth.*; 2024. Accessed July 16, 2025. https://www.participaction.com/wp-content/uploads/2024/05/2024-Children-and-Youth-Report-Card-Highlight-Report-1.pdf

- 136. Canadian Fitness and Lifestyle Research Institute. Percentage of children and youth who participate in organized physical activity and sport (MB). Accessed April 30, 2025. https://cflri.ca/tools-training/ data-tables/population-data/12-4-organized-physical-activity/#MB
- 137. Lebel DrK. Commentary: How Sports Participation Leads to Long-Term Success for Girls. August 12, 2024. Accessed April 30, 2025. https://news.uoguelph.ca/2024/08/commentary-how-sportsparticipation-leads-to-long-term-success-for-qirls/#:~:text=Sports%20and%20leadership,they%20 developed%20through%20sports%20participation
- 138. Gropper SS. The Role of Nutrition in Chronic Disease. Nutrients. MDPI. 2023;15(3). doi:10.3390/ nu15030664
- 139. Reid K. Population-Level Nutritional Well-Being: Nutrition Security and Equitability. Healthcare (Basel). 2023;11(6):817. Accessed May 29, 2025. https://pmc.ncbi.nlm.nih.gov/articles/PMC10048516/
- 140. Statistics Canada. Table 18-10-0004-02 Consumer Price Index by geography, all-items, monthly, percentage change, not seasonally adjusted, Canada, provinces, Whitehorse, Yellowknife and Igaluit. May 20, 2025. Accessed June 4, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1810000402
- 141. Statistics Canada. Table 13-10-0905-01 Health indicator statistics, annual estimates. Statistics Canada. October 2, 2024. Accessed June 4, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid= 1310090501
- 142. World health Organization. Healthy diet: Key facts. April 29, 2020. Accessed May 29, 2025. https://www.who.int/news-room/fact-sheets/detail/healthy-diet
- 143. Cena H, Calder PC. Defining a Healthy Diet: Evidence for the Role of Contemporary Dietary Patterns in Health and Disease. Nutrients. 2020;12(2):334. Accessed May 29, 2025. https://pmc.ncbi.nlm.nih.gov/ articles/PMC7071223/
- 144. Nilson E, Hamel V, Wahrhaftiq J, Rezende L, Polsky JY, Moubarac JC. How Much of the Burden of Cardiovascular Disease in Canada Is Attributable to Ultra-Processed Foods?; 2025. Accessed September 9, 2025. https://www.heartandstroke.ca/-/media/pdf-files/what-we-do/news/nilson\_moubarac\_upf\_2025\_ en.pdf?rev=62e596a8210146a081305b6a838ffb5e
- 145. Canadian Partnership Against Cancer. Healthy eating policies. Accessed June 4, 2025. https://www.partnershipagainstcancer.ca/topics/healthy-eating-and-cancer/key-statistics/
- 146. Canadian Centre on Substance Use and Addictions. Canada's Guidance on Alcohol and Health. Canadian Centre on Substance Use and Addictions.
- 147. Sherk A. Canada's Alcohol Deficit, 2007-2020: Social Cost, Public Revenue, Magnitudes of Alcohol Use, and the Per-Drink Net Deficit for a Fourteen-Year Period. J Stud Alcohol Drugs. 2024;85(3):306-311.
- 148. Health Canada. Canadian Substance Use Survey (CSUS): Data tool. March 18, 2025. Accessed May 15, 2025. https://health-infobase.canada.ca/substance-use/csus/
- 149. Health Canada. Drug and alcohol use by students in Canada. May 9, 2025. Accessed May 15, 2025. https://health-infobase.canada.ca/substance-use/csads/?topic=3-indicator=87-timeframe=3-group=Province-schoolyear=2021-display=Geographic-scale=fixed
- 150. Canadian Centre on Substance Use and Addictions. Canada's Guidance on Alcohol and Health. Canadian Centre on Substance Use and Addictions.
- 151. Government of Canada. Health effects of cannabis. March 25, 2024. Accessed July 16, 2025. https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/health-effects/effects. html
- 152. Canadian Cannabis Survey. Cannabis Use for Non-Medical Purposes among Canadians (Aged 16+).; 2024. Accessed July 6, 2025. https://health-infobase.canada.ca/cannabis/data-exploration.html#fig2Wrapper
- 153. Liquor Gaming and Cannabis Authority of Manitoba. Manitoba Cannabis Survey II.; 2023. Accessed July 16, 2025. https://lgcamb.ca/wp-content/uploads/dlm\_uploads/2023/02/REPORT-Manitoba-Cannabis-Survey-II-17FE2023.pdf
- 154. Malam R, MacDonald-Spracklin R, Biggar E, et al. Trends in cannabis-attributable hospitalizations and emergency department visits: data from the Canadian Substance Use Costs and Harms Study (2007– 2020). Health Promotion and Chronic Disease Prevention in Canada. 2025;45(6):265-276. doi:10.24095/ hpcdp.45.6.01

- 155. Health Canada. Is cannabis safe to use? Facts for youth aged 13-17 years. October 17, 2018. Accessed July 16, 2025. https://www.canada.ca/en/health-canada/services/publications/drugs-health-products/is-cannabis-safe-use-facts-youth.html
- 156. Canadian Centre on Substance Use and Addiction. Canadian Substance Use Costs and Harms. Accessed May 15, 2025. https://csuch.ca/explore-the-data/
- 157. Canadian Centre on Substance Use and Addiction, Canadian Institute for Substance Use Research.
  Canadian Substance Use Costs and Harms Visualization Tool. Canadian Substance Use Costs and Harms.
- 158. Statistics Canada. Canadian Tobacco and Nicotine Survey (CTNS): 2022 detailed tables. 2022. Accessed May 15, 2025. https://www.canada.ca/en/health-canada/services/canadian-tobacco-nicotine-survey/ 2022-summary/2022-detailed-tables.html#tbl2
- 159. Statistics Canada. Table 41-10-0071-01 Smoking status of First Nations people living off reserve, Métis and Inuit, by age group and gender. September 27, 2024. Accessed May 15, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=4110007101
- 160. Health Canada. Nicotine Addiction. March 7, 2013. Accessed May 15, 2025. https://www.canada.ca/en/health-canada/services/smoking-tobacco/health-effects-smoking-second-hand-smoke/nicotine-addiction.html
- 161. Health Canada. Guide to the Supplementary Rules Respecting Nicotine Replacement Therapies Order: Overview. February 12, 2025. Accessed May 15, 2025. https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-non-prescription/legislation-guidelines/guidance-documents/supplementary-rules-respecting-nicotine-replacement-therapies-order.html
- 162. Foran H, Bilodeau H, Pinault L. Concern about misinformation: Connections to trust in media, confidence in institutions, civic engagement, and hopefulness. Insights on Canadian Society. June 18, 2025. Accessed June 25, 2025. https://www150.statcan.gc.ca/n1/pub/75-006-x/2025001/article/00008-eng.htm
- 163. Enders A, Uscinski J, Seelig M, et al. The Relationship Between Social Media Use and Beliefs in Conspiracy Theories and Misinformation. *Polit Behav.* 2021;45(2):781-804. Accessed October 14, 2025. https://pmc.ncbi.nlm.nih.gov/articles/PMC8262430/
- 164. Canadian Centre for Cyber Security. How to identify misinformation, disinformation and malinformation. Communications Security Establishment = Centre de la sécurité des telecommunications. Preprint posted online 2024.
- 165. CCA (Council of Canadian Academies). Fault Lines: Expert Panel on the Socioeconomic Impacts of Science and Health Misinformation, CCA.; 2023. Accessed October 14, 2025. https://cca-reports.ca/wp-content/uploads/2023/02/Report-Fault-Lines-digital.pdf
- 166. Manitoba Health Seniors and Long-Term Care. 2023-2024 Annual Statistics.; 2025.
- 167. Government of Canada. Canadian Tobacco and Nicotine Survey (CTNS): summary of results for 2022. Government of Canada. 2022. Accessed March 17, 2025. https://www.canada.ca/en/health-canada/services/canadian-tobacco-nicotine-survey/2022-summary.html#cigarette
- 168. Canadian Fitness and Lifestyle Research Institute, Canadian Parks and Recreation Association. *The Price of Inactivity: Measuring the Powerful Impact of Sport, Physical Activity, and Recreation in Canada.*; 2023. www.cpra.ca
- 169. Shield KD, Parry C, Rehm J. Chronic Diseases and Conditions Related to Alcohol Use. Alcohol Res. Published online 2014.
- 170. Public Health Agency of Canada. *Obesity Statistics in Canada*.; 2024. Accessed July 29, 2025. https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/healthy-living/obesity-statistics-canada/obesity-statistics-canada.pdf
- 171. Western Youth Services, ACES Aware. *Adverse Childhood Experiences and Related Life Events: Understanding Their Prevalence, Impacts, and Best Practices in Intervening.*
- 172. Government of Canada. Canadian Chronic Disease Surveillance System. Government of Canada. 2023. Accessed February 23, 2025. https://health-infobase.canada.ca/ccdss/data-tool/Comp?G=00&V=1&M=1

- 173. Ruth C, Sellers E, Chartrand C, et al. Type 2 Diabetes in Manitoba.; 2020. www.mchp.ca
- 174. Pan-Canadian Health Inequalities Data Tool. A joint initiative of the Public Health Agency of Canada, the Pan-Canadian Public Health Network, Statistics Canada and the Canadian Institute for Health Information. June 6, 2024. Accessed October 6, 2025. https://health-infobase.canada.ca/healthinequalities/Indicat.
- 175. Manitoba Renal Program. Kidney Health Manitoba. Accessed October 5, 2025. https://www.kidneyhealth.ca/
- 176. World Health Organization. Cardiovascular diseases. World Health Organization. 2021. Accessed February 23, 2025. https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds)
- 177. CancerCare Manitoba. Manitoba Cancer System Performance Report 2024.; 2024. Accessed July 29, 2025. https://ext-opencms.cancercare.mb.ca/export/sites/default/About-Us/.galleries/files/corporatepublications/MCSP-Report-2024.pdf
- 178. Statistics Canada. Number and rates of new cases of primary cancer, by cancer type, age group and sex. Statistics Canada. 2025. Accessed June 8, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action? pid=1310011101
- 179. Government of Canada. Health Inequities Data Tool. Government of Canada. 2022. Accessed February 23, 2025. https://health-infobase.canada.ca/health-inequalities/data-tool/
- 180. Canadian Cancer Society. Number of cancer cases that could be prevented in Manitoba. Preprint posted online 2015.
- 181. Parachute. Potential Lost, Potential for Change. The Cost of Injury in Canada 2021.; 2021. Accessed October 14, 2025. https://parachute.ca/en/professional-resource/cost-of-injury-in-canada/
- 182. Manitoba Health Seniors and Long-Term Care. Epidemiology and Surveillance. Preprint posted online 2024.
- 183. Katz A, Urquia ML, Star L, et al. Changes in health indicator gaps between First Nations and other residents of Manitoba. Can Med Assoc J. 2021;193(48):E1830-E1835. doi:10.1503/cmaj.210201
- 184. Parachute. The Cost of Injury in Canada: Fall-Related Injuries in Children.; 2018.
- 185. Manitoba Public Insurance. Road to Zero. Manitoba Road Safety Plan 2017-2020.; 2021. Accessed October 14, 2025. https://www.mpi.mb.ca/wp-content/uploads/2022/10/Road-To-Zero.pdf
- 186. Manitoba Public Insurance. 2022 Traffic Collision Statistics Report.; 2024. Accessed October 5, 2025. https://www.mpi.mb.ca/wp-content/uploads/TCSR2022.pdf
- 187. Manitoba Public Insurance. 2018 Traffic Collision Statistics Report.; 2018. Accessed October 5, 2025. https://www.mpi.mb.ca/wp-content/uploads/2022/10/TCSR2018.pdf
- 188. Manitoba Public Insurance. 2019 Traffic Collision Statistics Report.; 2019. Accessed October 5, 2025. https://www.mpi.mb.ca/wp-content/uploads/2022/10/TCSR2019.pdf
- 189. Manitoba Public Insurance. 2020 Traffic Collision Statistics Report.; 2020. Accessed October 5, 2025. https://www.mpi.mb.ca/wp-content/uploads/2022/10/2020-Traffic-Collision-Statistics-Report.pdf
- 190. Manitoba Public Insurance. 2021 Traffic Collision Statistics Report.; 2022. Accessed October 5, 2025. https://www.mpi.mb.ca/wp-content/uploads/2023/02/TCSR2021.pdf
- 191. Workers Compensation Board of Manitoba. Manitoba Workplace Injury and Illness Statistics Report. Published online 2024. Accessed June 25, 2025. https://www.wcb.mb.ca/injury-and-illness-statistics-qa/
- 192. Workplace Safety and Health. Workplace Enforcement Activity. 2025. Accessed September 1, 2025. https://www.gov.mb.ca/labour/safety/reports.html
- 193. Workers Compensation Board of Manitoba. Manitoba Workplace Injury and Illness Statistics Report. Published online 2023. Accessed June 25, 2025. https://www.wcb.mb.ca/injury-and-illness-statistics-ga/
- 194. Parachute. Canadian Injury Prevention Resource: An Evidence-Informed Guide to Injury Prevention in Canada.; 2015.
- 195. Ontario Ministry of Health and Long-Term Care. Population and Public Health Division. *Injury Prevention* Guideline, 2018.; 2018. Accessed September 23, 2025. https://files.ontario.ca/moh-guidelines-injuryprevention-quideline-en-2018.pdf

- 196. National Committee for Injury Prevention and Control. Injury Prevention: Meeting the Challenge. *Am J Prev Med.* 1989;5(1):303.
- 197. Women and Gender Equality Canada. Intimate Partner Violence. August 5, 2025. Accessed October 5, 2025. https://www.canada.ca/en/women-gender-equality/gender-based-violence/intimate-partner-violence.html
- 198. Statistics Canada. Victims of police-reported intimate partner violence, by year and province or territory, 2018 to 2023. October 24, 2024. Accessed September 23, 2025. https://www150.statcan.gc.ca/n1/daily-quotidien/241024/t002b-eng.htm
- 199. Smye V, Browne AJ, Josewski V, Keith B, Mussell W. Social Suffering: Indigenous Peoples' Experiences of Accessing Mental Health and Substance Use Services. *Int J Environ Res Public Health*. 2023;20(4):3288. doi:10.3390/ijerph20043288
- 200. Statistics Canada. *2SLGBTQ+ Youth Are at Increased Risk for Mental Health Difficulties and Thoughts of Suicide.*; 2024. Accessed April 2, 2025. https://www150.statcan.gc.ca/n1/daily-quotidien/241120/dq241120d-eng.htm
- 201. Canadian Mental Health Association. When it Comes to Mental Health, Our Circumstances Matter. Canadian Mental Health Association.
- 202. Rush B, Urbanoski K, Bassani D, et al. Prevalence of Co-occurring Substance Use and Other Mental Disorders in the Canadian Population. Published online 2008.
- 203. Centre for Addiction and Mental Health. Addiction. Centre for Addictions and Mental Health. Accessed March 16, 2025. https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/addiction
- 204. Schuch FB, Vancampfort D. Physical activity, exercise, and mental disorders: it is time to move on. *Trends Psychiatry Psychother*. Published online 2021. doi:10.47626/2237-6089-2021-0237
- 205. Nakao M, Shirotsuki K, Sugaya N. Cognitive–behavioral therapy for management of mental health and stress-related disorders: Recent advances in techniques and technologies. Biopsychosoc Med. 2021;15(1):16. doi:10.1186/s13030-021-00219-w
- 206. World Health Organization. Mental health. June 17, 2022. Accessed September 11, 2025. https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response
- 207. Canadian Centre for Occupational Health and Safety. Mental Health. February 9, 2022. Accessed September 11, 2025. https://www.ccohs.ca/oshanswers/psychosocial/mh/mentalhealth\_intro.html
- 208. Canadian Mental Health Association. Connection Between Mental and Physical Health. Accessed September 11, 2025. https://ontario.cmha.ca/documents/connection-between-mental-and-physical-health/
- 209. Voinov B, Richie WD, Bailey RK. Depression and chronic diseases: it is time for a synergistic mental health and primary care approach. *Prim Care Companion CNS Disord. 2013*;15(2). doi:10.4088/PCC. 12r01468
- 210. Statistics Canada. Perceived mental health, by gender and province. 2024. Accessed August 13, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4510007901
- 211. Statistics Canada. Table 45-10-0080-01 Perceived mental health, by gender and other selected sociodemographic characteristics. Statistics Canada. 2024. Accessed May 28, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4510008001
- 212. Mental Health Commission of Canada. Children and Youth. 2025. Accessed November 13, 2025. https://mentalhealthcommission.ca/children-and-youth/
- 213. Canadian Mental Health Association. *Mental Health at the Pandemic's End: Youth Still Reporting Higher Rates of Mental Health Problems*.; 2023. https://www.mhrc.ca/data-hub.
- 214. Statistics Canada. Rising mental health concerns among youth. Statistics Canada. 2025. Accessed March 19, 2025. https://www.statcan.gc.ca/o1/en/plus/7642-rising-mental-health-concerns-among-youth
- 215. Mental Health Research Canada. Associations Between Social Media Use, Personal Screen Time, and Mental Health Indicators Among Canadian Youth.; 2025.
- 216. Daníelsdóttir HB, Aspelund T, Shen Q, et al. Adverse Childhood Experiences and Adult Mental Health Outcomes. *JAMA Psychiatry.* 2024;81(6):586. doi:10.1001/jamapsychiatry.2024.0039

- 217. Gutwinski S, Schreiter S, Deutscher K, Fazel S. The prevalence of mental disorders among homeless people in high-income countries: An updated systematic review and meta-regression analysis. PLoS Med. 2021;18(8):e1003750. doi:10.1371/journal.pmed.1003750
- 218. Canadian Observatory on Homelessness. Mental Health. Homeless Hub. Accessed June 11, 2025. https://homelesshub.ca/collection/homelessness-101/mental-health/
- 219. Cameron C, Khalifa N, Bickle A, Safdar H, Hassan T. Psychiatry in the federal correctional system in Canada. BJPsych Int. 2021;18(2):42-46. doi:10.1192/bji.2020.56
- 220. Hensel JM, Casiano H, Chartier MJ, et al. Prevalence of mental disorders among all justice-involved: A population-level study in Canada. *Int J Law Psychiatry*. 2020;68:101523. doi:10.1016/j.ijlp.2019.101523
- 221. Government of Canada. Suicide, self-harm, and suicide-related behaviours in Canada. Government of Canada. 2025. Accessed July 1, 2025. https://health-infobase.canada.ca/mental-health/suicide-selfharm/suicide-mortality.html
- 222. Centre for Suicide Prevention. Self-harm and Suicide. October 31, 2016. Accessed September 11, 2025. https://www.suicideinfo.ca/local\_resource/self-harm-and-suicide/
- 223. Kumar MB. Suicide among First Nations People, Métis and Inuit (2011-2016). Consumer Policy Research Database; 2019.
- 224. McQuaid RJ, Bombay A, McInnis OA, Humeny C, Matheson K, Anisman H. Suicide Ideation and Attempts among First Nations Peoples Living On-Reserve in Canada: The Intergenerational and Cumulative Effects of Indian Residential Schools. The Canadian Journal of Psychiatry. 2017;62(6):422-430. doi:10.1177/0706743717702075
- 225. Canadian Centre on Substance Use and Addiction. Lost Productivity Due to Substance Use Cost the Canadian Economy \$22.4 billion: New Report. Canadian Centre on Substance Use and Addiction. 2023. Accessed March 12, 2025. https://www.ccsa.ca/lost-productivity-due-substance-use-cost-canadianeconomy-224-billion-new-report
- 226. Canadian Mental Health Association. Mental Health in Manitoba.; 2024.
- 227. Government of Canada. Homelessness Data Snapshot: Mental Health, Substance Use, and Homelessness in Canada.
- 228. Lightfoot LO. Forensic Psychology: Part 4: Chapter 13: Assessing Offender Populations.
- 229. Hager M. Study shows addiction as biggest predictor of recidivism. *The Globe and Mail.* April 11, 2024.
- 230. Meadows AL, Strickland JC, Hyder SM, et al. Adverse childhood experiences and early initiation of substance use: A survival analysis. Int | Psychiatry Med. 2024;59(2):218-231. doi:10.1177/00912174231195751
- 231. Toombs E, Lund JI, Mushquash AR, Mushquash CJ. Intergenerational residential school attendance and increased substance use among First Nation adults living off-reserve: An analysis of the aboriginal peoples survey 2017. Front Public Health. 2022;10:1029139. doi:10.3389/fpubh.2022.1029139
- 232. Canadian Centre on Substance Use and Addiction, Canadian Institute for Substance Use Research. Substance Use Costs in Canada in 2020. Canadian Substance Use Costs and Harms. 2020. Accessed April 2, 2025. https://csuch.ca/substance-use-costs/current-costs/
- 233. Manitoba Health Seniors and Long-Term Care. Manitoba Substance-related Harms Surveillance Report. April 9, 2025. Accessed May 15, 2025. https://manitoba.ca/mh/srh-public-report.html#Hospitalizations\_\_ ED\_Presentations
- 234. Manitoba Families. Manitoba's Renewed FASD Strategy 2024-2029.; 2024. Accessed August 11, 2025. https://www.gov.mb.ca/fs/fasd/pubs/fasd-strategy-2024-2029.pdf
- 235. Canada FASD Research Network. What is FASD? Accessed August 11, 2025. https://canfasd.ca/what-isfasd/
- 236. Public Health Agency of Canada. Benzodiazepines in apparent drug toxicity deaths in Canada, 2018 to 2023. Preprint posted online 2023.
- 237. Street Connections. Drug Checking. Street Connections. Accessed July 8, 2025. https://streetconnections.ca/drug-checking
- 238. University of New Zealand. What is Environmental Health? Accessed April 15, 2025. https://www.ehinz. ac.nz/indicators/overview/what-is-environmental-health/

- 239. Public Health Agency of Canada. Enteric Disease: A major health concern in Canada. November 15, 2013. Accessed August 11, 2025. https://www.canada.ca/en/public-health/services/surveillance/foodnet-canada/enteric-disease-a-major-health-concern-canada.html
- 240. Public Health Agency of Canada. *National Enteric Surveillance Program (NESP) Annual Summary 2023.*; 2023. Accessed August 11, 2025. https://publications.gc.ca/collections/collection\_2025/aspc-phac/HP37-15-2023-eng.pdf
- 241. Manitoba Health Seniors and Long-Term Care. Environmental Health.; 2024.
- 242. Young I, Sanchez J, Tustin J. Recreational water illness in Canada: a changing risk landscape in the context of climate change. *Canadian Journal of Public Health.* 2022;113(6):940-943. Accessed August 12, 2025. https://pmc.ncbi.nlm.nih.gov/articles/PMC9663764/
- 243. Manitoba Environment and Climate Change. *Annual Report 2024-2025.*; 2025. Accessed August 12, 2025. https://www.gov.mb.ca/asset\_library/en/annualreports/2024\_2025/annual-report-ecc-24-25.pdf
- 244. National Institute of Environmental Health Sciences. Safe Water and Your Health. March 28, 2025. Accessed May 25, 2025. https://www.niehs.nih.gov/health/topics/agents/water-poll
- 245. Manitoba Environment and Climate Change. Office of Drinking Water. Government of Manitoba.
- 246. Environment and Climate Change Canada. Causes of Climate Change. March 28, 2019. Accessed April 29, 2025. https://www.canada.ca/en/environment-climate-change/services/climate-change/causes.html
- 247. Bush E, Lemmen DS editors. *Canada's Changing Climate Report.*; 2019. Accessed April 29, 2025. https://changingclimate.ca/site/assets/uploads/sites/2/2020/06/CCCR\_FULLREPORT-EN-FINAL.pdf
- 248. Loxley M. *A Snapshot of the Changing Prairie Climate.*; 2022. Accessed April 29, 2025. https://climatewest.ca/wp-content/uploads/2023/06/Snapshot-Changing\_Prairie-Climate-2022.pdf
- 249. Manitoba Natural Resources and Indigenous Futures. Fire Situation Report. September 10, 2025. Accessed September 11, 2025. https://www.gov.mb.ca/conservation\_fire/Fire-Situation/daily-firesituation.html
- 250. Emergency Measures Organization. Situation Report. Preprint posted online 2025.
- 251. Climate West. What are the Financial Costs of Climate Change in the Prairie Provinces? September 12, 2023. Accessed April 29, 2025. https://climatewest.ca/2023/09/12/what-are-the-financial-costs-of-climate-change-in-the-prairie-provinces/
- 252. Environment and Climate Change Canada. *Canada's National Adaptation Strategy: Building Resilient Communities and a Strong Economy.*; 2023. Accessed May 1, 2025. https://publications.gc.ca/collections/collection\_2023/eccc/en4/En4-544-2023-eng.pdf
- 253. Insurance Bureau of Canada. Summer 2024 shatters records for severe weather damage: Over \$7 billion in insured losses from floods, fires and hailstorms. September 24, 2024. Accessed August 12, 2025. https://www.ibc.ca/news-insights/news/summer-2024-shatters-records-for-severe-weather-damage-over-7-billion-in-insured-losses-from-floods-fires-and-hailstorms
- 254. Berry P, Schnitter R (Eds. ). *Health of Canadians in a Changing Climate Advancing Our Knowledge for Action.*; 2022. Accessed April 15, 2025. https://changingclimate.ca/site/assets/uploads/sites/5/2022/02/CCHA-REPORT-EN.pdf
- 255. Sauchyn D, Davidson D, Johnston M. *Prairie Provinces; Chapter 4 in Canada in a Changing Climate: Regional Perspectives Report, (Ed.) F.J. Warren, N. Lulham and D.S. Lemmen.*; 2020. Accessed May 4, 2025. https://natural-resources.canada.ca/sites/nrcan/files/earthsciences/Prairie%20Provinces%20Chapter% 20%E2%80%93%20Regional%20Perspectives%20Report.pdf
- 256. Health Canada. Outdoor air pollution and health: Overview. October 2, 2024. Accessed September 10, 2025. https://www.canada.ca/en/health-canada/services/air-quality/outdoor-pollution-health.html
- 257. Government of Canada. Wildfire smoke, air quality and your health: Health effects of wildfire smoke exposure. May 1, 2024. Accessed June 18, 2025. https://www.canada.ca/en/services/health/healthy-living/environment/air-quality/wildfire-smoke/health-effects-exposure.html
- 258. Environment and Climate Change Canada. About the Air Quality Health Index. April 28, 2021. Accessed July 8, 2025. https://www.canada.ca/en/environment-climate-change/services/air-quality-health-index/about.html

- 259. Environment and Climate Change Canada. Air Quality Health Index Daily Data. July 9, 2025. Accessed July 8, 2025. https://winnipeg.weatherstats.ca/charts/health\_index-daily.html
- 260. Faurie C, Varghese B, Liu J, Bi P. Association between high temperature and heatwaves with heat-related illnesses: A systematic review and meta-analysis. Sci Total Environ. Published online December 15, 2022. Accessed August 12, 2025. https://pubmed.ncbi.nlm.nih.gov/36041616/
- 261. Cheng J, Xu Z, Bambrick H, et al. Cardiorespiratory effects of heatwaves: A systematic review and meta-analysis of global epidemiological evidence. Environ Res. Published online July 26, 2019. Accessed August 12, 2025. https://pubmed.ncbi.nlm.nih.gov/31376629/
- 262. Liu J, Varghese B, Hansen A, et al. Hot weather as a risk factor for kidney disease outcomes: A systematic review and meta-analysis of epidemiological evidence. Sci Total Environ. Published online August 21, 2021. Accessed August 12, 2025. https://pubmed.ncbi.nlm.nih.gov/34467930/
- 263. Thompson R, Hornigold R, Page L, Waite T. Associations between high ambient temperatures and heat waves with mental health outcomes: a systematic review. Public Health. Published online August 16, 2018:171-191. Accessed August 12, 2025. https://pubmed.ncbi.nlm.nih.gov/30007545/
- 264. Xu R, Xiong X, Abramson M, Li S, Guo Y. Ambient temperature and intentional homicide: A multi-city case-crossover study in the US. Environ Int. Published online October 2020. Accessed August 12, 2025. https://pubmed.ncbi.nlm.nih.gov/32738768/
- 265. Health Canada. Fact Sheet: Staying healthy in the heat. August 30, 2024. Accessed June 18, 2025. https://www.canada.ca/en/health-canada/services/publications/healthy-living/fact-sheet-stayinghealthy-heat.html
- 266. Water Air and Climate Change Bureau. Healthy Environments and Consumer Safety Branch. Adapting to Extreme Heat Events - Guidelines for Assessing Health Vulnerability.; 2011. Accessed August 12, 2025. https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt\_formats/hecs-sesc/pdf/pubs/ climat/adapt/adapt-eng.pdf
- 267. Manitoba Health Seniors and Long-Term Care. Manitoba Heat Alert and Response Guide.; 2025. Accessed August 12, 2025. https://www.gov.mb.ca/health/publichealth/environmentalhealth/docs/heat-alertresponse-system-quide.pdf
- 268. Manitoba Data Science Program. Health Risks During Extreme Heat Events in Manitoba.; 2025.
- 269. Environment and Climate Change Canada. Projected Number of Days with Humidex >35. Preprint posted online 2025.
- 270. World Health Organization. One Health. World Health Organization. 2023. Accessed March 24, 2025. https://www.who.int/news-room/fact-sheets/detail/one-health#:~:text=zoonotic%20diseases%2C%20 which%20are%20infectious%20diseases%20that,West%20Nile%20virus%2C%20Lyme%20disease%20 and%20malaria:
- 271. U.S. Centers for Disease Control and Prevention. About zoonotic diseases. U.S. Centers for Disease Control and Prevention. 2024. Accessed March 24, 2025. https://www.cdc.gov/one-health/about/ about-zoonotic-diseases.html
- 272. World Health Organization. One Health. https://www.who.int/health-topics/one-health#tab=tab 1.
- 273. Boyd R. Costs of Climate Change on the Prairies.; 2023. Accessed April 29, 2025. https://climatewest.ca/ wp-content/uploads/2023/09/Report-Costs-of-Climate-Change-Prairies-Final.pdf
- 274. Public Health Agency of Canada. Lyme disease surveillance in Canada Annual Edition, 2022. 2024. Accessed June 17, 2025. https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/ diseases-conditions/lyme-disease-surveillance-canada-annual-edition-2022/lyme-diseasesurveillance-canada-annual-edition-2022.pdf
- 275. Gasmi S, Koffi J, Nelder M, et al. Surveillance for Lyme disease in Canada, 2009–2019. Canada Communicable Disease Report. 2022;48(5):219-227. doi:10.14745/ccdr.v48i05a05
- 276. Public Health Agency of Canada. Lyme Disease Surveillance Report: Annual Edition, 2020.; 2023. Accessed September 8, 2025. https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/ diseases-conditions/lyme-disease-surveillance-canada-annual-report-2020/lyme-disease-surveillancecanada-annual-report-2020.pdf

- 277. Public Health Agency of Canada. *Lyme Disease Surveillance in Canada Annual Edition*, 2021.; 2023. Accessed September 8, 2025. https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/diseases-conditions/lyme-disease-surveillance-canada-annual-edition-2021/lyme-disease-surveillance-canada-annual-edition-2021.pdf
- 278. Manitoba Health Seniors and Long-Term Care. What is West Nile Virus? Accessed August 13, 2025. https://www.gov.mb.ca/health/wnv/index.html
- 279. Manitoba Health Seniors and Long-Term Care. West Nile Virus Surveillance. *Manitoba Health, Seniors and Long-Term Care*. Preprint posted online 2025.
- 280. Manitoba Health Seniors and Long-Term Care. 2025 Surveillance Data for West Nile virus in Manitoba. September 11, 2025. Accessed October 1, 2025. https://www.gov.mb.ca/health/wnv/stats.html
- 281. Diener A, Dugas J. Inequality-related economic burden of communicable diseases in Canada *Communicable Disease Report*. 2016;42(S1):S1-7-S1-13. doi:10.14745/ccdr.v42is1a02
- 282. CATIE. HIV Basics. Accessed October 14, 2025. https://www.catie.ca/essentials/hiv-basics
- 283. Public Health Agency of Canada. HIV in Canada: 2023 Surveillance Highlights. Preprint posted online 2023.
- 284. Health Canada. HIV and AIDS: Prevention and risks. September 2, 2025. Accessed September 8, 2025. https://www.canada.ca/en/public-health/services/diseases/hiv-aids/prevention-risks.html
- 285. Manitoba Health Seniors and Long-Term Care. Sexually Transmitted and Blood-Borne Infections Surveillance Report. Accessed October 5, 2025. https://www.gov.mb.ca/health/publichealth/surveillance/stbbi/index.html
- 286. Manitoba HIV Program. Manitoba HIV Program Report 2018-2021. Published online 2022.
- 287. Manitoba HIV Program. *Program Update for Indigenous AIDS Awareness Week and World AIDS Day:*December 2024.; 2024. Accessed October 5, 2025. https://mbhiv.ca/wp-content/uploads/2024/11/
  MB-HIV-Program-Update-12.1.2024-FINAL.pdf
- 288. Manitoba Health. HIV in Manitoba 2023: Annual Surveillance Update.
- 289. Taylor M. Infectious diseases among those experiencing homelessness. Homeless Hub. 2018. Accessed August 12, 2025. https://homelesshub.ca/blog/2018/infectious-diseases-among-those-experiencing-homelessness/
- 290. Sorokopud-Jones M, Sharp A, Haworth-Brockman M, et al. Sexually transmitted and blood-borne infections by sex, methamphetamine use, and houselessness before, at, and after HIV diagnosis in Manitoba, Canada. *IJID Regions*. 2024;13. doi:10.1016/j.ijregi.2024.100433
- 291. Manitoba Health Seniors and Long-Term Care. STBBIs in Manitoba 2019-2024 Trends. Preprint posted online February 12, 2025.
- 292. UNAIDS. Understanding Measures of Progress towards the 95–95–95 HIV Testing, Treatment and Viral Suppression Targets.; 2023.
- 293. Hosein S. Syphilis. CATIE. 2023. Accessed June 22, 2025. https://www.catie.ca/syphilis-0
- 294. Tetteh A, Moore V. The rise of congenital syphilis in Canada: threats and opportunities. *Front Public Health*. Frontiers Media SA. 2024;12. doi:10.3389/fpubh.2024.1522698
- 295. Benoit P, Tennenhouse L, Lapple A, et al. Congenital syphilis re-emergence in Winnipeg, Manitoba. *Canada Communicable Disease Report*. 2022;47(2-3):89-94. doi:10.14745/ccdr.v48i23a06
- 296. Public Health Agency of Canada. *Report on Hepatitis B and C in Canada: 2017.* EDITIONS UNIVERSITAIRES E; 2019.
- 297. Miller D. Chlamydia. CATIE. 2023. Accessed October 14, 2025. https://www.catie.ca/chlamydia
- 298. Statistics Canada. *Housing Conditions among First Nations People, Métis and Inuit in Canada from the 2021 Census*. Statistics Canada = Statistique Canada; 2022.
- 299. Manitoba Health Seniors and Long-Term Care. *Epidemiology of Active Tuberculosis in Manitoba, January 2015-December 2024.: 2025.*
- 300. Gozda M, Lesperance S. Winnipeg TB Surveillance Summary. Preprint posted online 2024.

- 301. Forbes N, Montroy J, Salvadori MI, Dubey V. Summary of the National Advisory Committee on Immunization (NACI) Statement: Updated quidance on human papillomavirus (HPV) vaccines. Canada Communicable Disease Report. 2024;50(12):419-425. doi:10.14745/ccdr.v50i12da01
- 302. Shen SC, Dubey V. Addressing vaccine hesitancy: Clinical guidance for primary care physicians working with parents. Can Fam Physician. 2019;65(3):175-181.
- 303. Manitoba Health Seniors and Long-Term Care. Epidemiology and Surveillance. Preprint posted online 2024.
- 304. Manitoba Health Seniors and Long-Term Care. Pertussis (Bordetella pertussis). Government of Manitoba. Accessed April 13, 2025. https://www.gov.mb.ca/health/publichealth/diseases/pertussis.html
- 305. Government of Canada. Measles and rubella weekly monitoring report. 2025. Accessed June 18, 2025. https://health-infobase.canada.ca/measles-rubella/
- 306. Manitoba Health Seniors and Long-Term Care. Epidemiological Summary of Measles in Manitoba.; 2025.
- 307. Manitoba Health Seniors and Long-Term Care. Provincial Respiratory Virus Surveillance Report. Government of Manitoba. Accessed April 13, 2025. https://www.gov.mb.ca/health/publichealth/ surveillance/influenza/index.html
- 308. World Health Organization. Antimicrobial resistance. November 21, 2023. Accessed September 8, 2025. https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance
- 309. Council of Canadian Academies. When Antibiotics Fail The Expert Panel on the Potential Socio-Economic Impacts of Antimicrobial Resistance in Canada.

