

# MESSAGE FROM THE MEDICAL OFFICER OF HEALTH



I am pleased to present the 2024 Community Health Profile, on behalf of Hastings Prince Edward Public Health (HPEPH). This document summarizes the population health status of residents in Hastings and Prince Edward Counties, using key indicators drawn from the most recent five years of publicly available data.

Understanding the current health status of our community is critical to ensure we at HPEPH, as well as local community partners, are able to continuously review and adapt services to prioritize and address community needs. By comparing local data against provincial indicators, we can better understand where our efforts will make the most impact in our community.

This report identifies several key findings, including a better understanding of the impact of the aging population on local services, potential risks of climate change, impact of the increasing cost of living, rates of cancer and chronic disease, and the need for ongoing action to address potential harms related to mental health and substance use. As health is impacted by many factors beyond our control, this report strives to better understand, where possible, the relationship between the social determinants of health and health outcomes. Additionally, we are still learning about the long-term health effects of the COVID-19 pandemic and what this means for the long-term health of our community.

We will use this data to inform future plans within our organization, share key findings with partner agencies, and continue to advocate for community health priorities, as we work together to ensure our residents are able to become as healthy as they can be.

Dr. Ethan Toumishey MD, MPH, CCFP, FRCPC

Medical Officer of Health & CEO

Ether Tournisher

Hastings Prince Edward Public Health

## **ACKNOWLEDGMENTS**

This report would not be possible without the collaborative efforts of many staff at Hastings Prince Edward Public Health.

**Data analysis and report writing** Amanda Lau

Report formatting and graphic design

Sara Hart

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# LAND ACKNOWLEDGMENT

Hastings Prince Edward Public Health is situated and provides services on the traditional territory of the Anishinaabe, Huron-Wendat, and Haudenosaunee people. The land that we preside on today lies on unceded Indigenous territory. Our catchment area is adjacent to the Tyendinaga Mohawk Territory to our east and the Kijicho Manito Madaouskarini Algonquin First Nation to our north. We recognize that when settlers came to this land, they created a legacy of inequities that are ongoing. We are committed to reducing these inequities and, through our work, strive to improve health equity. We recognize the importance of the land and environment in establishing and sustaining optimal health, and we vow to respect this land as we undertake our work. Our organization pledges to build relationships with Indigenous friends and neighbours and recognizes the rich contributions they have provided and continue to provide to this region. This acknowledgment is a first step in our ongoing commitment to reconciliation.

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# **EXECUTIVE SUMMARY**

Understanding the health profile of Hastings and Prince Edward Counties (HPEC) is crucial in developing and implementing programs and services that will effectively promote and protect the health of individuals and the community.

This report presents the demographic profile of HPEC and highlights various health indicators related to overall health, environmental health, healthy growth and development, oral health, infectious disease, substance use, and injury prevention. The findings of this report are intended to assist Hastings Prince Edward Public Health (HPEPH) decision makers and community partners with evidence-informed decision making, planning, and implementation of programs and services that seek to improve the health of HPEC residents.

The report acknowledges the direct and indirect impacts that the COVID-19 pandemic has had on our lives and health. It is beyond the scope of this report to comprehensively examine the health impacts of the pandemic, but HPEPH is committed to understanding and addressing these short- and long-term effects through its services, programs, and policies.

Key findings in this report include the following:



Although HPEC's population is growing, it is also aging. HPEC's population growth of 6.4 per cent seen between the 2016 and 2021 Census, is outpacing that of Ontario's 5.4 per cent growth. A quarter of HPEC's population is 65 years of age or older and is projected to account for one-third of HPEC's population in 2031. This aging population has a wide range of implications, including increased demand for health care services. This may already be apparent based on the high usage of the Ontario Seniors Dental Care Program in HPEC.



HPEC residents are being adversely affected by high food costs. Approximately one-quarter of HPEC residents are food insecure and can spend up to 48 per cent of their income on healthy eating. This calculation is based on a monitoring tool called the Nutritious Food Basket, which measures the cost of basic healthy eating by calculating the cost of food choices that are recommended by Canada's Food Guide and that reflect Canadian eating and purchasing patterns. After factoring in the cost of food and rent, this can lead to little or no money for remaining costs.



Climate change continues to be a serious threat to health outcomes. Climate change may have led to an increased number of heat-related illnesses and could be contributing to the surging number of Lyme disease cases reported in the region from 68 cases in 2020 to 135 cases in 2021.



HPEC residents are experiencing higher rates of hospitalization and deaths related to chronic disease compared to the rest of Ontario.

HPEC respiratory illnesses (i.e., respiratory disease, lower respiratory disease, chronic obstructive pulmonary disease (COPD)) hospitalizations are 1.4 to 1.8 times greater than Ontario as a whole. Some of these chronic diseases could be prevented by health screening or lifestyle changes including quitting smoking, being active, and eating a healthy diet.



Opioid-related harms and deaths continue to affect individuals at an alarming rate. Both locally and provincially, emergency department (ED) visits related to opioids and opioid-related deaths have been on the rise. Locally, there has also been a rise of paramedic and police calls related to opioid poisonings or overdoses. This growing concern was highlighted in Belleville in February 2024. On a single day of that month, first responders in Belleville were called out to 17 opioid-related overdoses in the span of 24 hours. This event garnered national attention but is only a glimpse of the opioid landscape in HPEC.



Educating youth about the potential harms of substance use is important in reducing risky behavior and long-term negative health effects. In general, approximately 80 to 90 per cent of HPEC youth (i.e., 12 to 19 years of age) report they have never smoked or used cannabis. Although promising, this percentage may under report substance use in HPEC youth because of reporting bias (i.e., the selective revealing or suppression of information) or social desirability bias (i.e., the tendency to answer questions in a manner that is viewed favourably by others). Since these biases could thus affect any respondent, there is room for improvement as HPEC numbers are lower than those in other areas in the province.



**Declining positive mental health was apparent even before the COVID-19 pandemic.** Prior to the pandemic, 60 per cent of HPEC residents rated their mental health as very good or excellent, which was seven per cent lower than previous years. This decline in mental health is evident in the rising incidence of mental health related ED visits, most notably between 2015-2016 to 2017-2018 from 2,162.0 to 2,733.5 per 100,000 population, as well as the increasing percentage of pregnant individuals reporting mental health concerns (30 per cent in 2018 to 40 per cent in 2021).



**Sexually transmitted infections may have been under reported during the pandemic.** In addition to declining numbers of primary care providers within the region, the pandemic significantly reduced access to sexual health services such as testing. These factors may have contributed to the rate of chlamydia dropping from 306.21 per 100,000 population in 2019 to 193.74 in 2022. Despite this decline, screening remains important because sexually transmitted and blood-borne infections (STBBIs) do not always show symptoms. In addition, screening and surveillance are important to ensure effective treatment and to limit transmission of STBBIs, including antibiotic-resistant gonorrhea.

## INTRODUCTION

Hastings Prince Edward Public Health (HPEPH) is committed to working together with our communities to help people become as healthy as they can possibly be. This commitment is realized through a combination of our programs, services, and policies that share a goal of protecting and promoting the health of people living in Hastings and Prince Edward Counties (HPEC).

To ensure that we meet the unique needs of HPEC residents, it is crucial to understand the health status of the local population. This community profile is one of the many steps we take to build this understanding. The report reflects the current health of HPEC residents, and is intended to:

- Help the HPEPH Board of Health, HPEPH staff, community partners, elected officials, and other health-care providers understand the general health of HPEC residents.
- Provide health-related information to assist with evidence-informed decision making, planning, and implementation of programs and services that seek to improve the health of HPEC residents.
- Assist HPEPH to fulfil the Ontario Public Health Standards requirement to identify and assess the health needs of an evolving population.

This report presents key demographics and health indicators of the HPEC population and makes comparisons with Ontario as a whole. In creating this report, we acknowledge that health is impacted by many factors that are beyond our control. These factors, collectively referred to as the social determinants of health, can include gender, education, income, employment, and the social environment. Where possible, health data is analyzed by selected social determinants of health; however, the range of social determinants of health we can use to analyze health data is limited by the data sources from which they originated. As such, this report is not an exhaustive health profile. Despite this gap, HPEPH continues to work with local communities and populations to understand the role the social determinants of health play in HPEC health outcomes during the development and delivery of its programs and services.

This report examines the past five years of the most recent publicly available data. In doing so, we acknowledge the direct and indirect impacts that the COVID-19 pandemic has had on our lives and health. These impacts include changes in care-seeking behaviour, decreased transmission of certain illnesses, and decreased access to mental health care and supports, to name a few. As such, some of the trends seen in this report should be interpreted with caution. While this report cannot fully describe the impact of the pandemic, HPEPH is committed to understanding and addressing these short- and long-term effects through services, programs, and policies.

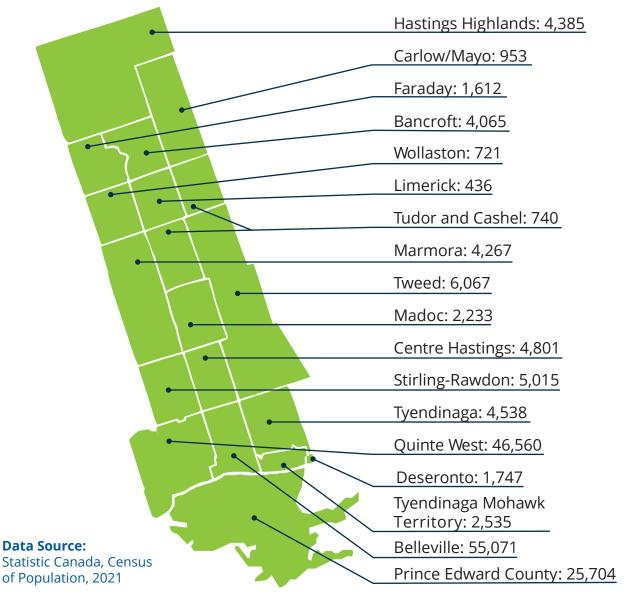
## SOCIO-DEMOGRAPHIC

## **Demographics**

Hastings Prince Edward Public Health (HPEPH) serves Hastings and Prince Edward Counties (HPEC), a region located in southeastern Ontario that covers approximately 7,000 square kilometres. The region consists of Hastings County, the second largest county in Ontario, Prince Edward County, a small community on the eastern end of Lake Ontario, and is adjacent to Tyendinaga Mohawk Territory, a sustainable Kanyen'kehá:ka community.

According to the 2021 Census, HPEC has 171,450 residents and has demonstrated a 6.4 per cent increase since the 2016 Census. This growth is greater than that of Ontario as a whole, which demonstrated a 5.9 per cent increase from 2016 to 2021. Approximately two-thirds of the HPEC population resides in an urban area (i.e., Belleville or Quinte West), while the rest live in a rural area (Figure 1).

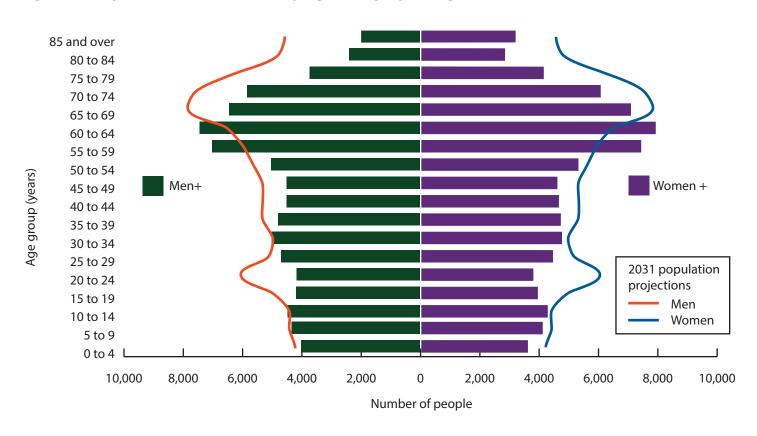
Figure 1: Population of HPEC by township



The median age of HPEC residents is 48.8 years, which is 7.2 years older than that of Ontario. Furthermore, approximately one-quarter of HPEC's residents are 65 years of age or older, which is greater than the 18.5 per cent of Ontario residents that are in the same age group (Figure 2). Based on population projections, individuals 65 years of age or older will make up one-third of HPEC's total population in 2031. This aging population results in a wide range of implications. For example, since older individuals are more likely to have multiple and complex health conditions, it could lead to an increased demand for health care services (Islam & Gilmour, 2024).

Based on the 2021 Census, slightly more than half of HPEC's population is comprised of women+ (i.e., 50.8 per cent compared to the 49.2 per cent that are men+). Statistics Canada defines women+ as women (and/or girls), as well as some non-binary persons, while men+ is defined as men (and/or boys), as well as some non-binary persons.

Figure 2: Population distribution by age category and gender, HPEC, 2021 and 2031



Data Source: Statistic Canada, Census of Population, 2021

Population Projections, 2031, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario

Date Extracted: March 8, 2024

**Data Note:** Statistic Canada uses the term gender to refer to an individual's personal and social identity as man, woman or non-binary person (a person who is not exclusively a man or a woman). Projection categories are labelled as Men and Women, as the Ministry of Health estimates do not specify how non-binary individuals are included.

## Origin, Identity, and Language

HPEC has a higher proportion of residents that identify as Indigenous, and a lower proportion of immigrants who consider themselves racialized compared to Ontario (Table 1).

Table 1: Selected demographic indicators, HPEC and Ontario, 2021

Indicator	HPEC	Ontario
Indigenous Identity (per cent)*	6.8	2.9
First Nations (North American Indian)	4.5	1.8
Métis	2.0	1.0
Inuk (Inuit)	0.1	0.0
Immigrants (per cent)	8.2	30.0
Racialized (per cent)	5.3	34.3

Data Source: Statistic Canada, Census of Population, 2021

Data Note: \*Per cent totals may not be equal to the overall percentage due to rounding.

Approximately eight per cent of the 2021 population living in HPEC was born outside of Canada (i.e., immigrants). Between 1980 to 2021, approximately 46 per cent were admitted under the economic category, 40 per cent were sponsored by family, 12 per cent were refugees, and two per cent were admitted for other reasons. In recent years, the country of birth for immigrants living in HPEC has changed (Table 2).

Table 2: Immigrants' country of birth, HPEC, 2021

All immigrants

Recent immigrants\*\*

Rank	Country of Birth	% of Total Immigrant Population*
1	United Kingdom	25.4
2	United States of America	7.6
3	Other place of birth in Europe	6.4
<b>4</b> Germany		6.3
5	Netherlands	6.0

Rank	Country of Birth	% of Total Immigrant Population*
1	India	30.3
2	Philippines	13.0
3	United States of America	11.5
4	United Kingdom	8.7
5	Syria	6.0

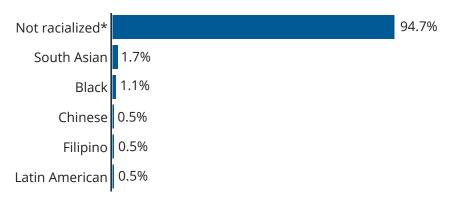
Data Source: Statistic Canada, Census of Population, 2021

Data Note: \*Per cent totals do not equal 100 per cent because only the top five countries are listed.

\*\*Recent immigrants refers to an immigrant who first obtained their landed immigrant or permanent resident status between Jan. 1, 2016, and May 11, 2021.

Racialized groups, which corresponds to the outdated term "Visible Minority" reported in the Census, represent 5.3 per cent of the HPEC population compared to 34.3 per cent of the Ontario population. South Asian, Black, Chinese, Filipino, and Latin American were the most reported racialized groups in HPEC (Figure 3).

Figure 3: Percentage of people by ethno-racial group, HPEC, 2021



Data Source: Statistic Canada, Census of Population, 2021

**Data Note:** \*Not racialized group excludes people who identified as Indigenous.

The majority of HPEC residents spoke either English or French at home (99.2 per cent). Excluding English or French, the top three languages spoken at home were Gujarati, Spanish, and Punjabi (Panjabi); however, when combined, the percentage of individuals speaking these languages at home was less than one per cent (i.e., 0.6 per cent).

#### Selected Social Determinants of Health

The social determinants of health (SDOH) are non-medical factors that influence health outcomes (World Health Organization, n.d.). The SDOHs include education, income, and employment (Government of Canada, 2024). As a result of the role the SDOH play within health equity, examining the SDOH helps to deepen the understanding of the population health needs within a community (Ontario Ministry of Health, 2021).

With regards to selected SDOHs, a greater percentage of HPEC residents have completed a non-university level program (i.e., apprenticeship, trades, college, CEGEP, or other) rather than university level programs, which is the opposite to that of Ontario (Table 3). A lower proportion of HPEC residents are in the labour force (i.e., participation rate) compared to Ontario; however, there is also a lower proportion of HPEC residents unemployed compared to Ontario. And finally, despite the higher portion of the total population, children, and seniors that live in low income, a higher percentage of HPEC residents are homeowners compared to Ontario. Compared to Ontario, HPEC residents also spend less on their monthly shelter costs and a lower percentage of residents spend 30 per cent or more of their income on shelter costs.

Table 3: Selected social determinants of health, HPEC and Ontario, 2021

Indicator	HPEC	Ontario
Education (per cent)*		
Less than high school	17.7	15.3
High school	32.3	27.2
Apprenticeship/trades certificate/diploma	6.9	5
College, CEGEP or other non-university certificate/diploma	26.5	20.3
University certificate or diploma below bachelor level	1.5	2.3
University certificate; diploma or degree at bachelor level or above	15.1	29.9
Population in the labour force, participation rate (per cent)	54.6	62.8
Unemployment rate (per cent)	11.2	12.2
Median after-tax income for individuals aged 15 years and older based on 2020 data (\$)	35,200	37,200
Total population in low income based on 2020 data (per cent)	11.5	12.2
Children in low income based on 2020 data (per cent)	12.4	11.5
Seniors in low income based on 2020 data (per cent)	12.9	12.1
Home ownership rate (per cent)	73.8	68.4
Average monthly shelter costs for owned dwelling (\$)	1,181	1,700
Household spending 30% or more of income on shelter costs (per cent)	11.6	17.7

Data Source: Statistic Canada, Census of Population, 2021

#### **Food Insecurity**

Food insecurity is an "inadequate or insecure access to food due to financial constraints" and is a considerable public health issue (PROOF, n.d.). Some health impacts of food insecurity include developmental challenges in youth, development of chronic diseases such as diabetes and asthma, as well as depression. HPEC has 23.0 per cent of households that are food insecure, which is higher than that of Ontario (17.4 per cent). When compared to all other health units in Ontario, HPEC has the second highest percentage of residents that are food insecure. It should be noted that HPEC's food insecurity estimate should be interpreted with caution due to sampling variability.

To illustrate the impacts of food security more concretely, as reported in HPEPH's "The Real Cost of Eating Well in Hastings and Prince Edward Counties 2023", a family of four that earns a median income, after tax (i.e., approximately \$9,300 per month) in HPEC spends about 12 per cent of their monthly income on healthy food. This calculation is based on a monitoring tool called the Nutritious Food Basket, which measures the cost of basic healthy eating by calculating the cost of food choices that are recommended by Canada's Food Guide and that reflect Canadian eating and purchasing patterns. Despite steady income or financial assistance, some individuals and families can spend up to 48 per cent of their income on healthy food. Meaning that after individuals and families pay for this food cost plus the cost of rental/housing, there is very little or no additional income to cover all other costs and expenses.

## **OVERALL HEALTH**

## **Life Expectancy**

The life expectancy at birth for someone living in HPEC from 2015 to 2017 is estimated at 80.1 years overall, 77.8 years for men, and 82.4 years for females. These life expectancies are less than that of Ontario by about 2.5 years overall, 2.7 years for males, and 2.2 years for females. The life expectancies for HPEC and Ontario residents have not changed significantly since 2011.

## **Quality of Life**

In 2019-2020, approximately nine out of ten HPEC residents were very satisfied or satisfied with life in general, and four out of 10 HPEC residents felt that their life stress was not at all or not very stressful. These percentages have been consistent since 2015-2016 and are similar to those of Ontario overall.

However, when asked how HPEC residents perceived their general health and mental health, a lower percentage of HPEC residents felt that the quality of these were very good or excellent compared to Ontario. These differences were not significant (Figure 4).

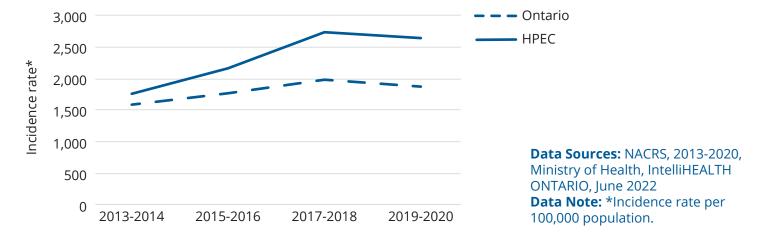
Figure 4: Perceived quality of health and mental health as very good or excellent, HPEC and Ontario, 2019-2020



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Overall Health Snapshot [Internet]. Toronto, ON: King's Printer for Ontario.

ED visits related to mental health have been steadily increasing, both locally and provincially (Figure 5).

Figure 5: Mental health ED visit rate, HPEC and Ontario, 2013-2014 to 2019-2020



HPEC residents that visited the ED for mental health related reasons tend to have an inability to access and attain basic material needs relating to housing, food, clothing, and education (i.e., higher level of material deprivation) and live in communities that are less socially supported (i.e., higher level of social deprivation).

## **Physical Activity and Weight**

Approximately two-thirds of HPEC residents reported physical activity levels at or above those recommended by the Canadian Physical Activity guidelines (Table 4). Despite reporting higher physical activity levels than those of Ontario, a higher percentage of HPEC residents self-reported being overweight or obese (69.1 per cent) based on their body mass index (BMI) compared to Ontario. Amongst these individuals, 35.7 per cent report being obese, which is significantly higher than Ontario (28.3 per cent).

Table 4: Self-reported physical activity and weights (per cent), HPEC and Ontario, 2019-2020

Indicator	HPEC	Ontario
Physical activity at or above recommended level from the Canadian Physical Activity guidelines, adult	59.8	52.1
Overweight or obese (self-reported BMI, adjusted), adults	69.1	63.7
Overweight (self-reported BMI, adjusted), adult	33.3	35.4
Obese (self-reported BMI, adjusted), adult	35.7*	28.3

**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: health behaviour nutrient healthy weight snapshot and physical activity snapshot [Internet]. Toronto, ON: King's Printer for Ontario.

**Data Notes:** \*Significantly higher.

While BMI remains a common method for measuring body fat and diagnosing obesity, it is an "imperfect way to measure body fat in multiple groups given that it does not account for difference across race/ethnic groups, sexes, genders, and age-span" (American Medical Association, 2023). Moreover, being labelled overweight or obese may be stigmatizing, further exacerbating adverse health outcomes due to harmful weight-based stereotypes directed at individuals because of their weight (Puhl & Heuer, 2010).

### **Health-Care Providers**

In HPEC, there has been a decline in the number of residents that have access to a health-care provider (i.e., 85 per cent in 2019-2020 compared to 92.4 per cent in 2015-2016). For comparison, 90 per cent of Ontarians have consistently reported having access to a health-care provider (from 2015-2016 to 2019-2020).

## **ENVIRONMENTAL HEALTH**

Environmental health refers to how the natural and built environments in which we live, play, learn, and work impact our health.

A particularly important issue in environmental health is climate change. The long-term shifts in the average weather conditions such as temperature, precipitation, and winds are impacting our health in complex and multilayered ways (Public Health Agency of Canada, 2022). Climate modelling has projected changes in climate patterns such as increasing number of very hot days (i.e., plus 30 degrees Celsius and hotter days), increasing number of heat waves, decreasing number of winter days (i.e., minus 15 degrees Celsius and colder days), and increasing number of precipitation days (Table 5).

Table 5: Selected projected climate patterns, HPEC, baseline, 2050s, 2080s

	Baseline	2050s		2080s	
	Daseillie	SSP2-4.5	SSP5-8.5	SSP2-4.5	SSP5-8.5
Hottest day temperature	32.7	35.6	36.3	36.5	39.0
Very hot days (days with T <sub>max</sub> >30°C)	9	27	36	38	69
Cold days (Days with T <sub>min</sub> <-15°C)	38	20	14	15	5
Very cold days (days with T <sub>min</sub> <-25°C)	7	2	1	1	0
Days with precipitation ≥10mm	26	30	29	30	32

Data Source: climatedata.ca, 2024

**Data Notes:** The table represents two climate change scenarios: SPP2-4.5 "middle of the road" (i.e., global carbon dioxide emissions remain about the same as they currently are) and SPP5-5.8 "fossil-fueled development" (i.e., development continues to depend on fossil fuels, leading to current global carbon dioxide emissions to double by 2050); as well as three time periods: baseline (i.e., 1981-2010), 2050s (i.e. 2041-2070), and 2080s (i.e., 2071-2100). Each time period represents a the 30-year average of the climate pattern for the specified period of time.

While rising temperatures, changing patterns of precipitation, and more frequent extreme weather events can have easily identifiable health outcomes, such as increased ED visits for heat-related illnesses (Figure 6), injury or death due to extreme storms or floods, climate change can also have long-term physical and mental impacts due to its impacts on food and water quality, safety, and security, the spread of climate-sensitive infectious diseases, as well as worsening chronic conditions.

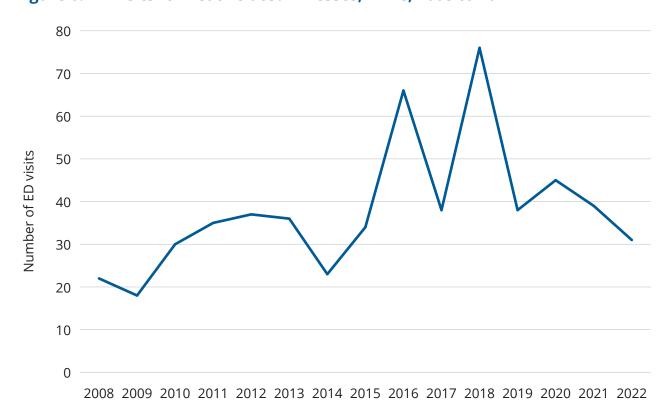


Figure 6: ED visits for heat-related illnesses, HPEC, 2008 to 2022

**Data Source:** National Ambulatory Care Reporting System (NACRS), Canadian Institute for Health Information (CIHI). Distributed by the Ontario Ministry of Health and Long-Term Care: IntelliHEALTH Ontario. Extracted: June 2024.

Furthermore, because of the complex interplay between the SDOH, some populations may be disproportionately affected by climate change, due to higher risk of exposure, higher sensitivity, and reduced capacity to adapt to climate change hazards (Public Health Agency of Canada, 2022). Although these impacts can change throughout a life span, some of the populations at greater risk include pregnant people, very young or very old people, individuals with pre-existing physical and/or mental health conditions, individuals without safe and consistent housing, as well as individuals with limited financial or social supports.

A comprehensive Climate Change Vulnerability Assessment is currently being undertaken by HPEPH in partnership with Kingston, Frontenac, and Lennox & Addington (KFL&A) Public Health and Leeds, Grenville and Lanark (LGL) District Health Unit that will describe climate change and its health impacts in more depth.

## CHRONIC DISEASE

In Ontario, chronic diseases such as cancer, cardiovascular disease, chronic respiratory disease, and diabetes are the leading cause of disability and death (Public Health Ontario, n.d.).

Cardiovascular disease, respiratory disease, and lower respiratory disease are the top chronic diseases that lead to hospitalization in HPEC (Table 6). When compared to Ontario, HPEC has a significantly higher hospitalization rate for most chronic diseases except for cardiovascular disease, ischemic heart disease, and hypertension.

Since 2018, HPEC males tended to have more hospitalizations than HPEC females for cardiovascular disease, ischemic heart disease, respiratory disease, cerebrovascular disease, stroke, and diabetes.

Table 6: Hospitalization for selected chronic diseases, HPEC and Ontario, 2019

	HPEC		Ontario
	Cases	Rate*	Rate*
Cardiovascular disease	2,080	808.9	776.9
Respiratory disease	1,542	688.5	501.2
Lower respiratory disease	620	249.3	148.1
Ischemic heart disease	553	222.9	217.8
Chronic obstructive pulmonary disease (COPD)	538	196.3	111.1
Cerebrovascular disease	441	170.7	132.1
Stroke	384	147.8	113.5
Diabetes	293	147.3	101
Asthma	79	51.6	35.2
Hypertension	35	14.2	16.7

**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Chronic Disease Hospitalization snapshot [Internet]. Toronto, ON: King's Printer for Ontario.

**Data Note:** \*Age-standardized rate per 100,000 population.

#### **Cancer**

After a decrease in 2014 and 2015, the incidence rates of all cancers in HPEC gradually increased and surpassed the incidence rates of all cancers in Ontario (Figure 7). Breast (in females), prostate (in males), and lung cancer had some of the highest incidence rates both locally (Figure 8) and provincially.

Figure 7: Incidence rate\* of all cancers, HPEC and Ontario, 2013 to 2018

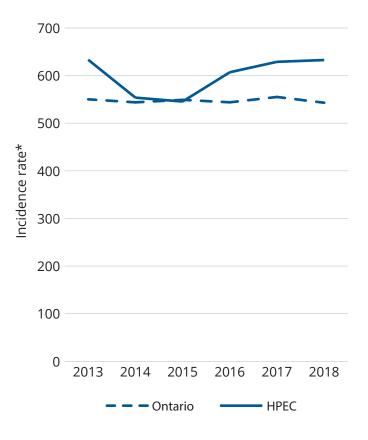
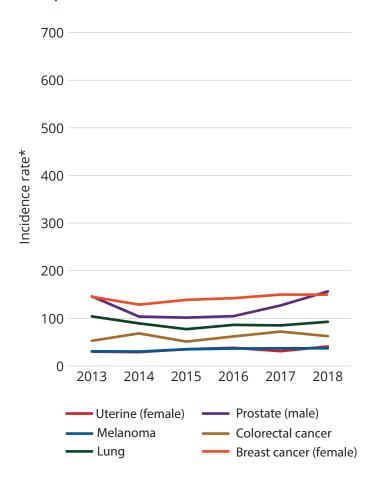


Figure 8: Incidence rate\* of select cancers, HPEC, 2013 to 2018



**Data Source:** Ontario Health (Cancer Care Ontario). Ontario Cancer Profiles [Internet]. 2021 May 7, 2024. Available from: https://profiles.cancercare.on.ca/Screening/atlas.html **Data Notes:** \*Age-standardized rate per 100,000 population.

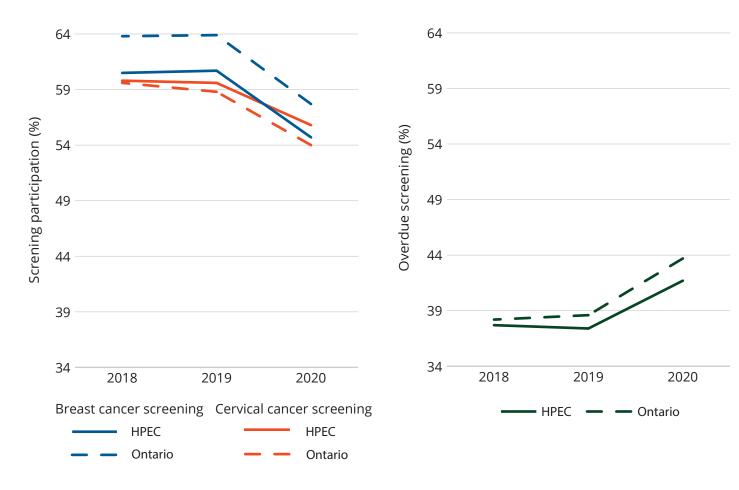
### **Cancer Screening**

Effective cancer screening and early diagnosis are crucial to reducing the impacts of the disease. Screening can help detect pre-cancerous changes or cancer at an early stage when treatments have a better chance of working, thus reducing the burden of the disease (Ontario Health (Cancer Care Ontario), 2021).

HPEC has a lower percentage of breast cancer screening participation (i.e., mammography) (Figure 9). However, it is noteworthy that HPEC has a higher percentage of cervical cancer screening participation (i.e., Pap smear) (Figure 9) and lower overdue colorectal cancer screening percentage compared to Ontario (Figure 10).

Figure 9: Breast and cervical cancer screening participation as a per cent of screen-eligible residents, HPEC and Ontario, 2018 to 2020

Figure 10: Overdue colorectal cancer screening as a per cent of screen-eligible residents, HPEC and Ontario, 2018 to 2020



**Data Source:** Ontario Health (Cancer Care Ontario). Ontario Cancer Profiles [Internet]. 2021 May 7, 2024. Available from: https://profiles.cancercare.on.ca/Screening/atlas.html

In 2020, the rates of screening decreased (i.e., decreased participation rate, increased overdue rate) in both HPEC and Ontario, likely as a result of the pandemic.

# **HEALTHY GROWTH AND DEVELOPMENT**

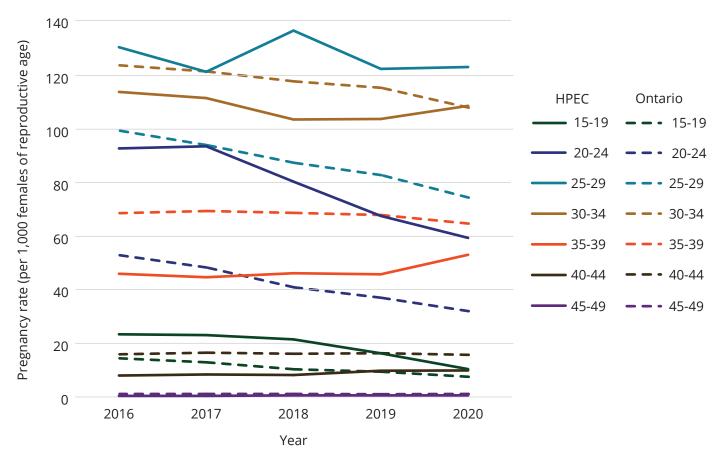
## **Reproductive Health**

From 2016 to 2020 the overall pregnancy rates in both HPEC and Ontario decreased over time. Despite this decrease, the pregnancy rate in HPEC has been significantly higher than that of Ontario.

Pregnant people of reproductive age in HPEC tend to be younger than Ontario, with individuals aged 25 to 29 years in HPEC having the highest pregnancy rate (Figure 11). From 2016 to 2020, the pregnancy rate for individuals in HPEC between the ages of 20 to 29 (i.e., age categories 20 to 24, 25 to 29) tended to be significantly higher than Ontario, while the pregnancy rate of individuals between the ages of 30 to 44 (i.e., age categories 30 to 34, 35 to 39, and 40 to 44) tended to be significantly lower than Ontario.

Notably, from 2016 to 2019 the adolescent pregnancy rates (i.e., 15 to 19 years of age) in HPEC have been significantly higher than that of Ontario (i.e., 1.6 to 2.1 times greater). In 2020, however, despite HPEC's adolescent pregnancy rate being 1.3 times greater than Ontario, the difference was not statistically significant.

Figure 11: Pregnancy rate (per 1,000 females) by age group and year, HPEC and Ontario, 2016 to 2020



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Reproductive Health snapshot [Internet]. Toronto, ON: King's Printer for Ontario.

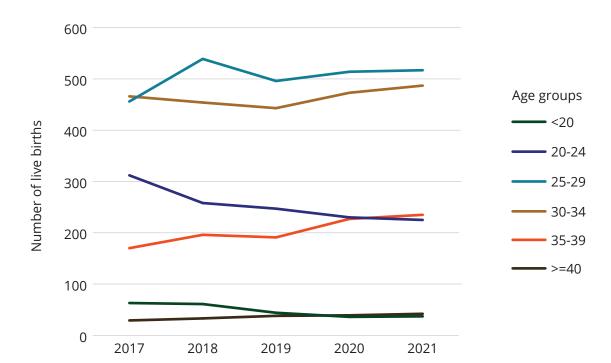


Figure 12: Number of live births, by age group and year, HPEC and Ontario 2017 to 2021

**Data Source:** Better Outcomes Registry & Network (BORN) Ontario, extracted March 20, 2024.

On average, between 2017 to 2021, there were 1,458 live births in HPEC. The birth rate has remained steady and lower than that of Ontario (8.5 births per 1,000 population in HPEC compared to 9.4 births per 1,000 population Ontario). In HPEC, individuals 25 to 29 years of age have the highest number of live births, accounting for one-third of all live births in HPEC (Figure 12). Individuals aged 30 to 34 years followed closely behind, accounting for a little less than one-third of all live births in HPEC.

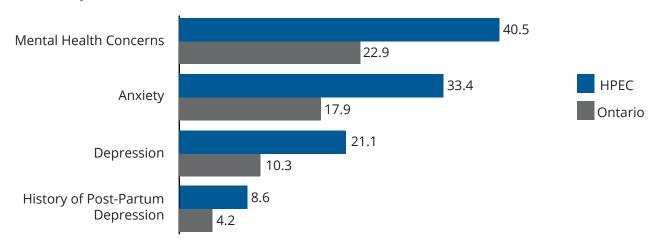
A higher rate of babies born in HPEC tended to be large for their gestational age when compared to Ontario (1.2 to 1.3 times greater).

The average age for a HPEC mother at the birth of their first infant was 27.9 years. In 2021, 39.7 per cent of first-time mothers were between 25 to 29 years of age followed by 26.5 per cent of first-time mothers being between 30 to 34 years of age.

### **Maternal Health**

A greater percentage of pregnant people in HPEC have mental health concerns, anxiety, depression, and a history of postpartum depression compared to that of pregnant people in Ontario (Figure 13). From 2017 to 2021, pregnant people in HPEC have consistently reported a significantly higher prevalence in pregnancy mental health indicators than that of Ontario. Within this same time period, there has been a steady increase in the prevalence for all mental health indicators at both the local and provincial levels.

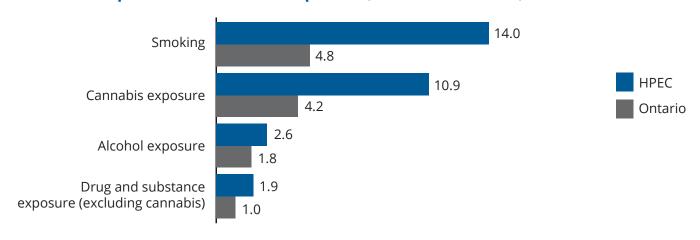
Figure 13: Overall per cent of maternal mental health indicators, HPEC and Ontario, 2021



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Maternal Health snapshot [Internet]. Toronto, ON: King's Printer for Ontario.

From 2017 to 2021, a higher percentage of younger mothers (i.e., less than 25 years of age) reported mental health concerns, anxiety, and depression during pregnancy, followed by mothers 25 to 34 years of age, then mothers 35 years of age and older. The only exception to this trend is when looking at depression. While the highest percentage of mothers reporting depression is still mothers less than 25 years of age, a greater percentage of mothers 35 years or older report depression compared to mothers 25 to 34 years of age.

Figure 14: Overall per cent of maternal exposures, HPEC and Ontario, 2021



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Maternal Health snapshot [Internet]. Toronto, ON: King's Printer for Ontario.

In 2021, a higher percentage of HPEC mothers also reported exposure to various substances including tobacco, cannabis, alcohol, as well as other drugs and substances (Figure 14), as well as lower folic acid use during pregnancy compared to Ontario. From 2017 to 2021, where data was available, HPEC mothers have consistently reported a significantly higher exposure to various substances than Ontario with a few exceptions (i.e., HPEC mothers's alcohol exposure was lower than Ontario mothers in 2018).

## **Early Child Health**

From 2017 to 2021, rates of exclusive breastfeeding were similar between HPEC and Ontario (Figure 15). While this may be the case, the percentage of HPEC infants who were fed breast milk substitutes has been consistently higher in the same time period.

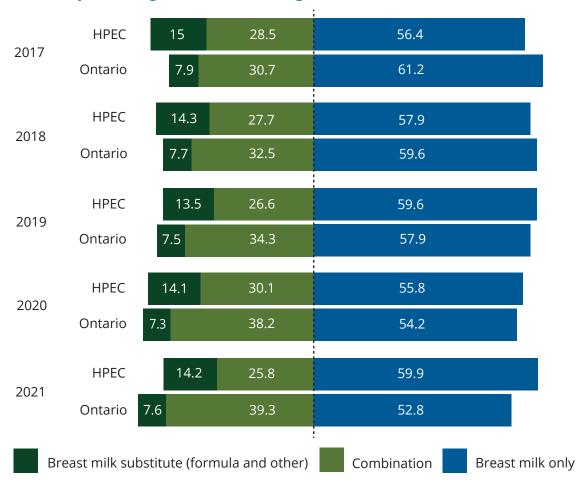
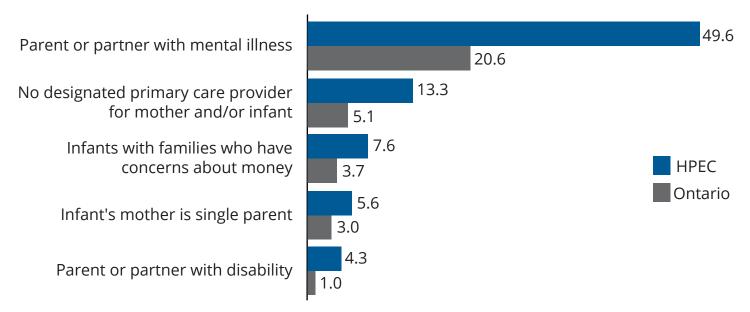


Figure 15: Overall percentage of infant feeding, HPEC, 2017 to 2021

**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Maternal Health snapshot [Internet]. Toronto, ON: King's Printer for Ontario.

As part of the Healthy Babies Healthy Children (HBHC) program, HPEPH screens families with infants to help identify families "with-risk". Based on this screening, HPEC infants and mothers tend to have higher percentages of risk factors for healthy childhood development compared to Ontario. These risk factors include a higher percentage of infants with the following: a mother who is a single parent, no designated primary care provider for the infant and/or mother, infants with families who have concerns with money, parents or parenting partner with mental illness, and parents or parenting partner with a disability (Figure 16). These percentages have been consistently higher than Ontario since 2018.

Figure 16: Percentage of infants with risk factors for healthy childhood development, HPEC and Ontario, 2022



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Healthy Child Development [Internet]. Toronto, ON: King's Printer for Ontario.

#### Early Development Instrument

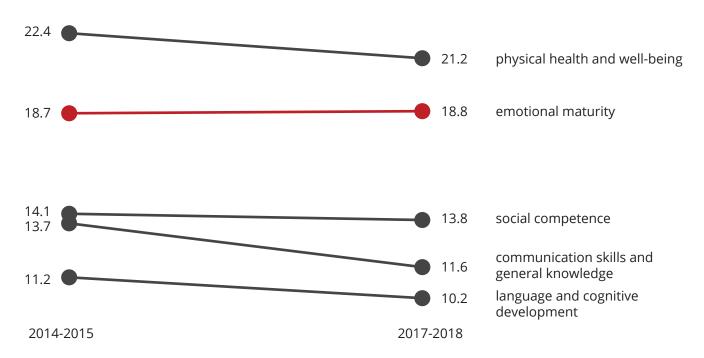
The Early Development Instrument (EDI) is a questionnaire that can be used by kindergarten teachers to measure a child's ability to meet age-appropriate developmental expectations in five areas: physical health and well-being, social competence, emotional maturity, language and cognitive development, and communication skills and general knowledge. Provincially, the EDI is collected every three years, with the first collection (i.e., cycle) happening in the 2005-2006 school year and the last cycle being completed in the 2017-2018 school year.

Children who fall into a "vulnerable" category on an EDI scale may be at risk for developmental problems later in childhood because they may be struggling but may not have been doing so visibly; thus, they have not already been identified as in need of additional support (Offord Centre for Child Studies, n.d.). This vulnerable group represents children for whom costeffective, universal prevention programs are likely to make a difference.

In 2014-2015 and 2017-2018, approximately one-third of HPEC children were scored as vulnerable on one or more domains and one-fifth of them were vulnerable on two or more domains. This is greater than the number of Ontario children who were scored as vulnerable (29.6 per cent and 13.9 per cent respectively in 2017-2018).

When looking at the five developmental domains that the EDI examines, the highest percentage of HPEC children were vulnerable in the physical health and well-being domain, while lowest percentage of HPEC children were vulnerable in the language and cognitive development domain. This trend was similar for Ontario. From 2014-2015 to 2017-2018, the percentage of HPEC children with vulnerabilities in most of the domains decreased, with the exception of emotional maturity, which saw a marginal increase in percentage of children that were vulnerable (Figure 17).

Figure 17: Percentage of infants vulnerable on Early Development Instrument (EDI) domains, HPEC, 2014-2015 and 2017-2018



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Early Development Instrument [Internet]. Toronto, ON: King's Printer for Ontario.

The biggest difference between HPEC and Ontario in the percentage of children vulnerable was in the domains of emotional maturity and physical health and well-being (average difference of 7.0 per cent and 5.6 per cent respectively).

# CHILDHOOD AND SCHOOL-BASED IMMUNIZATION

Immunizations are one of our best tools to protect us from certain infectious diseases. Vaccines work with the body's natural defences to develop protection against disease. Vaccines may prevent us from getting the disease, or if we do become infected, help prevent us from getting really sick (Government of Canada, 2023). Achieving and maintaining high immunization coverage (i.e., proportion of population that is appropriately immunized) is essential for the effective prevention and control of vaccine preventable disease (Ontario Agency for Health Protection and Promotion (Public Health Ontario), 2024).

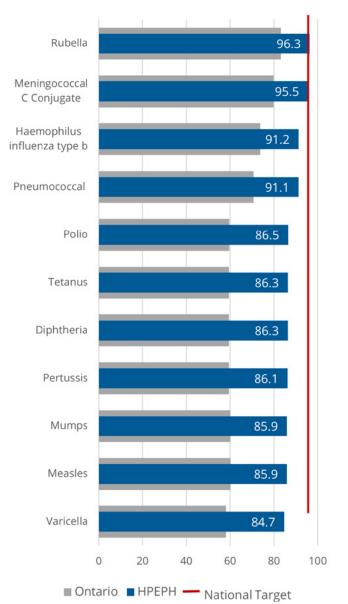
Ontario's Immunization of School Pupils Act (ISPA) requires that children and adolescents under 18 years of age be vaccinated against the following nine diseases: diphtheria, tetanus, polio, pertussis (i.e., whooping cough), measles, meningococcal disease, mumps, rubella, and varicella (i.e., chicken pox). These publicly funded routine infant and childhood immunizations, which are recommended at four to six years and 14 to 16 years of age, are primarily delivered by community-based primary care providers. Under the ISPA, immunizations by community providers should be reported to public health by parents. As such, HPEPH partners with schools to ensure we have an up-to-date immunization record for all students attending school.

At both the local and provincial level, coverage rates saw a considerable decline during the 2020-2021 school year due to service gaps realted to the pandemic. Considerable work has to been done locally and provincially to minimize gaps in immunization coverage. These efforts are seen in the improved immunization coverage rates evident in the 2022-2023 school year (Figure 18); however, the rates still remain lower than pre-pandemic rates.

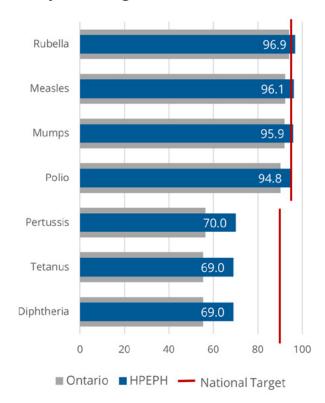
During the 2022-2023 school year, coverage rates for all ISPA vaccines in HPEPH were higher than that of Ontario (Figure 18). Many of HPEPH coverage rates met or were within 10 per cent or less of national targets, with the exception of pertussis, diphtheria, and tetanus in 17-year-olds.

Figure 18: Immunization coverage rate (per cent) for IPSA vaccines, HPEPH and Ontario, 2022-2023 school year

#### a) 7 years of age



#### b) 17 years of age

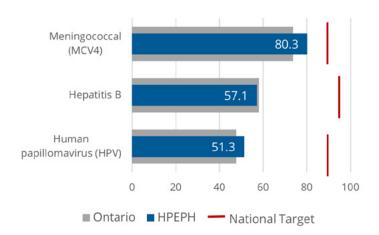


**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Immunization Coverage Report for School Pupils in Ontario: 2019-20 to 2022-23 School Years – Appendix Tables. **Data Note:** Coverage reflects immunizations including catch-up immunization received as of Aug. 31, 2023.

Additionally, as part of Ontario's publicly funded school-based immunization program, HPEPH delivers vaccines for hepatitis B, human papilloma virus (HPV), and quadrivalent meningococcal conjugate C (MCV4) to children in Grade 7. Only MCV4 is mandatory under the ISPA.

Though HPEPH coverage rates are higher than Ontario for meningococcal (MCV4) and human papillomavirus (HPV) vaccines, there is still room for improvement to attain national goals (Figure 19).

Figure 19: Immunization coverage rate (per cent) for school-based vaccines, HPEPH and Ontario, 2022-2023 school year



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Immunization Coverage Report for School Pupils in Ontario: 2019-20 to 2022-23 School Years – Appendix Tables.

Data Note: Coverage reflects immunizations including catch-up immunization received as of Aug. 31, 2023.

## **ORAL HEALTH**

## **Oral Health School Screening**

As part of the Ontario Public Health Standards, public health units are mandated to conduct oral health screenings in elementary schools. Oral health screenings are important for prevention and early identification of oral health problems (Ontario Agency for Health Protection and Promotion (Public Health Ontario), 2024).

In the 2022-2023 school year, 59.3 per cent of senior kindergarten (SK) and 43.8 per cent of Grade 2 students that completed an oral health school screening were cavity-free in HPEC (Table 7). Although this percentage is better than the previous school year, for SK students in particular, this percentage does not match that of pre-pandemic levels.

Table 7: Cavity-free students receiving an oral health school screening, HPEC, 2018-2019 to 2022-2023 school years

	2018-19	2019-20	2020-21	2021-22	2022-23
Senior Kindergarten	61.6	62.2	NA	54.5	59.3
Grade 2	42.1	42.5	NA	42.0	43.8

Data Source: Internal Data, OHISS

Data Note: NA – Not available due to suspension of Oral Health School Screening Program related to COVID-19.

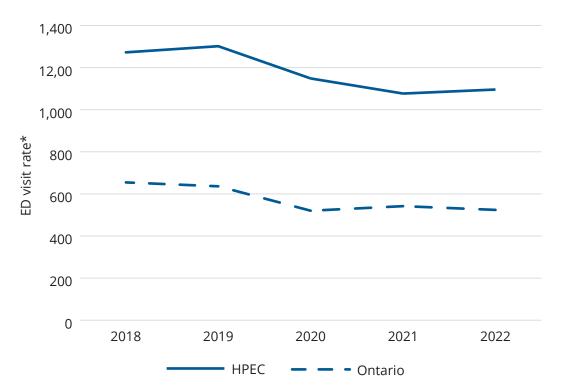
Of those students who were not cavity-free, 29.2 per cent of SK students and 25.6 per cent of Grade 2 students had urgent dental needs.

#### **General Oral Health and ED Visits**

In 2017-2018, approximately three-quarters of HPEC residents reported visiting a dental professional for a checkup at least once a year, and 66.2 per cent reported having insurance or a government program that covered all or part of dental expenses. These proportions are similar to that of Ontario (78.2 per cent and 68.1 per cent respectively). In the same year, approximately 60 per cent of HPEC residents 65 years old and older did not have insurance or government program covering dental costs compared to 57.3 percent of Ontarians. This large proportion both locally and provincially could account for the high demand for the Ontario Seniors Dental Care Program upon its launch in 2019.

HPEC residents have consistently had more visits to the ED for oral health conditions (Figure 20), surpassing Ontario's ED rate by around two times from 2018 to 2022. HPEC residents who visited the ED for oral health conditions tend to have a higher level of material deprivation and social deprivation.

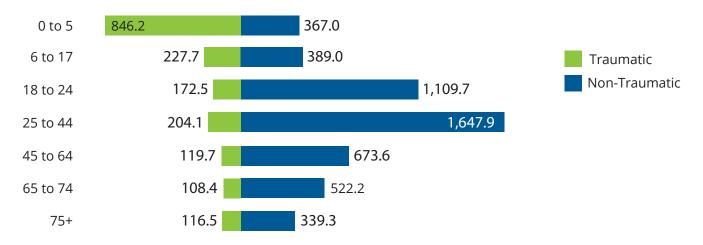
Figure 20: ED visit rate\* for oral health conditions, HPEC and Ontario, 2018 to 2022



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Oral Health Emergency Department Visits [Internet]. Toronto, ON: King's Printer for Ontario. **Data Note:** \*Age-standardized rate per 100,000 population.

When examining the types of oral health ED visits by age, traumatic ED visit rates were highest among residents 0 to five years of age, while non-traumatic ED visits were highest in residents between the ages of 25 to 44 years of age (Figure 21).

Figure 21: Age-specific ED visit rates\* for oral health conditions (traumatic and non-traumatic), HPEC, 2022



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Oral Health Emergency Department Visits [Internet]. Toronto, ON: King's Printer for Ontario. **Data Note:** \*Rates per 100,000 population.

# INFECTIOUS DISEASE

Ontario's <u>Health Protection and Promotion Act (HPPA)</u> and <u>Ontario Regulation 135/18</u> requires that suspected and confirmed cases of certain diseases (collectively called diseases of public health significance (DOPHS)) are reported to the Medical Officer of Health. Reporting of these diseases and related conditions is vital to controlling and preventing the spread of these diseases.

This section highlights the number of cases and rates of enteric diseases, vector-borne and zoonotic diseases, sexually transmitted and blood-borne infections, as well as other infectious diseases in HPEC between 2019 to 2023. It should be noted that the COVID-19 pandemic may have impacted the reported rates of various diseases. More information about these DOPHS and other diseases can be found on the HPEPH DOPHS Dashboard.

#### **Enteric Disease**

Enteric diseases are typically acquired through the ingestion of food and water contaminated by viruses, bacteria, or parasites that affect the gastrointestinal tract (Ontario Agency for Health Protection and Promotion (Public Health Ontario), n.d.).

In 2019 to 2023, the most commonly reported enteric diseases in HPEC were campylobacter enteritis and salmonellosis (Table 8). These diseases accounted for 39.1 per cent and 25.4 per cent, respectively, of all enteric diseases reported in HPEC in that five-year period.

Table 8: Number and rate\* of enteric diseases, HPEC and Ontario, 2019 to 2023 combined

		НРЕС	Ontario	
Disease	# of cases	5-year average rate*	5-year average rate*	
Campylobacter enteritis	177	20.3	16.2	
Salmonellosis	115	13.2	12.4	
Giardiasis	69	7.9	6.4	
Cryptosporidiosis	54	6.2	3.7	
Verotoxin-producing Escherichia coli (VTEC)	18	2.1	1.2	
Cyclosporiasis	15	1.6	2.7	
Yersiniosis	1	0.1	1.5	
Shigellosis	1	0.1	1.5	
Hepatitis A	1	0.1	0.8	
Typhoid	1	0.1	0.6	
Listeriosis	1	0.1	0.5	
Amebiasis	0	0.0	0.4	
Cholera	0	0.0	0.0	
Botulism	0	0.0	0.0	

**Data Source:** iPHIS via PHO ID Query, 2019 to 2023, extracted March 2024.

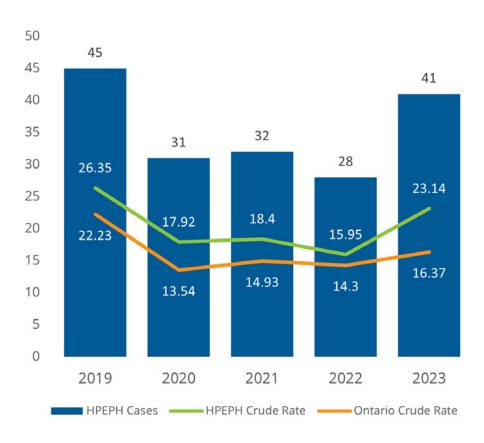
**Data Note:** \*Crude rate per 100,000 population.

### Campylobacter Enteritis

From 2019 to 2023 the rates of campylobacter enteritis in HPEC have been higher than that of Ontario (Figure 22). The disease is more often reported in males than females, and in individuals aged 50 years or older. Although campylobacter infections are generally mild, they can be fatal among the very young, elderly, and immunosuppressed individuals (World Health Organization, 2020).

The main route of transmission for the disease is food-borne through the consumption of undercooked meat, poultry, unpasteurized milk, or contaminated water (World Health Organization, 2020).

Figure 22: Yearly cases and rates\* of campylobacter enteritis, HPEC and Ontario, 2019 to 2023



Data Source: iPHIS via PHO ID Query, 2019-2023, extracted March 2024.

**Data Note:** \*Crude rate per 100,000 population.

#### **Vector-Borne and Zoonotic Diseases**

Vector-borne and zoonotic diseases are transmitted to humans from an animal or insect and can cause many different types of illness in people and animals.

Between 2019 to 2023, Lyme disease accounted for the greatest number of vector-borne and zoonotic diseases in HPEC (Table 9), with HPEC's five-year average rate being approximately six times greater than Ontario.

Table 9: Number and rate\* of vector-borne and zoonotic diseases, HPEC and Ontario, 2019 to 2023 combined

	Н	Ontario	
Disease	# of cases	5-year average rate*	5-year average rate*
Lyme disease	492	56.5	9.2
West Nile virus	2	0.2	0.2
Trichinosis	2	0.2	0
Malaria	0	0	NA
Q fever	0	0	0.1
Brucellosis	0	0	0
Anaplasmosis	0	0	0
Powassan virus	0	0	0
Babesiosis	0	0	0
Rabies	0	0	0

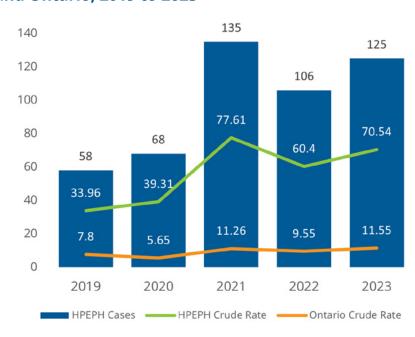
**Data Source:** iPHIS via PHO ID Query, 2019-2023, extracted March 2024. **Data Note:** \*Crude rate per 100,000 population, NA – Not available.

#### Lyme Disease

The yearly cases of Lyme disease in HPEC have been increasing in recent years (Figure 23). The greatest increase was between 2020 and 2021, with the number of cases doubling between those years.

The complex interplay between climate change, human behaviour, and land usage may explain the increasing number of Lyme disease cases. The longer, hotter summers and milder winters have promoted tick survival, growth, and reproduction. The prolonged window in which ticks are

Figure 23: Yearly cases and rates\* of Lyme Disease, HPEC and Ontario, 2019 to 2023



**Data Source:** iPHIS via PHO ID Query, 2019-2023, extracted March 2024. **Data Note:** \*Crude rate per 100,000 population.

active and people are outside has increased the window of opportunity for the two to physically interact. The expanded range, abundance, and activity of rodent, bird, and deer hosts that carry the disease also promotes a larger tick population (Public Health Agency of Canada, 2022).

## **Sexually Transmitted and Blood-Borne Infections**

Sexually transmitted and blood-borne infections (STBBIs) are transmitted through the exchange of bodily fluids (e.g., blood, vaginal fluid, semen, or other fluids) primarily during sexual contact but also through activities such as sharing needles during injection drug use.

During the COVID-19 pandemic there was a reduced demand for and access to services related to preventing STBBIs due to changes in the availability of health care, health seeking behaviour, public health follow-up, and case entry during the pandemic (Ontario Agency for Health Protection and Promotion (Public Health Ontario), 2024). As such, data from 2020 to 2023 should be interpreted with caution.

Chlamydia was the most reported STBBI in HPEC (Table 10) and is the most common reportable sexually transmitted infection in Canada (Public Health Agency of Canada, 2023). In HPEC, the chlamydia rate was almost six-times higher than that of gonorrhea, the second most reported STBBI in HPEC. For most STBBIs, the five-year local crude rate was lower than that of the provincial rate.

Table 10: Number and rate\* of STBBI, HPEC and Ontario, 2019 to 2023 combined

Disease	HPEC		Ontario
	# of cases	5-year average rate*	5-year average rate*
Chlamydia	1963	224.4	275.9
Gonorrhea	340	39.1	75.1
Hepatitis C	257	29.5	24.7
Infectious syphilis	82	9.4	19.7
HIV	15	1.7	6.1
Latent syphilis	13	1.5	8.2
Hepatitis B, acute	11	1.3	0.7
Other syphilis	5	0.6	1.6
AIDS	0	0	0.4

Data Source: iPHIS via PHO ID Query, 2019-2023, extracted March 2024.

**Data Note:** \*Crude rate per 100,000 population.

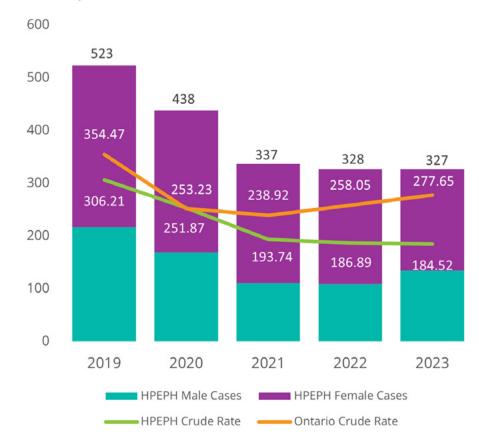
### Chlamydia

While the rates of chlamydia were high at both local and provincial levels, the number of cases in HPEC has been decreasing over the past five years (Figure 24). As noted earlier, this decrease may have been impacted by reduced access and demand for STBBI services during the COVID-19 pandemic (Ontario Agency for Health Protection and Promotion (Public Health Ontario), 2024).

In HPEC, individuals aged 15 to 24 years account for about two-thirds of the cases in the last five years. The number of cases was between 1.4 to 2.1 times greater in females than males. Similar trends are also seen at a national level.

Approximately 50 per cent of males and 70 per cent of females infected with chlamydia have no symptoms,

Figure 24: Yearly cases and rates\* of chlamydia, HPEC and Ontario, 2019 to 2023



**Data Source:** iPHIS via PHO ID Query, 2019-2023, extracted March 2024 **Data Note:** \*Crude rate per 100,000 population.

and as such, are unaware they have the infection (Government of Canada, 2023). Left untreated, chlamydia can result in painful health problems and infertility (Government of Canada, 2023).

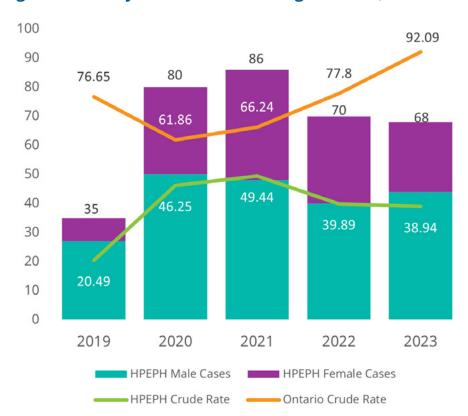
#### Gonorrhea

While the rates of gonorrhea are high in HPEC, the rates are lower than that of Ontario (Figure 25). About one-quarter of gonorrhea cases are in individuals aged 30 to 34 years, with the disease being reported 1.3 to 3.4 times higher in males than females. This difference was seen in Ontario as a whole.

Left untreated, gonorrhea can cause infertility, pelvic inflammatory disease, and disseminated gonococcal disease (Sawatzky, et al., 2023). In recent years there has been a rise of antibiotic resistance in gonorrhea. This rise is an important public health concern, and regional and national surveillance are essential to ensure the effective treatment therapies are recommended (Sawatzky, et al., 2023).

Understanding the risk factors associated with STBBI transmission and acquisition, as well as safer sex practices, such as condom use, are key to primary prevention (Public Health Agency of Canada, n.d.).

Figure 25: Yearly cases and rates\* of gonorrhea, HPEC and Ontario, 2019 to 2023



**Data Source:** iPHIS via PHO ID Query, 2019-2023, extracted March

2024.

**Data Note:** \*Crude rate per 100,000

population.

### **Other Infectious Diseases**

Other DOPHS are not as easily categorized because they have various modes of transmission and acquisition (Table 11). Of these diseases, latent tuberculosis accounts for 55.5 per cent of cases.

Table 11: Number and rate\* of other infectious diseases, HPEC and Ontario, 2019 to 2023 combined

		НРЕС	Ontario
Disease	# of cases	5-year average rate*	5-year average rate*
Latent tuberculosis	303	34.8	38.4
Invasive group A streptococcal	110	12.6	7.9
Invasive streptococcus pneumoniae	89	10.2	7.3
Encephalitis/meningitis	23	2.6	0.9
Infectious tuberculosis	9	1	5.1
Legionellosis	9	1	2.4
Blastomycosis	3	0.3	0.6

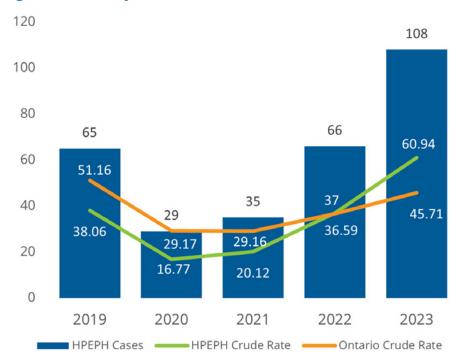
**Data Source:** iPHIS via PHO ID Query, 2019-2023, extracted March 2024.

**Data Note:** \*Crude rate per 100,000 population.

#### Latent Tuberculosis

Latent tuberculosis (LTBI) cases have increased 1.6 times from 2022 to 2023 in HPEPC, with the rate of incidence surpassing that of Ontario within the same time period (Figure 26). LTBI is reported more often in females and in individuals between 20 to 24 years of age.

Figure 26: Yearly cases and rates\* of latent tuberculosis, HPEC and Ontario, 2019 to 2023



**Data Source:** iPHIS via PHO ID Query, 2019-2023, extracted March 2024.

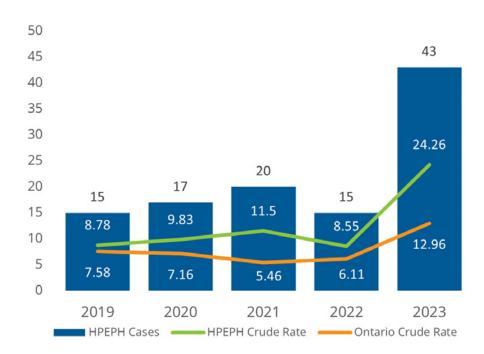
**Data Note:** \*Crude rate per 100,000 population.

Even though individuals that have LTBI are not sick and not contagious, about one in ten people with LTBI in Canada will develop active tuberculosis (TB) disease (Public Health Agency of Canada, 2018). While the rate of TB is low in Canada, TB is a leading cause of death worldwide, despite being preventable and curable (Public Health Agency of Canada, 2018). Within Canada as a whole, TB disproportionately affects First Nations on-reserve, Inuit, and foreign-born individuals, particularly refugees from countries with a high incidence of TB. These populations may be at greater risk of infection and disease development due to the health inequities that result from SDOH such as poverty, food insecurity, inadequate housing, and overcrowding (Public Health Agency of Canada, 2018).

### Invasive Group A Streptococcal Disease

From 2022 to 2023, the cases of invasive Group A streptococcal disease (iGAS) in HPEC increased 2.8 times, surpassing the 2.1 times increase in Ontario for the same time period (Figure 27).

Figure 27: Yearly cases and rates\* of invasive Group A streptococcal, HPEC and Ontario, 2019-2023



**Data Source:** iPHIS via PHO ID Query, 2019-2023, extracted March 2024.

**Data Note:** \*Crude rate per 100,000 population.

iGAS is reported more often in males that are 45 years of ages and older in HPEC. In 2023, there was an increase in the number of iGAS cases seen in HPEC residents 10 years of age and under. Although there were less than five cases in HPEC, in previous years there were generally no cases of iGAS reported in this population.

Group A streptococcal disease (GAS) is bacteria that is typically found on the skin or throat. While some people may have no or mild symptoms with GAS, in rare cases, the bacteria can become invasive (i.e., iGAS) and enters the blood or deep tissue. When this entry occurs, it can cause life-threatening illness (Ontario Agency for Health Protection and Promotion (Public Health Ontario), n.d.). Globally, iGAS cases have been on the rise. Although there are many factors that may have caused this surge, experts suggest that reduced disease exposure and immunity in children 10 years of age and under, as a result of social distancing as part of the pandemic may have led to increased vulnerability and higher incidences of iGAS (Cyr, 2024).

### SUBSTANCE USE

Substance use refers to the consumption of alcohol, tobacco, cannabis, opioids, and other drugs. While some people are able to use substances without any apparent harm to their health or well-being, others may experience real damage to their health, lives, and relationships (Chief Medical Officer of Health of Ontario, 2024). From a prevention and treatment standpoint, it is important to note the factors that drive substance use are multifaceted. As such it is important to use an all-of-society approach to improve health and reduce substance use harms (Chief Medical Officer of Health of Ontario, 2024). The following section highlights use of selected substance use and their associated harms.

#### **Alcohol**

From 2015-2016 to 2019-2020, a higher proportion of HPEC residents reported exceeding Canada's low-risk alcohol guidelines compared to Ontario. This difference was significantly higher in 2017-2018, with 58.7 per cent of HPEC residents reporting they exceeded the low-risk alcohol guidelines compared to 43.9 per cent of Ontario residents (Table 12). A similar trend was seen for HPEC residents who reported a heavy drinking rate (i.e., drinking five or more drinks on at least one occasion per month in the past 12 months); however, the overall proportions were lower (i.e., ranging for 18.0 to 28.9 per cent for HPEC residents).

In addition, a lower proportion of HPEC residents reported lifetime abstinence or consuming no alcoholic drinks in the past 12 months compared to Ontario residents.

Table 12: Self-reported alcohol use (per cent), by sex, HPEC and Ontario, 2015-2016 to 2019-2020

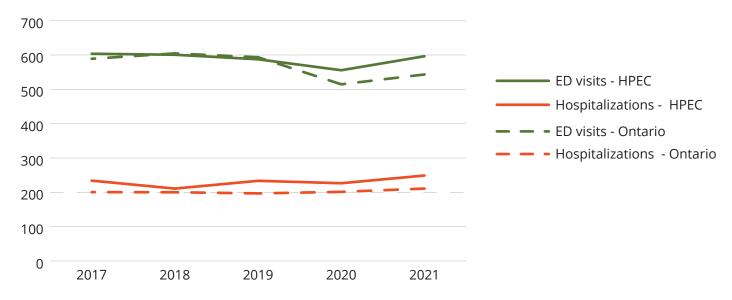
		HPEC			Ontario	
	2015-16	2017-18	2019-20	2015-16	2017-18	2019-20
Exceeding low-risk alcohol drinking guideline	49.9	58.7*	46.2	44.1	43.9	41.7
Males	62.9*	64.7	51.6	50.6	49.5	47.4
Females	37.5	53.1	41.1	38	38.5	36.2
Self-reported heavy drinking rate	18.0	28.9*	16.4	18.5	17.9	16
Males	23.5	36.5*	19	23.5	21.6	19.6
Females	12.9	21.5	13.7	13.7	14.3	12.6
Lifetime abstinence or consuming no alcoholic drinks in the past 12 months	19.5	15**	24.2	21.1	22.6	24.2
Males	16.7	13	25.9	17.5	18.6	20.7
Females	22.2	16.8**	22.5	24.5	26.3	27.5

Data Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Alcohol use snapshot [Internet]. Toronto, ON: King's Printer for Ontario.

Data Note: \*Significantly higher than ON, \*\*Significantly lower than ON.

The rates of ED visits and hospitalizations for conditions entirely caused by alcohol have remained steady from 2017 to 2021 (Figure 28). The HPEC rates were not significantly different from Ontario.

Figure 28: Rates\* of ED visits and hospitalizations for conditions entirely caused by alcohol, HPEC and Ontario, 2017 to 2021



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Alcohol harms snapshot [Internet]. Toronto, ON: King's Printer for Ontario. **Data Note:** \*Age-standardized rate per 100,000 population.

#### **Tobacco**

Between 2015-2016 to 2019-2020, approximately one-third of HPEC residents reported that they had never smoked. This proportion, however, was significantly lower than Ontario residents (Table 13). This difference was especially apparent in females.

A significantly higher proportion of HPEC residents reported daily or occasional smoking compared to Ontario residents. Additionally, throughout the years, approximately one-fifth of HPEC residents reported daily smoking. This proportion is almost twice that of Ontario residents. The difference is seen particularly in females, with their reported proportions more than doubling that of Ontario females (Table 13).

Table 13: Self-reported smoking (per cent), by sex, HPEC and Ontario, 2015-2016 to 2019-2020

		HPEC			Ontario	
	2015-16	2017-18	2019-20	2015-16	2017-18	2019-20
Never smoked	34.8**	33.1**	34.9**	44.6	46.2	49.3
Males	28.5	27.1**	29.0**	36.8	37.3	41.2
Females	40.1**	38.4**	40.2**	51.7	54.6	57
Current smoking rate (daily or occasionally)	25.8*	28.6*	21.0*	18.1	16.8	14.2
Males	26.4	30.1*	25.6	21.6	20.4	17.3
Females	25.4*	27.3*	16.9	14.7	13.3	11.2
Daily smoking rate	22.8*	23.8*	17.3*	13	12.2	10.1
Males	23.2	24.4*	21.1	15.3	14.4	12.3
Females	22.7*	13.1*	14.1*	10.9	10.1	8

**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Smoking snapshot [Internet]. Toronto, ON: King's Printer for Ontario.

Data Note: \*Significantly higher than ON, \*\*Significantly lower than ON.

#### **Cannabis**

The proportion of HPEC and Ontario residents that have never used cannabis has decreased over the years, with the proportion of HPEC residents reporting never using cannabis being lower than that of Ontario (Table 14).

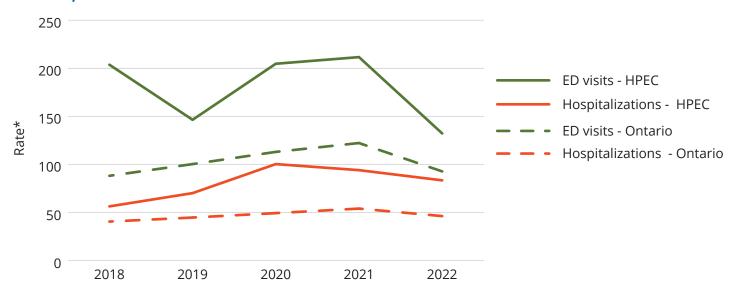
Table 14: Self-reported cannabis use (per cent), HPEC and Ontario, 2015-2016 to 2019-2020

		HPEC		Ontario		
	2015-16	2017-18	2019-20	2015-16	2017-18	2019-20
Never used cannabis	49.3	43.8	42.4	59	55.6	52.7

**Data Source:** Canadian Community Health Survey 2019/2010 [2015-16 to 2019-20], Statistics Canada, Share File, Ontario Ministry of Health.

Between 2018 to 2022, the rates of ED visits for cannabis related harms in HPEC was higher than that of Ontario (Figure 29). On average, between these years, the rates for hospitalization and ED visits for HPEC was 1.8 times higher than Ontario's rate.

Figure 29: Rates\* of ED visits and hospitalizations for cannabis related harms, HPEC and Ontario, 2018 to 2022



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Cannabis Harms snapshot [Internet]. Toronto, ON: King's Printer for Ontario. **Data Note:** \*Age-standardized rate per 100,000 population.

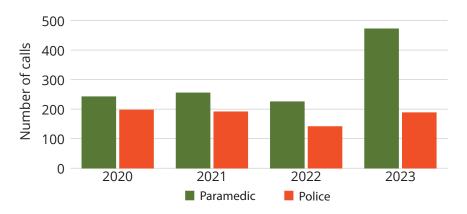
### **Opioids**

Opioids are a particularly important public health issue given the current opioid toxicity crisis in Canada. Although not reflected completely in the data below, the local opioid crisis in Belleville sparked national attention in February 2024, with 17 overdoses being reported in 24 hours.

HPEPH has created an <u>Opioid Monitoring Dashboard</u> with local data about the opioid landscape in HPE as a tool for health-care professionals, partners, and the public. This dashboard can be used in conjunction with Public Health Ontario's <u>Interactive Opioid Tool</u> and Ontario Drug Policy Research Network (ODPRN)'s <u>Ontario Opioid Indicator Tool</u>. The following section provides a high-level overview of the information available on these dashboards.

HPEC saw a steady number of paramedic and police calls related to opioid poisonings or overdoses from 2020 to 2022 (Figure 30). In 2023, however, while the number of calls for both paramedic and police increased, paramedic calls nearly doubled from the previous year.

Figure 30: Paramedic and police calls related to opioid poisonings or overdoses, HPEC, 2020-2023



**Data Source:** HQPS, BPS, OPP data via HPEPH's Opioid Monitoring Dashboard.

ED visits for opioid poisonings and rates of opioid-related death increased between 2019 to 2020 (Figures 31 and 32). ED visits for opioid poisonings and opioid-related deaths were more likely to occur in males between the ages of 12 to 44 years. In ED visits for opioid poisonings, the majority of patients were admitted to the Belleville General Hospital rather than other hospitals in the health region.

Figure 31: ED visits for opioid poisonings, HPEC and Ontario, 2018 to 2022

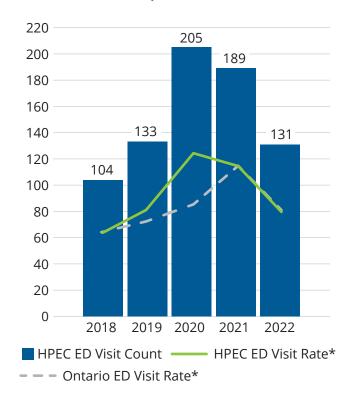
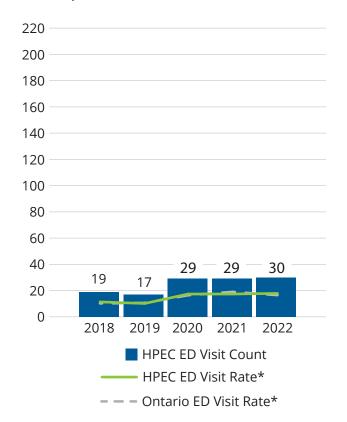


Figure 32: Opioid-related deaths, HPEC and Ontario, 2018 to 2022

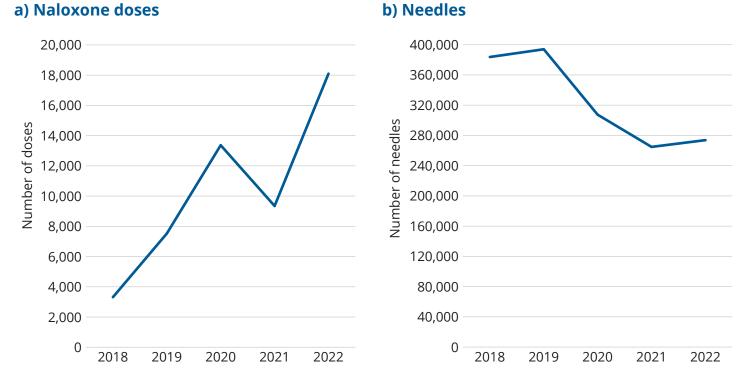


**Data Sources:** ED visits: National Ambulatory Care Reporting System (NACRS) from CIHI, IntelliHealth Ontario Opioid Deaths: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive opioid tool. Toronto, ON: King's Printer for Ontario; 2024. **Data Note:** \*Rate per 100,000 population.

Harm reduction remains an important focus of public health because it recognizes that many individuals coping with addiction and problematic substance use may not be in a position to remain abstinent from their substance of choice (Canadian Mental Health Association, n.d.). An essential component of a harm reduction approach is providing people who use substances with a choice about how they will minimize substance harms through non-judgemental and non-coercive strategies (Canadian Mental Health Association, n.d.). Ontario's Naloxone Program and Harm Reduction Distribution Program are key to Ontario's harm reduction approach.

The amount of naloxone distributed to HPEC by Ontario's Ministry of Health (MOH) has been increasing since 2018, with doses totalling more than 18,000 in 2022 (Figure 33a). Naloxone doses are provided to both HPEPH and pharmacies for provision to the community. Needles provided to HPEC by the MOH have decreased over the years; however, they still total more than 250,000 (Figure 33b).

Figure 33: Harm reduction supplies provided by the MOH, HPEC, 2018-2022



**Data Source:** Ontario Drug Policy Research Network. Ontario Opioid Indicator Tool. Toronto, ON; Updated April 2024. DOI: 10.31027/ODPRN.2022.01. Available from: https://odprn.ca/ontario-opioid-indicator-tool/

#### **Youth Substance Use**

While substance use may be common in youth, it is important to educate youth about the potential harms associated with early substance use in efforts to reduce potential risky behavior and long-term negative health effects (Public Health Agency of Canada, 2018). It is important to note with the following self-reported percentages that they may be affected by reporting bias (i.e., the selective revealing or suppression of information) or social desirability bias (i.e., the tendency to answer questions in a manner that is viewed favorably by others). As such, the percentages that follow may under report youth substance use in HPEC and Ontario.

Although it is encouraging that close to 80 to 90 per cent of HPEC youth 12 to 19 years of age self-reported never smoking between 2015-2016 to 2019-2020, these percentages are lower than those of Ontario youth that have never smoked (Table 15).

In 2015-2016 and 2019-2020, approximately 80 per cent of HPEC youth reported that they had never used cannabis. This proportion is similar to that of Ontario youth that reported never having used cannabis. One exception to this trend is in 2017-2018, which saw a decline to 56.9 per cent in the number of HPEC youth that had never used cannabis (i.e., more HPEC youth were using cannabis). This percentage was significantly lower than that of Ontario (78.2 per cent in 2017-2018).

Approximately 45 per cent of HPEC youth reported underaged drinking in 2015-2016 and 2017-2018. Although these percentages are higher than Ontario, they are not significantly so. However, the proportion of young HPEC males that reported underage drinking in 2017-2018 was almost two times higher than young males in Ontario.

Table 15: Youth (12 to 19 years of age) substance use (per cent), HPEC and Ontario, 2015-2016 to 2019-2020

		HPEC			Ontario	
	2015-16	2017-18	2019-20	2015-16	2017-18	2019-20
Never smoked	79.5	75.5	88.8	89.7	88.6	91.6
Males	76.8	60.9 <sub>↑**</sub>	90.8	88.6	87.2	89.8
Females	82.8	96.2	86	90.9	90	93.5
Never used cannabis	79.7	56.9**	83.3	81.9	78.2	83.1
Males	77.8 ∱	43.5 <sub>†</sub> **	NR	80.7	76.8	82.0
Females	82.3	75.6	NR	83.1	79.7	84.1
Underage drinking	43.9↑	48.2	NR	30.2	31.9	26.8
Males	55.0 ∱	64 ∱*	NR	32.8	32.5	27.4
Females	30.3 ∱	NR	NR	27.4	31.2	26.2

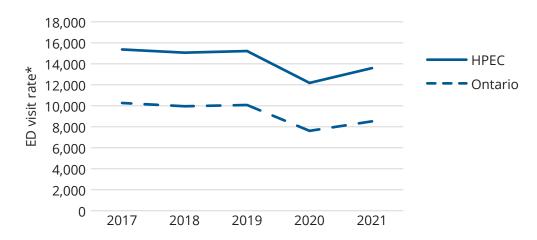
**Data Sources:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Smoking snapshot, Alcohol use snapshot, and [Internet]. Toronto, ON: King's Printer for Ontario. Canadian Community Health Survey 2019/2010 [2015-16 to 2019-20], Statistics Canada, Share File, Ontario Ministry of Health.

**Data Notes:** † Use with caution due to sampling variability, \*Significantly higher, \*\*Significantly lower.

## **INJURY PREVENTION**

HPEC residents are more likely than Ontario residents to have an ED visit for an injury (Figure 34). Although the rate of ED visits has declined slightly locally and provincially, the rates have been fairly similar since 2017.

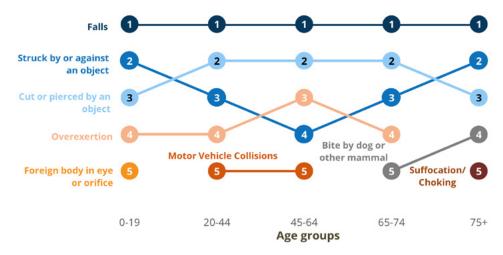
Figure 34: Rate of ED visits\* for all injuries, HPEC and Ontario, 2017 to 2021



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Injury Hospitalization snapshot [Internet]. Toronto, ON: King's Printer for Ontario. **Data Note:** \*Age-standardized rate per 100,000 population.

In 2021, HPEC's rate of injury related ED visits (per 100,000 people) of 13,600.6 equated to 22,951 ED visits due to injury. When looking at the top five injuries by age group for that year, falls were consistently the top injury for ED visits (Figure 35). Being struck by or against an object, as well as being cut or pierced by an object remained within the top five injuries requiring an ED visit in all age groups.

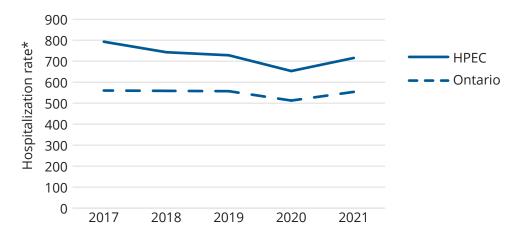
Figure 35: Top 5 injuries for ED visits by age group ranked, HPEC, 2021



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Injury Emergency Department Visit snapshot [Internet]. Toronto, ON: King's Printer for Ontario.

Similar to ED visits, HPEC residents are also more likely than Ontario residents to be admitted to the hospital for an injury (Figure 36). Although the hospitalization rate for injury in HPEC is significantly higher than that of Ontario, the difference between the two rates has been slowly decreasing.

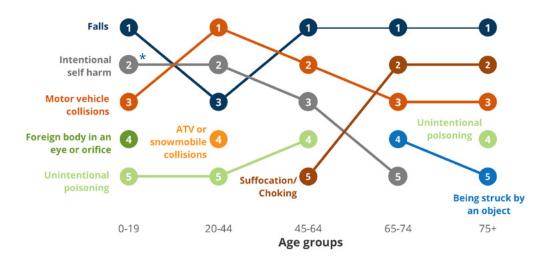
Figure 36: Hospitalization rate\* for all injuries, HPEC and Ontario, 2017 to 2021



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Injury Emergency Department Visits snapshot [Internet]. Toronto, ON: King's Printer for Ontario. **Data Note:** \*Age-standardized rate per 100,000 population.

In 2021, HPEC's hospitalization rate (per 100,000 people) of 715.1 people equated to 1,486 hospitalizations due to injury. Like ED visits, falls remained within the top three causes of hospitalization across all age groups (Figure 37). However, unlike ED visits, intentional self harm and motor vehicle collisions were common injuries across all age groups that led to a hospitalization.

Figure 37: Top five injuries for hospitalization by age group ranked, HPEC, 2021



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Injury Hospitalization snapshot [Internet]. Toronto, ON: King's Printer for Ontario. **Data Note:** \*Intentional self-harm ranking for 0 to 19 year olds actually reflects the rate for 10 to 19 year olds.

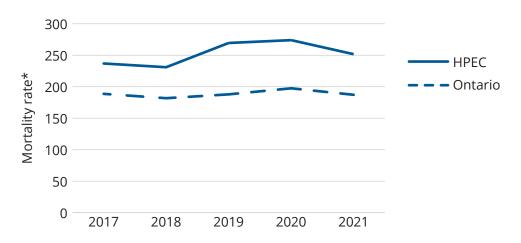
### **MORTALITY**

### **Premature Potentially Avoidable Mortality**

On average, between 2017 to 2021, approximately seven of 10 premature deaths (i.e., deaths before 75 years of age) could have been avoided by healthier behaviours, effective public health intervention, and/or early detection/treatment. These deaths are referred to as potentially avoidable mortality.

The rate of potentially avoidable mortality in HPEC has been consistently higher than that of Ontario (Figure 38). Locally and provincially, males are 1.5 to 1.9 times more likely to die prematurely from avoidable causes. The leading causes of avoidable mortality in both HPEC and Ontario are ischaemic heart disease and lung or bronchus cancer. These two causes could potentially be avoided by lifestyle changes including quitting smoking, being active, and eating a healthy diet (Government of Canada, n.d.; James, Manuel, & Mao, 2006).

Figure 38: Potentially avoidable mortality rate\*, HPEC and Ontario, 2017 to 2021



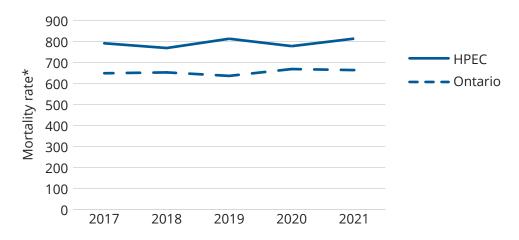
**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Potentially avoidable mortality snapshot [Internet]. Toronto, ON: King's Printer for Ontario. **Data Note:** \*Age-standardized rate per 100,000 population.

### All Cause Mortality

Between 2017 to 2021, HPEC's all-cause mortality rate (i.e., death from any cause) has been stable and significantly higher than Ontario (Figure 39).

Locally and provincially, the all-cause mortality rate for males is 1.3 to 1.5 times higher than females. The three leading causes of death in HPEC and Ontario were ischaemic heart disease, dementia and Alzheimer disease, as well as lung and bronchus cancer.

Figure 39: All cause mortality rate\*, HPEC and Ontario, 2017 to 2021



**Data Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: All-cause mortality snapshot [Internet]. Toronto, ON: King's Printer for Ontario.

## **APPENDIX**

### **Appendix A: Data Tables**

Data table for Figure 2. Population distribution by age category and gender, HPEC, 2021 and 2031

	2021 (	Census	2031 F	Projects
	Men+	Women+	Men	Women
0 to 4	4,005	3,620	4,224	4,224
5 to 9	4,320	4,120	4,403	4,403
10 to 14	4,460	4,290	4,415	4,415
15 to 19	4,180	3,955	4,994	4,994
20 to 24	4,160	3,805	6,061	6,061
25 to 29	4,685	4,465	5,146	5,146
30 to 34	4,995	4,770	4,978	4,978
35 to 39	4,785	4,730	5,322	5,322
40 to 44	4,485	4,665	5,325	5,325
45 to 49	4,490	4,615	5,319	5,319
50 to 54	5,020	5,325	5,639	5,639
55 to 59	7,010	7,440	5,964	5,964
60 to 64	7,420	7,930	6,517	6,517
65 to 69	6,440	7,095	7,843	7,843
70 to 74	5,820	6,075	7,564	7,564
75 to 79	3,715	4,155	6,223	6,223
80 to 84	2,380	2,850	4,792	4,792
85 and over	1,985	3,205	4,569	4,569

Data table for Figure 5: Mental health ED visit rate per 100,000 population, HPEC and Ontario, 2013-2014 to 2019-2020

	2013-2014	2015-2016	2017- 2018	2019-2020
Ontario	1,585.3	1,766.2	1,980.6	1,871.3
HPEC	1,757.5	2,162.0	2,733.5	2,640.2

#### Data table for Figure 6: ED visits for heat-related illnesses, HPEC, 2008 to 2022

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
# of ED	22	18	30	35	38	36	23	34	66	38	76	38	45	39	31
visits															

# Data table for Figure 7: Incidence rate per 100,000 population of all cancers, HPEC and Ontario, 2013 to 2018

	2013	2014	2015	2016	2017	2018
Ontario	633.3	553.7	545.5	607	628.9	632.7
HPEC	550.2	543.8	549.1	543.9	555.1	543

## Data table for Figure 8: Incidence rate per 100,000 population of select cancers, HPEC, 2013 to 2018

	2013	2014	2015	2016	2017	2018
Breast cancer (female)	145.3	128.8	138.8	142.4	149.9	149.7
Colorectal cancer	52.9	68.4	51.2	62	72.2	62.6
Lung	104.1	89.4	77.3	86.3	85.2	92.8
Melanoma	30.9	30.3	35	36.6	37.1	37.1
Prostate (male)	146.1	103.7	101.5	104.6	127.1	156.6
<b>Uterine (females)</b>	30.1	29	35.3	38.2	31.1	41

# Data table for Figure 9: Breast and cervical cancer screening participation as a percent of screen-eligible residents, HPEC and Ontario, 2018 to 2020

		2018	2019	2020
Dunnet company companying mouticipation	HPEC	60.5	60.7	54.7
Breast cancer screening participation	Ontario	63.8	63.9	57.7
	HPEC	59.8	59.6	55.8
Cervical cancer screening participation	Ontario	59.6	58.8	54

### Data table for Figure 10: Overdue colorectal cancer screening as a percent of screeneligible residents, HPEC and Ontario, 2018 to 2020

	2018	2019	2020
HPEC	37.7	37.4	41.7
Ontario	38.2	38.6	43.7

# Data table for Figure 11: Pregnancy rate (per 1,000 females) by age group and year, HPEC and Ontario 2016 to 2020

			HPEC					Ontario	)	
Age Group	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
15-19	23.4	23.1	21.5	16.3	10.4	14.5	13	10.4	9.5	7.6
20-24	92.8	93.6	80.4	67.6	59.4	53	48.4	41	37.1	32.1
25-29	130.6	121.4	136.8	122.5	123.2	99.5	94.1	87.5	82.9	74.5
30-34	113.9	111.6	103.6	103.8	108.7	123.9	121.6	117.9	115.5	108.1
35-39	46	44.7	46.2	45.8	53.1	68.7	69.5	68.8	68	64.8
40-44	8	8.4	8.2	9.8	9.9	16	16.6	16.2	16.4	15.8
45-49	0.4	0.4	0.6	0.6	0.6	1.2	1.2	1.2	1.1	1.2
Overall	57.8	55.9	55.3	51.3	51.7	54.2	52.8	50.1	48.7	45.3

## Data table for Figure 12: Number of live births, by age group and year, HPEC and Ontario 2017 to 2021

Age Group	2017	2018	2019	2020	2021
<20	63	61	44	36	37
20-24	312	258	247	230	225
25-29	456	539	496	514	517
30-34	466	454	443	473	487
35-39	170	196	191	227	235
>=40	29	33	38	39	42

# Data table for Figure 18: Immunization coverage (per cent) for IPSA vaccines, HPEPH and Ontario, 2022-2023 school year

a) Seven years of age

Vaccine	НРЕРН	Ontario
Varicella	84.7	58.1
Measles	85.9	60.2
Mumps	85.9	60
Pertussis	86.1	59.4
Diphtheria	86.3	59.5
Tetanus	86.3	59.5
Polio	86.5	59.6
Pneumococcal	91.1	70.6
Haemophilus influenza type b	91.2	73.8
Meningococcal C conjugate	95.5	79.8
Rubella	96.3	83.1

b) 17 years of age

Vaccine	HPEPH	Ontario
Diphtheria	69.0	55.4
ырпшена	09.0	33.4
Tetanus	69.0	55.4
Pertussis	70.0	56.3
Polio	94.8	90.1
Mumps	95.9	92
Measles	96.1	92.3
Rubella	96.9	94.1

Data table for Figure 19: Immunization coverage (per cent) for school-based vaccines, HPEPH and Ontario, 2022-2023 school year

Vaccine	НРЕРН	Ontario
Human papillomavirus (HPV)	51.3	47.8
Hepatitis B	57.1	58.2
Meningococcal (MCV4)	80.3	73.7

# Data table for Figure 20: ED visit rate per 100,000 population for oral health conditions, HPEC and Ontario, 2018 to 2022

	HPEC	Ontario
2018	1,273.0	654.7
2019	1,302.2	636.3
2020	1,148.9	520.2
2021	1,077.1	541.9
2022	1,096.3	524.1

# Data table for Figure 28: Rates of ED visits and hospitalizations per 100,000 population for conditions entirely caused by alcohol, HPEC and Ontario, 2017 to 2021

		2017	2018	2019	2020	2021
Hospitalizations	HPEC	234.0	210.8	233.5	226.4	248.9
	Ontario	200.5	200.1	196.8	201.3	210.9
ED visits	HPEC	603.6	600.7	587.5	555.6	596.4
	Ontario	589.0	604.6	593.4	514.6	543.3

# Data table for Figure 29: Rates of ED visits and hospitalizations per 100,000 population for cannabis related harms, HPEC and Ontario, 2018 to 2022

		2018	2019	2020	2021	2022
Hospitalizations	HPEC	56.3	70.1	100.3	94	83.4
	Ontario	40.5	44.7	49.3	54	46.2
ED Visits	HPEC	203.7	146.4	204.7	211.6	132.2
	Ontario	88.1	100.3	113	122.2	92.7

### Data table for Figure 31: ED visits for opioid poisonings, HPEC and Ontario, 2018 to 2022

	2018	2019	2020	2021	2022
HPEC ED visit count	19	17	29	29	30
HPEC ED visit rate	11.5	10.3	17.5	17.5	18
Ontario ED visit rate	10.4	10.7	16.6	19.1	16.7

### Data table for Figure 32: Opioid-related deaths, HPEC and Ontario, 2018 to 2022

	2018	2019	2020	2021	2022
HPEC Opioid-Related Deaths	19	17	29	29	30
HPEC Opioid-Related Death Rate	11.5	10.3	17.5	17.5	18
Ontario Opioid-Related Death Rate	10.4	10.7	16.6	19.1	16.7

#### Data table for Figure 33: Harm reduction supplies provided by the MOH, HPEC, 2018-2022

#### a) Naloxone doses

	2018	2019	2020	2021	2022
Naloxone doses	3,314	7,522	13,364	9,348	18,096

#### b) Needles

	2018	2019	2020	2021	2022
Needles	383,715	393,966	307,390	264,800	273,750

# Data table for Figure 34: ED visits rate per 100,000 population for all injuries, HPEC and Ontario, 2017 to 2021

	2017	2018	2019	2020	2021
HPEC	15,373.6	15,070.0	15,223.9	12,187.8	13,600.6
Ontario	10,275	9,963.4	10,083.7	7,621.5	8,527.4

Data table for Figure 35: Top five injuries for ED visits by age group ranked, HPEC, 2021

lainny	Age Group					
Injury	0-19	20-44	45-64	65-74	75+	
Falls	1,683	1,360	1,587	1,058	1,693	
Struck by or against an object	961	857	440	157	122	
Cut or pierced by an object	369	911	581	223	97	
Overexertion	265	703	470	115	64	
All motor vehicle collisions	184	500	257	61	53	
Foreign body in eye or orifice	254	343	211	69	56	
Bite by dog or other mammal	141	241	214	79	68	
Being caught or crushed between objects	124	242	157	48	19	
Unintentional poisoning	111	246	110	31	32	
Assault	85	216	79	13	5	
Intentional self-harm	128*	177	52	14	10	
Exposure to smoke or fire or contact with heat or hot substances	68	134	68	25	12	
All-terrain vehicles or snowmobiles	64	113	36	2	0	
Contact with heat or hot substances	52	76	43	16	10	
Suffocation/choking	21	13	27	43	66	
Exposure to smoke or fire	16	58	25	9	2	
Near drowning or submersion	2	1	1	2	0	

**Data Note:** \*Intentional self-harm ranking for 0 to 19 year olds actually reflects the rate for 10 to 19 year olds"

### **Appendix B: References**

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