



State of Ottawa's Health, 2018



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Data Sources

Ottawa Public Health (OPH) maintains several internal databases, accesses provincial databases and national survey data, generates data through collaboration with universities and other organizations, and communicates with other agencies to track local data related to health and disease. The most current data available were used for the preparation of this report: demographic data are from 2016; emergency department visits and hospitalization data are from 2017; mortality data are from 2012; health behaviour data are from 2015-16 or 2017, as indicated in the report; infectious disease data are from 2017, and childhood immunization data are from the 2016-17 academic year. These data are described in more detail below.

Demographic data come from the 2016 Census of Canada. Every five years Statistics Canada conducts a census to provide a portrait of Canada and its people.

Emergency department visit data are from the National Ambulatory Care Reporting System (Canadian Institute of Health Information (CIHI)). The majority of hospitalization data are from the Discharge Abstract Database (CIHI); 2017 is the most current calendar year for both sources. Injury-related hospitalization analyses rely on emergency department visits that are coded as having been admitted to hospital because the Discharge Abstract Database does not capture some injuries related to mental health (e.g. self-harm, unintentional poisoning and substance misuse). Mental health related hospital admissions are from the Ontario Mental Health Reporting System (CIHI), which includes admissions to designated adult mental health beds.

Mortality data come from the Vital Statistics database, which is maintained by the Office of the Registrar General. This database is current to 2012.

Prevalence of selected chronic conditions and self-rated health in adults are derived from Statistics Canada's 2015-16 Canadian Community Health Survey (CCHS), a periodic survey of individuals in Canada aged 12 years and older. Prevalence of other indicators such as physical activity are derived from the 2017 Rapid Risk Factor Surveillance System (RRFSS), an ongoing survey of adults aged 18 years and older, in Ottawa and other participating Ontario cities, conducted by the Institute for Social Research at York University on behalf of OPH. These data are based on self-reports.

Prevalence of youth behaviours are derived from the Ontario Student Drug Use and Health Survey (OSDUHS), conducted by the Centre for Addiction and Mental Health

(CAMH) and administered by the Institute for Social Research at York University. Its contents and interpretation are solely the responsibility of the authors and do not necessarily represent the official view of CAMH. The OSDUHS surveys a random sample of Ontario students in grades 7 through 12 enrolled in the public and Catholic school systems. A representative sample of Ottawa students completed the OSDUHS survey with 2017 being the most current year for which we have data.

Information on infectious diseases in 2017 are available from the Integrated Public Health Information System (iPHIS) of the Ontario Ministry of Health and Long-Term Care (MOHLTC). The data entered into iPHIS are obtained from laboratory and hospital reports and OPH case investigation.

Immunization coverage levels for Ontario's publicly funded childhood immunization programs for 7 and 17 year olds in Ottawa are calculated by Public Health Ontario, which queries Ontario immunization records maintained in the Digital Health Immunization Repository.

Data notes

Any differences between Ottawa and "Ontario less Ottawa" should be interpreted as differences between individuals living in Ottawa and individuals living across Ontario excluding Ottawa. It does not mean that Ottawa is different from other individual health units across Ontario. No comparisons were made to other individual health units across Ontario. Because of the data sources, some comparisons can only be made to Ontario overall.

Comparisons by income are carried out using five income groups (quintiles). These quintiles are based on household income and the low income cut-off for a given household size and there is no direct income equivalent of the quintiles.

Introduction

This report provides an overview of the health of Ottawa's population, including information about the demographic characteristics of Ottawa residents; key measures of general health such as longevity, disease prevalence and hospital visits; and behaviours that affect health, such as physical activity and substance use. More detailed information on the topics described in this report can be found in the health profiles available online at the [OPH Research & Statistics web page](#) (URL). The data contained in this report will provide Ottawa Public Health (OPH) with evidence to guide

informed decisions about its policies and the programs and services it provides. This report satisfies a requirement of the Ontario Public Health Standards, through the Ministry of Health and Long-Term Care, that all Ontario public health units regularly assess the health of the population. In addition, this information will be used as a resource to other stakeholders who plan and deliver health promotion and protection services in Ottawa. Over the long-term, this information and evidence can be used to better understand the city's health, to shape plans for improving it, and to measure progress and changes in the population's health over time.

While this summary report does not include data on the health of Indigenous peoples, Ottawa Public Health is committed to improving health equity for First Nations, Inuit and Métis peoples living in Ottawa. As part of the [OPH Reconcili-ACTION Plan](#), the health unit is working with local Indigenous organizations to address the Truth and Reconciliation Commission of Canada's call to action #19, to establish measurable goals to identify and close gaps in health outcomes, by identifying local First Nations, Inuit and Métis health and wellness priorities; and developing and implementing culturally-appropriate data collection methods, analysis and reporting mechanisms.¹

Ottawa and its People

Demographics

At the time of the 2016 census, it was estimated that there were 934,243 people living in Ottawa (accounting for projected births, deaths and migration, Ottawa's population projection for 2017 was 996,651).^{2 3} The 2016 Census showed 5.8% population growth since the 2011 Census.^{4 5}

The median age of Ottawa residents is 40 years. An estimated 15% of the population is 65 years of age and older, up from 12% in 2006.^{6 7} As the population ages, it is estimated that older adults (65+ years) will account for over 22% of the population by 2035.⁸

Two thirds of Ottawa's residents live in urban areas inside the Greenbelt, whereas 10% live in rural areas. The largest population growth in 2017 took place in the suburban centres outside the Greenbelt (2.3% growth from 2016); this is consistent with the growth pattern of previous years.⁹

Origin and Identity

Over one quarter (26%) of Ottawa residents identified themselves as a visible minority in 2016, an increase from 20% ten years earlier. Black, Chinese and Arab are the most frequently reported visible minorities. Two and a half percent of Ottawa's population identify as Indigenous (e.g., First Nations, Métis, Inuit), an increase from 1.5% in 2006. This is considered an underestimate of the actual Indigenous population in the city. A quarter (24%) of Ottawa's population was not born in Canada, and 3.2% immigrated in the five years preceding the 2016 Census, down from 3.7% reported in the 2011 Census.^{10 11}

Language

Almost all Ottawa residents are able to speak one or both official languages: English only (59%), French only (1%), English and French (38%). One percent speak neither English nor French.

English is the most common single language spoken in the home (79%), followed by French (10%). Eleven percent of residents speak a non-official language in their homes; Chinese and Arabic are the most frequently spoken. This has remained unchanged from the 2011 Census.^{12 13}

Education, Employment and Income

Three-quarters of adult Ottawa residents have a postsecondary education, 19% have a high school diploma or equivalent, and 6% have not completed high school. This has remained unchanged from the 2011 Census.^{14 15}

In 2015, Ottawa's median after-tax individual income was \$37,136, and the unemployment rate for Ottawa residents was about 7%. Thirteen percent of Ottawans were considered low income, with the highest rate (16%) in those under 18 years of age.¹⁶

Housing

One quarter of Ottawa's households spend more than 30% of their income on housing. The percentage is much higher among those who rent (42%) than among those who own their homes (14%). Sixteen percent of renting households live in subsidized housing.¹⁷

In 2016, 13% of Ottawa households lived in a dwelling that was considered unsuitable or inadequate and were not able to afford more suitable housing.¹⁸

Mortality, Morbidity and Quality of Life

Leading Causes of Death

The most recent mortality data shows that in 2012, there were 5,397 deaths among Ottawa residents. Since 1986, Ottawa has consistently had lower rates of death, on average, than in Ontario-less-Ottawa.¹⁹

The most common causes of death for Ottawa men were heart disease, followed by lung cancer and dementia /Alzheimer's disease. Among women, dementia /Alzheimer's disease became the leading cause of death in 2012, overtaking heart disease, which dropped to second place; and lung cancer was the third most common cause of death.²⁰

The leading cause of death varies according to age:

- For children aged 0 to 4 years, perinatal conditions, such as extreme prematurity, were the most common causes of death.²¹
- Injuries accounted for the leading causes of death among men aged 20 to 44 years; the top three causes were suicide, unintentional poisoning and substance misuse/overdose, and transport collisions. For women aged 20 to 44 years, the leading cause of death was breast cancer.²²
- Among men aged 45 to 64 years, heart disease was the leading cause of death, followed by lung cancer. Breast cancer was the leading cause of death for women in this age group, followed by lung cancer.²³
- Among older adults (65+ years), heart disease was the leading cause of death for men, followed by dementia /Alzheimer's disease and lung cancer. Dementia / Alzheimer's disease was the leading cause of death among women in this age group, followed by heart disease and cerebrovascular disease (stroke).²⁴

Life Expectancy

Life expectancy at birth for Ottawa men increased slightly from 81.3 years in 2010 to 2012 to 81.9 years in 2014 to 2016. For Ottawa women, life expectancy did not change between 2010 and 2016, estimated at 85.2 years (2014 to 2016). For both men and

women, Ottawa life expectancy at birth was slightly higher than the Ontario average (80.5 years for men and 84.5 years for women in 2014 to 2016).²⁵

Because the risk of certain illnesses and injuries change as people age, projected life expectancy changes over the life span. At age 65, Ottawa men can expect to live for another 21 years (to age 86) and women for another 23 (to age 88). These estimates are higher than the provincial average (Ontario men at age 65: 19.6 years; Ontario women at age 65: 22.4 years) in 2014 to 2016.²⁶

Premature Death and Potential Years of Life Lost

Premature death (defined as death before the age of 75) has been decreasing steadily over the past three decades.²⁷ In 2012, 1,914 deaths, or 35% of all deaths in Ottawa, were premature. Injuries (intentional and unintentional), cancer and heart disease are the leading causes of premature death in Ottawa. It is estimated that over 70% of premature deaths might have been avoided, either by preventing the onset of disease (through public health policies, prevention programs or effective health care) or by delaying death once a disease or condition has developed (through screening and treatment).²⁸

In 2012, 13,694 potential years of life were lost in Ottawa due to premature death. Potential years of life lost (PYLL) measures the additional years a person would have lived had he or she not died before the age of 75. The burden of PYLL is greater among younger people; a person who died at age 25 has lost 50 potential years of life.²⁹

Leading Causes of Emergency Department Visits

In 2017, Ottawa residents made 338,353 visits to the emergency department (ED).³⁰ The six leading causes of these visits were:

1. Injury, poisoning/overdose or other external cause (81,111 visits)
2. Respiratory conditions (27,959)
3. Digestive conditions (20,724)
4. Musculoskeletal conditions (20,585)
5. Mental and behavioural conditions (17,724)
6. Genitourinary conditions (17,302)³¹

This ranking has remained largely unchanged since 2013, with one exception: mental and behavioural conditions exceeded genitourinary conditions in 2017.³²

Injury (e.g. falls, self-harm, collisions, overdose and poisoning, burns, cuts, overexertion) was the leading cause of emergency department visits in all age groups, except for children aged 5 years and younger, in which the leading cause was respiratory conditions.³³

Leading Causes of Hospitalizations

In 2017, 66,464 Ottawa patients were hospitalized. In 2016 and continuing into 2017, mental and behavioural conditions became the second leading cause of hospitalization following obstetrical reasons (e.g., pregnancy and childbirth).^{34 35} The six leading causes of hospitalization, in 2017, were:

1. Obstetrical (9,855)
2. Mental and behavioural conditions (7,144)
3. Circulatory conditions (7,094)
4. Digestive conditions (6,424)
5. Injury, poisoning/overdose or other external causes (5,256)
6. Respiratory conditions (4,848)^{36 37}

The leading causes of hospitalizations vary by age. In 2017, mental and behavioural conditions were the leading cause for those aged 5 to 19 years and the second leading cause for those aged 20 to 44 years, behind obstetrics. This ranking is unchanged over the past 5 years. Diseases of the circulatory and respiratory systems were the leading causes of hospitalization for older adults aged 65 years and over.^{38 39}

Self-rated Health and Satisfaction with Life

About two-thirds (67%) of Ottawa residents reported that they were in very good or excellent health in 2015/16, higher than the Ontario-less-Ottawa average (61%). Younger residents were more likely than older ones to rate their health as very good or excellent (78% of those aged 12 to 19 years vs. 51% of those aged 65 years and older).⁴⁰

In 2015/16, approximately nine in ten (91%) Ottawa residents reported they were satisfied with their lives, similar to the Ontario-less-Ottawa average. People with higher

income levels reported satisfaction with life more often than those with lower incomes (97% in the highest income group vs. 78% in the lowest).⁴¹

Chronic Conditions

Chronic diseases are the leading cause of premature death in Canada.

Five common self-reported chronic conditions reported among Ottawa residents in 2015/16 were back problems (18% of the population), high blood pressure (16%), arthritis (14%), migraine headaches (12%), and asthma (10%). These common chronic conditions are most prevalent among people aged 65 years and older, for whom the top five were high blood pressure (42% of 65+ year-olds), arthritis (43%), back problems (25%), heart diseases (15%), and diabetes (14%). Ottawa residents in the lowest income group were twice as likely to report two or more chronic conditions than those in the highest income group (19% vs. 9%).⁴²

Risk Factors for Chronic Conditions

Chronic diseases are often associated with risk factors such as physical inactivity, tobacco use, poor diet, and alcohol and substance misuse as well as social determinants of health. Behavioural risk factors are discussed below.

Overweight and Obesity

Overweight and obesity is a complex health issue with far-reaching causes and contributors. The health risks associated with weight status are generally assessed using the Body Mass Index (BMI) measurement.⁴³

- One third (33%) of Ottawa adults 18 years and older reported that they were overweight (BMI = 25.0 – 29.9) and close to one quarter (23%) reported that they were obese (BMI – 30.0 or greater) in 2015/16, similar to Ontario-less-Ottawa.⁴⁴
- Men (41%) were more likely to be overweight or obese than women (26%).
- Adults aged 65 years and older were more likely to be overweight or obese (61%) than those aged 45 to 64 years (64%) and those aged 18 to 44 years (50%).⁴⁵
- Two thirds (66%) of students in grades 7 to 12 reported a healthy weight (BMI =18.5 to 24.9) in 2017, which is similar to Ontario-less-Ottawa (61%).

- Thirteen percent of Ottawa students were classified as overweight and 9% were classified as obese, which is unchanged from 2013 and is not different from Ontario-less-Ottawa.⁴⁶
- Students with higher perceived socioeconomic status were more likely to report being a healthy weight than students with low perceived socioeconomic status (71% vs. 55%).⁴⁷

Nutrition

Consumption of Vegetables and Fruits

Most Ottawa residents eat fewer vegetables and fruits than recommended by [Eating Well with Canada's Food Guide](#), which recommends seven to ten servings of vegetables and fruits each day. One third (33%) of Ottawa residents reported eating vegetables and fruits at least five times a day, with women (40%) more likely to do so than men (26%). This was higher than the Ontario-less-Ottawa average of 27%.⁴⁸ In 2017, 39% of Ottawa youth ate vegetables and fruits less than three times daily, which is lower than students in Ontario-less -Ottawa (45%).⁴⁹

Fast Food and Eating Out

In 2016, 36% of Ottawa residents reported going to a restaurant or ordering takeout foods three to six times a week, and twelve percent do this on an almost daily basis. Men and young adults (18 to 29 years of age) were most likely to eat out nearly every day. This is unchanged from the previous estimate in 2014.⁵⁰

Nearly all (92%) Ottawa residents believed that it was important to choose nutritious food when eating outside the home, with post-secondary graduates more likely to say that it was important compared to those with high-school education or less. This is unchanged since 2014.^{51 52}

Sugar-Sweetened Beverages

Consumption of sugar-sweetened beverages (SSBs) such as soft drinks, fruit drinks, sports and energy drinks, and sweetened milks is one of the dietary factors leading to increases in obesity and overweight rates in children and adults.⁵³ In 2017, 9% of Ottawa youth drank SSBs daily. This is unchanged from 2013 and is not different from Ontario-less-Ottawa.⁵⁴ Three-quarters (75%) of Ottawa students drank at least one SSB in the week prior to the survey, which is lower than students in Ontario-less-Ottawa (80%) and is unchanged from 2013.^{55 56}

In 2015, 27% of Ottawa adults (18 years or older) drank SSBs daily, with young adults (18 to 24 years) more likely to do so (41%) than any other age group. Chocolate or other flavoured milk, regular soft drinks, and sweetened specialty coffee, tea and hot chocolate were the SSBs that Ottawa residents most frequently reported drinking on a daily basis.⁵⁷

Ninety-four percent of Ottawa residents believed that drinking SSBs can lead to weight gain, high blood sugar or other unhealthy effects. More than two-thirds (69%) identified at least one type of SSB (usually flavoured milk or milk alternatives) as a healthy drink.⁵⁸

Food Security

A household is considered food insecure when the quality of its food is compromised or when food intake is reduced, for example through skipping meals, because food is either unavailable or unaffordable.

In 2013/14, one in fifteen (7%) Ottawa households reported food insecurity, which was similar to Ontario-less-Ottawa. Food insecurity in Ottawa has remained stable since 2007/08. Low income continues to be a barrier to food security.⁵⁹ In 2017, it cost a minimum of \$873 a month to feed a family of four, an almost 20% increase from 2009.⁶⁰

Six percent of Ottawa students reported always or often going to school or to bed hungry because there was not enough food in their home, which is the same as students in Ontario-less-Ottawa.⁶¹

Physical Activity, Sedentary Behaviour and Sleep

Regular physical activity helps protect against obesity, promotes well-being and self-esteem, and protects against symptoms of mental illness.

Physical Activity in Children and Youth

In 2017, one in five (22%) of Ottawa youth reported being active more than 60 minutes every day, which is the level recommended by the [Canadian 24–Hour Movement Guidelines](#).⁶² This is unchanged from 2013 and is not different from Ontario-less-Ottawa.⁶³

Boys were more likely than girls to meet the guidelines (27% vs 16%), and students in grades 7 to 8 were more likely to meet the guidelines (36%) than those in grades 9 to 12 (14%). Students who perceived themselves to be in lower socioeconomic status families

(14%) were less likely to meet the guidelines than students at higher perceived socioeconomic levels (25%).⁶⁴

Among Ottawa students in grades 7 to 12, one in five (18%) usually used active transportation (i.e. walked or biked) to get to school in 2017. This rate is similar to the Ontario-less-Ottawa average of 19%.⁶⁵

Physical Activity among Adults

The Canadian Physical Activity Guidelines recommend that adults spend at least 150 minutes per week in physical activity. About two-thirds (65%) of Ottawa residents aged 18 and over met this guideline, which is higher than Ontario-less-Ottawa (55%). Adults aged 65 years and older were less likely (49%) to report meeting the physical activity guidelines than younger adults (20 to 44 years of age: 69%; 45 to 64 years of age: 60%).⁶⁶

One in ten (10%) employed Ottawa residents aged 15 years and older reported that their primary mode of transportation to work was walking or cycling in 2016. This proportion has remained steady over the past 15 years.⁶⁷

Sedentary Behaviour

In 2017, 59% of Ottawa youth reported spending more than the recommended two hours per day in sedentary “screen time” activities such as playing video games, watching TV, and surfing the Internet. This is unchanged from 2013 and is not different from Ontario-less-Ottawa.⁶⁸ Students in grades 7 to 8 (50%) were less likely than those in grades 9 to 12 (63%) to spend more than two hours a day on screen-time activities.⁶⁹

Sleep

Not getting enough sleep or getting poor quality sleep is associated with obesity, type 2 diabetes and heart disease, as well as injuries, poor mental health, and poor well-being. Sleep is a fundamental part of healthy growth and development among children and youth.⁷⁰

Over half (56%) of Ottawa youth report that, on an average school night, they sleep less than the eight hours recommended by the *Canadian 24-Hour Movement Guidelines*. This is lower than Ontario-less-Ottawa where 59% of youth report sleeping less than eight hours. Girls (62%), youth in grades 11 to 12 (74%) and students from families at lower socioeconomic levels (65%) were more likely to report getting less sleep.⁷¹ While

over 60% of youth found their sleep refreshing, 14% had difficulty getting to sleep most of the time or all of the time.⁷²

For adults, seven to nine hours of sleep per night are recommended. Just over half (55%) of Ottawa adults report that they usually sleep at least seven hours nightly, and 15% have difficulty getting to sleep most or all of the time.⁷³

Exposure to Ultraviolet Radiation

The National Consensus Process on the Recommended Core Content for Sun Safety Messages in Canada has recommended that Canadians protect their skin and eyes as much as possible when the UV Index is 3 or higher.

Nearly two thirds (65%) of Ottawa residents report that they protect their skin from the sun. This percent is higher than in Ontario-less-Ottawa (61%).⁷⁴ Over a third (35%) of Ottawa residents report that they had had a sunburn in the past year, which is higher than the Ontario-less-Ottawa average of 30%.⁷⁵

Substance Use

Tobacco

Tobacco use is an important cause of chronic disease and the associated health care costs and lost productivity. Tobacco smoking rates continue to decline in Ottawa.

Adult Smoking

In 2015/16, 15% of Ottawa residents aged 19 years and older were current smokers, down from 22% in 2001 and lower than the Ontario-less Ottawa rate of 17%.⁷⁶ Current smoking prevalence is higher among those between the ages of 19 and 24 years (18%), those with French as a mother tongue (20%), those with less than high school (22%) or high school education (23%) and those in the lowest income category (26%).⁷⁷

Youth smoking

In 2017, most (87%) grade 7 to 12 students in Ottawa reported that they have never smoked. Six percent reported smoking one or more cigarettes in the past year. There was no difference compared to 2013 or between Ottawa and Ontario-less-Ottawa.⁷⁸

Waterpipe use

In 2017, 6% of Ottawa adults had used a waterpipe in the past 12 months to smoke tobacco or non-tobacco herbal products. This is not different than the estimate for Ontario.⁷⁹ At 28%, use is highest among young adults aged 18 to 24 years.⁸⁰

In 2017, 9% of grade 7 to 12 students in Ottawa had used a waterpipe in the past 12 months, similar to students in Ontario-less-Ottawa (6%).⁸¹

Exposure to environmental tobacco smoke (ETS)

In Ottawa, 15% of the non-smoking population reported regular exposure to second-hand smoke (ETS) in public places. Nine percent reported regular exposure to ETS at work or school. These are not significantly different from the rates for Ontario-less-Ottawa.^{82 83}

Fourteen percent of Ottawa youth reported being regularly (four or more days a week) exposed to other people's tobacco smoke, with older youth (grades 9 to 12; 17%) more likely than younger ones (grades 7 to 8; 9%) to be exposed.⁸⁴

Three percent of Ottawa non-smokers reported being regularly exposed to ETS in vehicles.⁸⁵

The majority (92%) of Ottawa homes are completely smoke free. This is higher than Ontario-less-Ottawa (90%).⁸⁶

Deaths attributable to smoking

Smoking is responsible for an estimated 916 deaths per year in Ottawa. Of those, 866 deaths (17% of deaths from any cause) are attributable to cigarette smoking and 50 deaths (1% of deaths from any cause) are attributable to ETS exposure. Cancer accounts for 50% of smoking-attributable deaths; with cardiovascular disease accounting for 29%; and respiratory disease for 21%.^{87 88}

Alcohol Use

[Canada's Low-risk Drinking Guidelines](#) recommend that men drink no more than 15 alcoholic drinks per week, and women drink no more than 10 drinks. One fifth (21%) of Ottawa adults report drinking in excess of these weekly guidelines.⁸⁹

Binge drinking, or consuming five or more alcoholic drinks on a single occasion for men and four or more for women, is a risky but common behaviour. In 2015/16, half (52%) of adults reported binge drinking in the past year, which is similar to the rest of Ontario. One fifth (21%) of adults reported binge drinking at least once per month in 2015/16.⁹⁰ In 2017, 12% of Ottawa youth reported binge drinking in the month prior to the survey, which is lower than the 21% who reported binge drinking in 2013 and similar to youth in Ontario-less-Ottawa.⁹¹

Cannabis

Adult Cannabis Use

In the 2015 to 2016 period, cannabis use among Ottawa adults is slightly higher than Ontario-less-Ottawa: 15% compared to 11%. Just over a third of Ottawa residents who used cannabis in the past year (36%) reported using it once a week or more; 19% used it one to three times a month and 44% reported using it less than once a month.⁹²

Cannabis use is highest among men (20%), young adults (33%) and those with a high school education as their highest educational attainment (22%). Ottawa residents with a mother tongue other than French or English had lower rates of use (5%).⁹³

Youth Cannabis Use

In 2017, 18% of Ottawa youth reported using cannabis in the past year, which is similar to youth in Ontario-less-Ottawa (19%). This rate has remained fairly steady since 2009.⁹⁴ Among youth who have used cannabis, one-quarter first tried it before grade 9, half first tried it in grade 9 or 10, and one in five first tried it in grade 11 or 12. Eleven percent of youth reported using cannabis more than ten times in the previous 12 months.⁹⁵

Potential Impact of Cannabis Legalization

Approximately 14% of adults who have not used cannabis in the past year say they are at least moderately likely to try cannabis post-legalization.⁹⁶

Thirteen percent of youth reported they would try cannabis once it was legalized. An additional 19% reported they would use it as often as or more often than they currently do.⁹⁷

Illicit Substances

An estimated 3% of the Ottawa population aged 12 years and over reported using an illicit drug other than cannabis in the past year, which is similar to Ontario-less-Ottawa.⁹⁸ Among youth in 2017, 14% reported using prescription medication (e.g. opioids, tranquilizers) non-medically. This is a significant decrease from 21% in 2009.⁹⁹ There was no difference between Ottawa and Ontario-less-Ottawa. In 2017, about one in ten (9%) youth reported using hallucinogens, cocaine, ecstasy or other illicit substances.¹⁰⁰ Self reports likely underestimate drug use due to the stigmatic and illegal nature of many of these drugs.

Opioids

Across Ontario, the emerging opioid crisis has resulted in a doubling of opioid overdose related emergency department visits, a 20% increase in opioid overdose related hospitalizations and a 68% increase in opioid overdose deaths.¹⁰¹

In Ottawa, opioid overdose deaths (intentional and unintentional) have increased markedly, from 34 in 2015 to 64 in 2017. The opioid overdose mortality rate in 2017 was highest in 45 to 64 year olds.¹⁰²

A similar trend can be seen in emergency department visits and hospitalizations, which exceed those from all other drugs combined. The highest rates of ED visits due to unintentional opioid overdose are seen in young adults (30 to 34 year-olds), whereas hospitalization rates are highest in older adults (65 years of age and older), who also have the highest rate of prescription opioid use for pain.^{103 104}

Injuries and Injury Prevention

Injury is one of the leading causes of premature death and disability in Ottawa. In 2014, 18% of Ottawa residents aged 12 years and older reported being injured in the past year.¹⁰⁵

In 2012, the most recent year of mortality data, there were 319 injury deaths in Ottawa, representing 6% of all deaths. The top three causes of injury death were falls, suicide, and unintentional poisonings and overdose. Falls became the leading cause of injury-related death in 2008, particularly among people 80 years of age and older. The number and rate of deaths related to unintentional poisonings and drug overdose rose from 2008 to 2012.¹⁰⁶

In 2017, injuries to Ottawa residents accounted for over 92,000 emergency department visits. Approximately 6,600 of these visits resulted in hospitalization. Falls are the leading cause of injury-related ED visits and hospitalizations, with the highest rates being among older adults aged 65 and over and has not changed in the last 5 years.¹⁰⁷

Seat Belt Use

Wearing seat belts reduces the risk of death and serious injury, while driving under the influence of alcohol and drugs, or texting or using a cell phone while driving, increase the death and injury risk.

Nearly all (98%) Ottawa drivers say they always wear a seat belt, as required by Ontario law. This drops to 79% among passengers and 57% among taxi passengers.¹⁰⁸

Impaired Driving

Four percent of Ottawa drivers reported having had two or more drinks in the hour before driving, at least once in the past year.¹⁰⁹

Across Canada, 14% of cannabis users said they had driven within two hours of use. This increased to 23% for drivers who used cannabis daily or weekly.¹¹⁰ One in ten Ottawa youth (11%) have ridden in a vehicle at least once in the past year when the driver had been using drugs other than alcohol.¹¹¹

Distracted Driving

Most drivers (71%) say they have never used a hand-held cell phone while driving, down slightly from 77% in 2009, though 31% said they sometimes used a hands-free phone, up from 12% in 2009.¹¹² Thirty one percent of high school drivers say they have sent a text message or e-mail while driving in the past year.¹¹³

Violence and Abuse

The extent of violence and abuse in Ottawa is under-reported. Few Ottawa-specific statistics are available. Across Ontario, one-third (32%) of adults have reported experiencing childhood physical abuse, sexual abuse or exposure to intimate partner violence.¹¹⁴ Nationwide, 8% of community-dwelling older adults (55 years and older) have reported mistreatment, most commonly psychological and financial abuse.¹¹⁵

Bullying

In 2017, 18% of Ottawa youth were bullied at least once on school property in the current school year. This is not different than Ontario-less-Ottawa but is less than the 23% who reported being bullied in 2013.¹¹⁶ Eighteen percent reported having been cyber-bullied (bullied on the internet). One in twelve (8%) Ottawa students reported that they had bullied others at school and 8% reported they had cyber-bullied others. In 2017, 5% of Ottawa students reported they had “beat up or hurt someone on purpose” in the past 12 months.¹¹⁷

Physical and Sexual Assault

In 2017, there were 193.3 visits to emergency departments per 100,000 population in Ottawa due to physical or sexual assault, similar to previous years, and lower compared to the Ontario-less-Ottawa rate (239.3 visits per 100,000 in 2017). Assault-related hospitalizations occurred at a rate of 13.3 per 100,000 in 2017, which is similar to previous years and similar to Ontario-less Ottawa (14.3 per 100,000 in 2017).¹¹⁸ Assault related injuries may be underreported.

Across Ontario, approximately 4% of adults reported being the victim of a physical or sexual assault in the past year – this was highest among young adults aged 18 to 24 years (9%) and higher for those born in Canada (4%) than for immigrants (2%).¹¹⁹

Infectious Diseases

Food and Water-Borne Diseases

In 2017, *Campylobacter* enteritis (191 cases), salmonellosis (173 cases) and giardiasis (120 cases) were the most frequently reported enteric (gastrointestinal) illnesses in Ottawa, accounting for 73% of all such illnesses. The incidence of some enteric illnesses was lower in 2013 than in 2017: salmonellosis (130 cases), giardiasis (81 cases), and cyclosporiasis (3 cases in 2013 vs. 17 in 2017). Incidence of all food and water-borne gastrointestinal infections reported in Ottawa during 2017 was similar to provincial averages.¹²⁰

Respiratory and Direct-Contact Infections

Influenza

During the 2017-2018 respiratory disease season, influenza activity was higher than usual. There were 1181 laboratory-confirmed influenza cases reported to OPH during the 2017-2018 season, representing twice as many cases as were reported during the 2013-2014 season (506 cases).¹²¹ Although there were more cases of influenza than in past seasons, the number of deaths, hospitalizations and outbreaks in institutions was similar to past seasons. Also, the incidence of influenza in Ottawa in 2017 was lower than in Ontario-less-Ottawa (120/100,000 vs. 130/100,000).¹²²

During the 2017-18 influenza season, one-third (34%) of residents aged 18 to 64 years reported receiving an influenza immunization while three-quarters (78%) of residents 65 years of age and older received an influenza immunization. These are similar to previous influenza seasons for both age groups.¹²³

Invasive Group A Streptococcal Infections (iGAS)

iGAS infections can occur in skin, soft tissue, joints, the respiratory tract, or normally sterile sites of the body. In 2017, 68 iGAS cases in Ottawa residents were reported to OPH, which is slightly higher than during 2013 (53 cases).¹²⁴ While a significant increase was seen during 2013-17 across the rest of Ontario, 2017 rates in Ottawa and in Ontario-less-Ottawa are similar.¹²⁵ Chronic disease and underlying medical conditions, drug and alcohol use, and being homeless or under-housed were common risks identified among people with iGAS infections in Ottawa during recent years. These risks are consistent with identified populations at risk for iGAS elsewhere in Canada.¹²⁶

Tuberculosis (TB)

Tuberculosis is caused by a type of bacteria called *Mycobacterium tuberculosis*. TB typically affects the lungs, but can also infect other parts of the body, and is spread from person to person through droplets in the air. In 2017, 46 cases of TB were reported among Ottawa residents, a rate that is no different than 2013.¹²⁷ The incidence of TB in Ottawa in 2017 was the same as in Ontario-less-Ottawa.¹²⁸ Most people in Ottawa diagnosed with TB were born outside Canada. Among Canadian-born individuals in Ottawa, Indigenous people have higher rates of TB. People in Ottawa who are marginally housed also experience disproportionately higher rates of TB.

Sexually Transmitted and Blood-borne Infections and Risk Factors

Reportable sexually transmitted infections include chlamydia, gonorrhea, hepatitis B, human immunodeficiency virus (HIV), and syphilis. Reportable blood-borne infections include hepatitis B, hepatitis C, and HIV. Hepatitis B; HIV; and rarely, hepatitis C, can be transmitted both through blood and sexually.

Chlamydia was the most frequently reported sexually transmitted infection in Ottawa in 2017, with 3,452 cases reported, followed by gonorrhea, with 639 cases, and infectious syphilis, with 105 cases.¹²⁹ The rate of all of these infections has increased significantly over the last decade (216 cases of chlamydia per 100,000 in 2008 vs. 350/100,000 in 2017, 23 vs. 65 per 100,000 cases of gonorrhea, and 4 vs. 11 per 100,000 cases of infectious syphilis), and the rate of chlamydia in Ottawa in 2017 was higher than in Ontario-less-Ottawa (246/100,000).¹³⁰ Depending on the infection, youth 15 to 29 years of age (chlamydia and gonorrhea); and gay, bisexual, and men who have sex with other men (gonorrhea and infectious syphilis) are at higher risk.¹³¹ The most common risk factors for sexually transmitted infections are condomless sex, having a partner who is anonymous or new during the two months before diagnosis, and having more than one partner in the six months before diagnosis.

In 2017, 63 HIV infections and 11 cases of AIDS were reported to OPH.¹³² The incidence of HIV and AIDS has not changed since 2013. The incidence rate of HIV in Ottawa in 2017 was the same as in Ontario-less-Ottawa; however, the rate of AIDS was higher (0.9 vs. 0.4/100,000).¹³³ In Ottawa, the highest numbers of infections were diagnosed in those from, or those with a sexual partner from, a country where HIV is common; in men who have sex with men; and in people who use drugs.¹³⁴

Injecting drugs is the top risk factor for hepatitis C, 269 cases of which were reported in 2017.¹³⁵ The incidence of hepatitis C has not changed since 2013. In 2017, the rate was lower in Ottawa than in Ontario-less-Ottawa (27 vs. 35/100,000).¹³⁶ A total of 2 cases of acute hepatitis B were reported to OPH in 2017, which was the same in 2013 and lower than in Ontario-less-Ottawa (0.2/100,000 vs. 0.8/100,000) in 2017.¹³⁷ Most hepatitis B diagnoses are in those from a country where the disease is common.¹³⁸

Sexual Behaviour of Young Adults

Approximately two-thirds (68%) of Ottawa residents aged 15 to 29 years reported ever having had sex, which was similar to in Ontario-less-Ottawa (62%). The proportion that

reported ever having sex increased with age: 35% of 15 to 19-year-olds, 80% of 20 to 24 year-olds, and 89% of 25 to 29 year-olds.¹³⁹

Of the 15 to 29 year-olds who reported ever having had sex, only about half reported using a condom the last time they had sex, and about a third had had two partners or more in the past year, similar to in Ontario-less-Ottawa. Just under half reported they had been tested for sexually transmitted infections in the past year, which was higher than in Ontario-less-Ottawa.¹⁴⁰

Vaccine-Preventable Diseases

In general, reports of vaccine-preventable diseases to OPH have been low because of effective immunization programs and high immunization coverage across Ottawa. The most common reportable vaccine-preventable diseases in 2017 were chickenpox (74 cases) and pneumococcal disease (73 cases), a common cause of pneumonia.¹⁴¹ The rates of these diseases have not changed over the past 5 years. The rate of pneumococcal disease is not different from Ontario-less-Ottawa;¹⁴² provincial data for chickenpox are not available for comparison. Pertussis, or whooping cough, is the next most common vaccine-preventable disease, and its incidence has increased over the last 5 years (from 11 cases in 2013 to 25 cases in 2017).¹⁴³ However, the rate of pertussis in Ottawa in 2017 was lower than in Ontario-less-Ottawa (2.5 vs. 3.7/100,000).¹⁴⁴

The National Immunization Strategy's vaccination coverage goals, updated in 2017, set target coverage goals to minimize the morbidity and mortality associated with vaccine preventable diseases.¹⁴⁵ These goals are based on international standards and best practices.¹⁴⁶ In Ottawa, the coverage rate among seven year old students surpasses the national goal of 95% coverage for rubella (98.4%) and meningococcal C conjugate (96.9%), is approaching the goal for measles (94.5%) and mumps (94.4%), and is below the goal for diphtheria (87.3%), tetanus (87.3%), polio (87.8%), pertussis (87.3%), *Haemophilus influenzae* type b (84.3%) and pneumococcal disease (83.7%).¹⁴⁷ These coverage estimates are limited to immunizations reported to public health.

Vector-borne Diseases

Lyme disease

Ottawa, like much of northeastern Ontario, is an established Lyme disease risk area, meaning that more than 20% of ticks in the area are believed to be infected with the disease-causing bacterium, *Borrelia burgdorferi*.¹⁴⁸ In 2017, a record number of Lyme

disease cases were reported to OPH (190 cases), compared with 49 cases reported in 2013.¹⁴⁹ However, compared with other health units in eastern Ontario with established Lyme disease risk,¹⁵⁰ the rate in Ottawa is lower (56/100,000 vs. 19/100,000).¹⁵¹

In 2017, only 62% of Ottawa adults who were aware that one could get Lyme disease from a tick reported performing tick checks or taking steps to protect themselves from tick bites after spending time outdoors.¹⁵²

West Nile virus (WNV) illness

In 2017, 20 cases of WNV illness were reported among Ottawa residents, which is higher than what was reported in 2013 (2 cases).¹⁵³ The incidence of WNV illness in Ottawa in 2017 was higher than in Ontario-less-Ottawa (2 cases per 100,000 vs. 1 case per 100,000).¹⁵⁴

Mental Health

While most Ottawans consider their mental health to be good, mental health conditions account for a growing number of deaths, emergency department visits and hospital admissions.

Self-Rated Mental Health

Most Ottawans consider themselves to be in good mental health. In 2015/16 almost three-quarters (70%) of Ottawa residents described their mental health as very good or excellent, which was similar to 2011/12 (70%) and 2013/14 (69%).¹⁵⁵ This is not different from Ontario-less-Ottawa (68%).¹⁵⁶ Residents who rent their homes and those who are unable to work or permanently unemployed reported very good or excellent mental health less often. Self-rated mental health increased with increasing education levels and increasing household income.¹⁵⁷

Social Well-Being

Social well-being, and a sense of belonging to one's local community, are strongly related to good mental health. Two-thirds of Ottawa residents reported a strong sense of belonging to their local community in 2015/16; this was similar to Ontario-less-Ottawa and has not changed since 2005.¹⁵⁸ Young people reported the highest levels of strong community belonging, whereas adults aged 20 to 44 years reported the lowest levels. Residents who lived alone reported lower levels of strong community belonging than those who lived with others.¹⁵⁹

Suicide and Self-Harm

In 2012-2016, an average of 80 people died by suicide each year in Ottawa, more than two thirds of them male. In 2016, the rate of death by suicide was 8.4 per 100,000 population, similar to the rates in 2014 (8.1 per 100,000) and 2015 (8.7 per 100,000).¹⁶⁰ The highest rates are among men aged 40 to 64 years.¹⁶¹ Approximately 10% of suicide deaths each year occur among young people aged 15 to 24; suicide is the leading cause of death among young men (aged 20 to 44 years).^{162 163}

The rate of ED visits due to self-harm (135.8 per 100,000 in 2016) has increased since 2011 (113.2 per 100,000), particularly among young women aged 15 to 24 years, and was higher than the rate for Ontario-less-Ottawa in 2016 (126.4 per 100,000).¹⁶⁴

Eleven percent of Ottawa students in grades 7 to 12 say they seriously considered suicide in the past year, with 60% of these students reporting that they had wanted to talk to someone about their concerns but did not know how to access help. The percentage of Ottawa students who seriously considered suicide is not different from Ontario-less-Ottawa.¹⁶⁵

Use of Mental Health Services

In 2016, 17% of Ottawa residents, including 30% of Ottawa youth, said they had consulted a health professional about their emotional or mental health in the past year. Mental health consultations in the past year for Ottawa residents are slightly higher than for all residents in Ontario-less-Ottawa (14%) and for youth (24%).^{166 167} The percentage of Ottawa youth who consulted a health professional about their mental health hasn't changed since 2013.¹⁶⁸

Emergency department visits for mental health and addictions have risen in recent years, from 1,257 visits per 100,000 population in 2007 to 1,829 visits per 100,000 in 2016, with a sharp climb among youth and young adults. Less advantaged neighbourhoods¹⁶⁹ in Ottawa have more than twice the rate of ED visits for mental health and addictions than more advantaged neighbourhoods.¹⁷⁰

Oral health

Over half (54%) of Ottawa residents rate their oral health as very good or excellent and 15% rate it as poor to fair. This is not different from Ontario-less-Ottawa. Those who were most likely to rate their oral health as poor to fair include those with low incomes,

with a mother tongue other than French or English, with a high school education or less; immigrants; and men.¹⁷¹

Among those aged 12 years and older in Ottawa, 74% have seen a dentist in the past year, which is not different than Ontario-less-Ottawa.¹⁷²

About three-quarters (73%) of Ottawans aged 12 years and over have dental insurance, which is higher than Ontario-less-Ottawa (66%). Those without dental insurance are less likely to have visited a dentist in the past year, over three times as likely to use dental services only in emergencies, and over twice as likely to rate their oral health as fair or poor.¹⁷³

Reproductive, Family and Child Health

Pregnancy and Maternal Health

Fertility & Birth rate

In 2017, 9,558 babies were born to Ottawa women; down from 9,978 live births in 2013. The fertility rate (number of live births per 1,000 women aged 15 to 49 years) declined from 42.2 births per 1,000 women in 2013 to 38.9 births per 1,000 women in 2017.¹⁷⁴ Fertility rates were lower in Ottawa than the Ontario average between 2013 and 2016.¹⁷⁵ Fertility rates were highest among Ottawa women aged 30 to 34 years, followed by women aged 35 to 39 years and women aged 25 to 29 years. Births among teenagers dropped from 158 (5.5 births per 1,000 women 15 to 19 years) in 2013 to 105 (3.8 births per 1,000 women 15 to 19 years) in 2017,¹⁷⁶ and was lower compared to Ontario (5.7 births per 1,000 women 15 to 19 years).¹⁷⁷

The majority (95%) of women delivered at a hospital and 2.2% delivered at home in 2017. The proportion of women delivering at a birth centre increased from 1.2% in 2014 to 2.4% in 2017.¹⁷⁸ Most (92%) babies were born full term (8.2% preterm), and 81.5% were born with an appropriate weight for their gestational age. Compared to Ontario-less-Ottawa in 2017, Ottawa had a lower proportion of small for gestational age babies born (Ottawa: 7.7% vs. Ontario-less-Ottawa: 9.8%) and a slightly higher proportion of large for gestational age babies born (Ottawa: 10.8% vs Ontario-less-Ottawa: 9.4%).¹⁷⁹ In 2017, 28% of Ottawa women delivered via Caesarean section.¹⁸⁰

Mental Health and Pregnancy

In 2017, 17% of mothers in Ottawa reported to their health care provider that they had experienced anxiety, depression or another mental health concern during pregnancy, similar to Ontario-less-Ottawa.¹⁸¹ Eighteen percent of families screened through the Healthy Babies Healthy Children program reported that the mother or parenting partner had a history of depression, anxiety or other mental illness.¹⁸²

Smoking and Alcohol/Substance Use during Pregnancy

Fewer than 5% of Ottawa women who gave birth in 2017 reported smoking, lower compared to Ontario-less-Ottawa (7%) and approximately 5% reported drinking alcohol during their pregnancy, more than Ontario-less-Ottawa (2%).¹⁸³ Less than 2% reported use of other drugs such as marijuana, opioids and cocaine.¹⁸⁴

Prenatal Care

During their first trimester of pregnancy, 94% of women visited a health care provider, slightly more than Ontario-less-Ottawa (92%).¹⁸⁵ Twenty-nine percent attended a prenatal class in 2017, higher than the provincial average of 23%.¹⁸⁶

Infant Feeding

Nearly all (96%) of Ottawa mothers who gave birth in 2017 intended to feed breast milk to their infant and 86% intended to exclusively¹⁸⁷ feed breast milk to their infant, slightly higher than the Ontario-less-Ottawa average (81%).¹⁸⁸ Nine out of ten (91%) mothers who gave birth in 2017 fed breast milk on discharge from hospital or three days after giving birth with a midwife.¹⁸⁹ In 2016, seven out of ten (70%) mothers were feeding breast milk at six months.¹⁹⁰

There was a large drop in exclusive breastfeeding from 61% at a few days after birth (at hospital discharge or three days after giving birth with a midwife) to 38% at two weeks of age, among those who gave birth in 2016.^{191 192} The same drop in exclusive breastfeeding between a few days after birth and at two weeks has been observed since 2012.¹⁹³ Nine percent of mothers reported exclusively feeding breast milk for six months.¹⁹⁴ This has largely remained unchanged since 2012.¹⁹⁵

Awareness and Use of OPH Parenting Services

In 2016 and 2017, 85% of parents with children under six years of age had heard of at least one of the parenting services OPH provides and 56% had made use of at least one

of them. The most used services were the OPH telephone line (46%), the Parenting in Ottawa website (46%), and OPH's prenatal education service (44%).¹⁹⁶

Early Child Development

The first six years of life set the foundation for life-long learning and development; during those years children develop physical, emotional, social, language and communication skills. The Early Development Instrument (EDI) is a population-based measure of children's developmental health across five domains: Physical Health and Well-Being; Emotional Maturity; Social Competence; Language and Cognitive Development; and Communication Skills and General Knowledge. In 2015/16, 26% of Ottawa senior kindergarten children were considered to be "vulnerable"¹⁹⁷ in one or more of these domains.¹⁹⁸ The percent of children vulnerable in the *Physical Health and Well-Being*, *Social Competence* and *Emotional Maturity* domains have increased over time. The percent of vulnerable children in Ottawa was slightly lower than the provincial average (including Ottawa, 28%), though some neighbourhoods had higher vulnerability rates than others (range: 7% to 48% of senior kindergarteners).¹⁹⁹

Conclusion

Ottawa's population continues to grow and become more diverse and Ottawa has lower rates of death and higher life expectancy than the provincial average. There are many positive trends in the state of health of Ottawa residents. Seven out of ten (70%) Ottawa residents described their mental health as very good or excellent and 66% have a strong sense of community belonging, similar to Ontario-less-Ottawa. In 2017, 12% of Ottawa youth reported binge drinking in the month prior to the survey, which is lower than the 21% who reported binge drinking in 2013 and similar to youth in the rest of Ontario.²⁰⁰

In 2015/16, 15% of Ottawa residents aged 19 and older were current smokers, down from 22% in 2001 and lower than the provincial rate of 17%,²⁰¹ and in 2017, most (87%) grade 7 to 12 students in Ottawa reported that they have never smoked.

However, there are areas where the health of Ottawa residents could be improved:

- Mental health-related visits to emergency departments have risen over the past 10 years, with a sharp climb among youth and young adults. Self-harm

emergency department visits have also increased. One in nine (11%) youth seriously considered suicide in the past year, with 60% of these students wanting to talk to someone but not knowing where to get help.

- There are increased risks for road users due to self-reported impaired and distracted driving
- Although Ottawa fares better than the rest of Ontario in many categories, some residents are still not meeting **healthy eating, physical activity and sleep** guidelines.
- Rates of some sexually transmitted infections continue to climb.
- There are gaps in Ottawa residents' understanding of the prevention of emerging vector-borne diseases such as Lyme disease.
- Ottawa is feeling the impact of an aging population. An increasing number of deaths are caused by dementia, and preventable falls among older adults continue to be the primary cause of injury.
- Deaths and hospitalizations due to opioid overdose continue to rise.

OPH will continue to use data as discussed in this report to keep programs and services current, informed and focused; provide information to partner agencies to use in their program development; and assess progress in protecting and promoting health and preventing disease. Regular population health assessment and analysis enables OPH to continually adjust and improve programs and services it delivers to residents of Ottawa.

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