



# Status of Mental Health in Ottawa

**REPORT 2018**





# MESSAGE FROM OTTAWA PUBLIC HEALTH

On behalf of Ottawa Public Health (OPH), I am pleased to provide the *Status of Mental Health in Ottawa Report*, which is the first local surveillance report to describe the state of mental health across the population of Ottawa. I am grateful to the Champlain Local Health Integration Network, the members of our Mental Health Advisory Committee, the Public Health Agency of Canada and the many OPH staff for their support and expertise in developing this report.

With the important focus on mental health in our community, this report is timely and relevant as it highlights the factors that promote and protect mental health, and those that contribute to poor mental health. This information builds on the current work to promote mental health by community partners, service delivery agencies, and OPH.

The findings from this report will also help to inform future discussions on mental health promotion, and will support policy makers, community partners, and our own endeavours to promote positive mental health.



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# ACRONYMS

| ACRONYM       | DEFINITION                                         |
|---------------|----------------------------------------------------|
| <b>CAMH</b>   | Centre for Addiction and Mental Health             |
| <b>CCHS</b>   | Canadian Community Health Survey                   |
| <b>DAD</b>    | Discharge Abstract Database                        |
| <b>ED</b>     | Emergency Department                               |
| <b>EDI</b>    | Early Development Instrument                       |
| <b>LGBTQ2</b> | Lesbian, gay, bisexual, trans, queer, two-spirited |
| <b>LHIN</b>   | Local Health Integration Network                   |
| <b>NACRS</b>  | National Ambulatory Care Reporting System          |
| <b>OHIP</b>   | Ontario Health Insurance Plan                      |
| <b>ONS</b>    | Ottawa Neighbourhood Study                         |
| <b>OPH</b>    | Ottawa Public Health                               |
| <b>OSDUHS</b> | Ontario Student Drug Use and Health Survey         |
| <b>PHAC</b>   | Public Health Agency of Canada                     |

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The data contents and interpretation in this publication from the Ontario Student Drug Use and Health Survey, conducted by the Centre for Addiction and Mental Health and administered by the Institute for Social Research, York University are solely the responsibility of the authors and do not necessarily represent the official view of the Centre for Addiction and Mental Health.

# TABLE OF CONTENTS

|                                                                                                                |            |
|----------------------------------------------------------------------------------------------------------------|------------|
| <b>Message from Ottawa Public Health .....</b>                                                                 | <b>i</b>   |
| <b>Acronyms.....</b>                                                                                           | <b>iii</b> |
| <b>Acknowledgements .....</b>                                                                                  | <b>iv</b>  |
| <b>List of Figures .....</b>                                                                                   | <b>3</b>   |
| <b>Executive Summary.....</b>                                                                                  | <b>5</b>   |
| Positive Mental Health Outcomes .....                                                                          | 5          |
| Mental Health Care Utilization, Mental Health Challenges and Illness, Substance Use and Addiction .....        | 6          |
| Individual Determinants .....                                                                                  | 7          |
| Family Determinants .....                                                                                      | 7          |
| Community Determinants .....                                                                                   | 8          |
| Society Determinants .....                                                                                     | 8          |
| <b>What is the purpose of the report?.....</b>                                                                 | <b>9</b>   |
| <b>Why talk about mental health?.....</b>                                                                      | <b>10</b>  |
| <b>The Public Health Agency of Canada's Positive Mental Health Surveillance Conceptual Framework .....</b>     | <b>12</b>  |
| <b>Methodology .....</b>                                                                                       | <b>14</b>  |
| Data Sources .....                                                                                             | 14         |
| Analysis.....                                                                                                  | 14         |
| First Nations, Inuit and Métis Peoples .....                                                                   | 15         |
| Limitations .....                                                                                              | 15         |
| <b>Positive Mental Health Outcomes .....</b>                                                                   | <b>16</b>  |
| Highlights for Ottawa.....                                                                                     | 16         |
| Self-Rated Mental Health.....                                                                                  | 17         |
| Happiness .....                                                                                                | 18         |
| Life Satisfaction.....                                                                                         | 19         |
| Psychological Well-Being .....                                                                                 | 20         |
| Social Well-Being.....                                                                                         | 22         |
| <b>Mental Health Care Utilization, Mental Health Challenges and Illness, Substance Use and Addiction .....</b> | <b>24</b>  |
| Highlights for Ottawa.....                                                                                     | 24         |
| Mental Health Care Utilization.....                                                                            | 26         |
| Mental Health Challenges and Illness .....                                                                     | 34         |
| Self Injury.....                                                                                               | 39         |
| Suicidal Behaviour.....                                                                                        | 41         |
| <b>Individual Determinants .....</b>                                                                           | <b>43</b>  |
| Highlights for Ottawa.....                                                                                     | 43         |
| Resilience .....                                                                                               | 44         |
| Coping.....                                                                                                    | 44         |
| Control and Self-Efficacy .....                                                                                | 45         |
| Social Competence and Emotional Maturity in Young Children.....                                                | 46         |

|                                                     |           |
|-----------------------------------------------------|-----------|
| Self-Esteem .....                                   | 47        |
| Psychological Distress and Youth.....               | 47        |
| Health Status .....                                 | 47        |
| Physical Activity .....                             | 50        |
| Problematic Behaviours.....                         | 52        |
| <b>Family Determinants.....</b>                     | <b>54</b> |
| Highlights for Ottawa.....                          | 54        |
| Family Relationship Quality and Connectedness ..... | 54        |
| Mental Health of Family Members.....                | 55        |
| Family Structure .....                              | 57        |
| Family Violence.....                                | 57        |
| <b>Community Determinants.....</b>                  | <b>60</b> |
| Highlights for Ottawa.....                          | 60        |
| Community Involvement .....                         | 61        |
| Social Networks .....                               | 61        |
| Social Support.....                                 | 62        |
| Workplace Environment.....                          | 62        |
| School Environment.....                             | 64        |
| Neighbourhoods and the Built Environment.....       | 65        |
| Community Violence .....                            | 66        |
| <b>Society Determinants .....</b>                   | <b>67</b> |
| Highlights for Ottawa.....                          | 67        |
| Inequity .....                                      | 68        |
| Stigma .....                                        | 71        |
| Discrimination.....                                 | 72        |
| Political Participation .....                       | 73        |
| <b>Mental Wellbeing of Indigenous Peoples.....</b>  | <b>74</b> |
| Self reported Mood and Anxiety Disorders.....       | 75        |
| Substance Use .....                                 | 75        |
| Self Injury.....                                    | 75        |
| Suicidal Behaviour.....                             | 75        |
| Self-reported Exposure to Childhood Violence .....  | 75        |
| Physical and Sexual Assault .....                   | 75        |
| Food Insecurity .....                               | 75        |
| Stigma .....                                        | 76        |
| Discrimination.....                                 | 76        |
| <b>Conclusion.....</b>                              | <b>77</b> |
| <b>Glossary .....</b>                               | <b>78</b> |
| <b>References .....</b>                             | <b>80</b> |
| <b>Appendix 1: Priority Populations .....</b>       | <b>92</b> |
| <b>Appendix 2: Data Tables for Figures.....</b>     | <b>94</b> |

If the content of this report impacts you in a negative way, please speak to your health care provider or call the Mental Health Crisis Line at **613-722-6914** (Ottawa) or **1-866-996-0991** (outside Ottawa).

# LIST OF FIGURES

|                  |                                                                                                                                                                                                                   |    |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| <b>Figure 1</b>  | Public Health Agency of Canada's Positive Mental Health Surveillance Conceptual Framework.....                                                                                                                    | 13 |
| <b>Figure 2</b>  | Percentage of Ottawa residents (12 years and older) who reported excellent or very good mental health, by selected socio-economic factors, 2013/14.....                                                           | 17 |
| <b>Figure 3</b>  | Percentage of Ottawa residents (15 years and older) who reported feeling happy almost every day or every day in the past month, by selected socio-economic factors, 2011/12 .....                                 | 18 |
| <b>Figure 4</b>  | Percentage of Ottawa residents (12 years and older) satisfied or very satisfied with their life, by selected socio-economic factors, 2013/14 .....                                                                | 19 |
| <b>Figure 5</b>  | Percentage of Ottawa residents (15 years and older) who reported high psychological well-being, by mother tongue, 2011/12 .....                                                                                   | 20 |
| <b>Figure 6</b>  | Percentage of students by grade who reported high autonomy, competence and relatedness, Canada, 2014/15 .....                                                                                                     | 21 |
| <b>Figure 7</b>  | Percentage of residents (12 years and older) who reported a very or somewhat strong sense of belonging to their local community, Ottawa and Ontario-less-Ottawa, 2005–2014 .....                                  | 22 |
| <b>Figure 8</b>  | Percentage of residents (12 years and older) who reported a very or somewhat strong sense of belonging to their local community, by selected socio-economic factors, Ottawa, 2013/14.....                         | 23 |
| <b>Figure 9</b>  | Age standardized rate (per 1,000 population) of outpatient physician visits related to mental health and addictions, Ottawa and Ontario-less-Ottawa, 2006–2015.....                                               | 27 |
| <b>Figure 10</b> | Age-specific rate (per 1,000 population) of outpatient physician visits related to mental health and addictions, Ottawa, 2006–2015 .....                                                                          | 27 |
| <b>Figure 11</b> | Percentage of residents (12 years and older) who reported seeing or talking to a health professional about their emotional or mental health in the past 12 months, Ottawa and Ontario-less-Ottawa, 2005–2014..... | 28 |
| <b>Figure 12</b> | Age standardized rates (per 100,000 population) of emergency department visits for any mental health or addictions condition, Ottawa and Ontario-less-Ottawa, 2007–2016.....                                      | 29 |
| <b>Figure 13</b> | Age-specific rates (per 100,000 population) of emergency department visits for any mental health or addictions condition, Ottawa, 2007–2016.....                                                                  | 30 |
| <b>Figure 14</b> | Crude rate (per 1,000 population) of emergency department visits for any mental health or addictions condition, by Ottawa neighbourhood socio-economic advantage, ages 10 years and older, 2014–2016.....         | 31 |
| <b>Figure 15</b> | Age standardized rates (per 100,000 population) of hospitalizations for any mental health or addictions condition, Ottawa and Ontario-less-Ottawa, 2007–2016.....                                                 | 32 |

|                  |                                                                                                                                                                                                                     |    |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| <b>Figure 16</b> | Age-specific rates (per 100,000 population) of hospitalization for any mental health or addictions condition, Ottawa, 2007–2016 .....                                                                               | 32 |
| <b>Figure 17</b> | Age standardized rates (per 100,000 population) of emergency department visits for mood and/or anxiety disorders, Ottawa and Ontario-less-Ottawa, 2007–2016 .....                                                   | 33 |
| <b>Figure 18</b> | Age-specific rates (per 100,000 population) of emergency department visits for mood and/or anxiety disorders, Ottawa, 2007–2016.....                                                                                | 34 |
| <b>Figure 19</b> | Percentage of residents (19 years and older) who reported diagnosis with a mood and/or anxiety disorder, Ottawa and Ontario-less-Ottawa, 2005 to 2014 .....                                                         | 35 |
| <b>Figure 20</b> | Age-specific rate (per 100,000 population) of emergency department visits for eating disorders, Ottawa, 2007–2016 .....                                                                                             | 37 |
| <b>Figure 21</b> | Age standardized rate (per 100,000 population) of intentional self-harm related ED visits, Ottawa and Ontario-less-Ottawa, 2007–2016.....                                                                           | 39 |
| <b>Figure 22</b> | Age specific rate (per 100,000 population) of intentional self-harm related ED visits by sex, Ottawa, 2007–2016 .....                                                                                               | 40 |
| <b>Figure 23</b> | Age-specific rate (per 100,000 population) of intentional self-harm related ED visits by sex, Ottawa, 2016 .....                                                                                                    | 40 |
| <b>Figure 24</b> | Crude rate (per 100,000 population) of deaths by suicide, Ottawa, 2003–2016.....                                                                                                                                    | 42 |
| <b>Figure 25</b> | Age-specific rate (per 100,000 population) of deaths by suicide by sex, Ottawa, 2012–2016 average .....                                                                                                             | 42 |
| <b>Figure 26</b> | Percentage of Canadian adults (18 years and older) who reported a high level of coping, by selected socio-economic factors, Canada, 2012 .....                                                                      | 44 |
| <b>Figure 27</b> | Percentage of Canadian adults (18 years and older) who reported a high level of perceived control over life situations, by selected socio-economic factors, Canada, 2008 .....                                      | 45 |
| <b>Figure 28</b> | Percentage of residents (12 years and older) who reported very good or excellent health, by selected socio-economic factors, Ottawa, 2013/14 .....                                                                  | 48 |
| <b>Figure 29</b> | Percentage of residents (12 years and older) who reported activity limitations sometimes or often, by selected socio-economic factors, Ottawa, 2013/14 .....                                                        | 49 |
| <b>Figure 30</b> | Percentage of residents (12 years and older) who reported they were moderately active or active in their leisure time, Ottawa and Ontario-less-Ottawa, 2005-2014.....                                               | 50 |
| <b>Figure 31</b> | Percentage of residents (12 years and older) who reported they were moderately active or active in their leisure time, by selected socio-economic factors, Ottawa, 2013/14.....                                     | 51 |
| <b>Figure 32</b> | Percentage of Canadian adults (18 years and older) who experienced physical abuse, sexual abuse or exposure to intimate partner violence before the age of 16 years, by selected socio-economic factors, 2012 ..... | 58 |
| <b>Figure 33</b> | Percentage of residents (18 to 75 years) who reported most days at work were quite a bit or extremely stressful, Ottawa and Ontario-less Ottawa, 2005–2014.....                                                     | 63 |
| <b>Figure 34</b> | Percentage of Ottawa residents (18 to 75 years) who reported most days at work were quite a bit or extremely stressful, by highest education level, 2013/14.....                                                    | 63 |
| <b>Figure 35</b> | Percentage of Ottawa households reporting food insecurity by selected socio-economic factors, 2013/14.....                                                                                                          | 70 |

# EXECUTIVE SUMMARY

The *Status of Mental Health in Ottawa Report* describes the mental health of Ottawa residents, including the characteristics and factors that promote mental health in our community and the number of residents seeking care for mental illness and addictions.

In order to understand the mental health status of a community, it is necessary to use a population-based model of health. This report uses the Public Health Agency of Canada's (PHAC) *Positive Mental Health Surveillance Conceptual Framework* to report on the determinants of mental health at a local level.

As part of OPH's strategic direction to [Foster Mental Health in Our Community](#), OPH is committed to increasing mental health promotion efforts at the population level across the lifespan. Alongside our many community partners OPH seeks to contribute to: a) the improved well-being of the population; b) supportive environments that enhance mental health where residents live, learn, play and work; and c) the improved quality and accessibility of services for individuals with mental health issues and their caregivers.

## TABLE 1 REPORT QUICK STATS FOR OTTAWA

**This table contains Ottawa statistics only. Provincial and national level statistics for indicators where local data are not available are presented in the report.**

### Positive Mental Health Outcomes

| INDICATOR                       | MEASURE                                                                                | LATEST DATA | SOURCE       |
|---------------------------------|----------------------------------------------------------------------------------------|-------------|--------------|
| <b>Self-rated mental health</b> | % aged 12y+ who report very good or excellent mental health                            | 69%         | 2013/14 CCHS |
| <b>Happiness</b>                | % aged 15y+ who report feeling happy almost every day or every day in the past month   | 75%         | 2011/12 CCHS |
| <b>Life satisfaction</b>        | % aged 12y+ who report being satisfied with their life                                 | 91%         | 2013/14 CCHS |
| <b>Psychological well-being</b> | % aged 15y+ who report high psychological well-being                                   | 64%         | 2011/12 CCHS |
| <b>Social well-being</b>        | % aged 12y+ who report a very or somewhat strong sense of belonging to local community | 63%         | 2013/14 CCHS |

y=years; **SK**=Senior Kindergarten; **CCHS**=Canadian Community Health Survey; **DAD**=Discharge Abstract Database; **EDI**=Early Development Index; **NACRS**=National Ambulatory Care Reporting System; **OHIP**=Ontario Health Insurance Plan; **OSDUHS**=Ontario Student Drug Use and Health Survey; **ON**=Ontario

## Mental Health Care Utilization, Mental Health Challenges and Illness, Substance Use and Addiction

| INDICATOR                             | MEASURE                                                                                                               | LATEST DATA    | SOURCE             |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------|--------------------|
| <b>Mental health care utilization</b> | Number (and rate per 1,000 population) of outpatient visits to physicians for mental health and addictions conditions | 728,938 (763)  | 2015 OHIP Billing  |
| <b>Mental health care contact</b>     | % aged 12y+ who talked to a health professional about their mental or emotional health in past year                   | 16%            | 2013/14 CCHS       |
|                                       | % grade 7–12 students who talked to health professional about mental or emotional health in past year                 | 30%            | 2017 OSDUHS        |
|                                       | Number (and rate per 100,000 population) of ED visits for mental health and addictions conditions                     | 17,790 (1,829) | 2016 NACRS         |
|                                       | Number (and rate per 100,000 population) of hospitalizations for mental health and addictions conditions              | 7,075 (727)    | 2016 DAD           |
|                                       | Number (and rate per 100,000 population) of ED visits for mood and anxiety disorders                                  | 7,680 (795)    | 2016 NACRS         |
| <b>Self injury</b>                    | Number (and rate per 100,000 population) of ED visits for self-harm                                                   | 1,283 (136)    | 2016 NACRS         |
| <b>Suicidal behaviour</b>             | % grade 7–12 students who considered suicide in past year                                                             | 11%            | 2017 OSDUHS        |
| <b>Suicide</b>                        | Average number (and rate per 100,000 population) of suicide deaths                                                    | 80 (8.5)       | 2012-16 ON Coroner |
| <b>Alcohol use</b>                    | % aged 19y+ who report frequent binge drinking in past year                                                           | 20%            | 2013/14 CCHS       |
|                                       | % grade 7–12 students who report binge drinking in past 4 weeks                                                       | 12%            | 2017 OSDUHS        |
| <b>Drug use</b>                       | % aged 19y+ of those who used cannabis more than once in their lifetime who used cannabis in past year                | 14%            | 2015 CCHS          |
|                                       | % aged 18y+ who report using illicit drugs in the past year                                                           | 2%             | 2011/12 CCHS       |
|                                       | % grade 7–12 students who report using cannabis in past year                                                          | 18%            | 2017 OSDUHS        |
|                                       | % grade 7–12 students who report non-medical use of prescription drugs in past year                                   | 14%            | 2017 OSDUHS        |
|                                       | % grade 7–12 students who report using illicit drugs (excluding cannabis) in past year                                | 9%             | 2017 OSDUHS        |

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## Individual Determinants

| INDICATOR                                         | MEASURE                                                                                                                                    | LATEST DATA | SOURCE       |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|
| <b>Social competence &amp; emotional maturity</b> | % of SK children vulnerable for social competence                                                                                          | 9%          | 2014/15 EDI  |
|                                                   | % of SK children vulnerable for emotional maturity                                                                                         | 12%         | 2014/15 EDI  |
| <b>Self-esteem</b>                                | % grade 7–12 reporting moderate to high self-esteem                                                                                        | 93%         | 2013 OSDUHS  |
| <b>Psychological distress</b>                     | % grade 7–12 scoring moderate to serious psychological distress over past 4 weeks                                                          | 35%         | 2017 OSDUHS  |
| <b>Self-rated health</b>                          | % aged 12y+ who report very good or excellent health                                                                                       | 63%         | 2013/14 CCHS |
| <b>Activity limitation</b>                        | % aged 12y+ who report their activities are sometimes or often limited due to a “long-term physical or mental condition or health problem” | 30%         | 2013/14 CCHS |
| <b>Problem gambling</b>                           | % grades 7–12 who report gambling for money at least once in the past year                                                                 | 34%         | 2017 OSDUHS  |
| <b>Problematic use of electronic devices</b>      | % grades 9–12 students at risk of problematic use of electronic devices                                                                    | 48%         | 2017 OSDUHS  |

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## Family Determinants

| INDICATOR                         | MEASURE                                                                                              | LATEST DATA                 | SOURCE      |
|-----------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------|-------------|
| <b>Parent-youth relationships</b> | % grades 7–12 who report getting along very well with at least one parent                            | Gr 7–8: 84%<br>Gr 9–12: 74% | 2013 OSDUHS |
|                                   | % grades 7–12 who report they usually or always talked about their problems with at least one parent | Gr 7–8: 65%<br>Gr 9–12: 50% | 2017 OSDUHS |
| <b>Family structure</b>           | % of single parent families                                                                          | 16%                         | 2016 Census |

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## Community Determinants

| INDICATOR                               | MEASURE                                                                                                          | LATEST DATA | SOURCE       |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------|--------------|
| <b>Social networks</b>                  | % of grade 7–12 students who report using social media sites for 5+ hours every day                              | 17%         | 2017 OSDUHS  |
| <b>Workplace stress</b>                 | % aged 18–75y who worked in past year who report most days at work were quite a bit or extremely stressful       | 26%         | 2013/14 CCHS |
| <b>School attachment</b>                | % grade 7–12 students who report feeling part of their school                                                    | 83%         | 2017 OSDUHS  |
| <b>School safety</b>                    | % grade 7–12 students who report that they feel safe in their school                                             | 91%         | 2017 OSDUHS  |
| <b>Bullying</b>                         | % grade 7–12 students who report they were bullied at least once on school property in current school year       | 18%         | 2017 OSDUHS  |
|                                         | % grade 7–12 students who report they were cyber-bullied at least once on in past year                           | 18%         | 2017 OSDUHS  |
| <b>Neighbourhood safety &amp; crime</b> | % aged 12y+ who report feeling that the crime rate in their neighbourhood made it unsafe to go on walks at night | 11%         | 2015 CCHS    |

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## Society Determinants

| INDICATOR                      | MEASURE                                                       | LATEST DATA | SOURCE              |
|--------------------------------|---------------------------------------------------------------|-------------|---------------------|
| <b>Unemployment</b>            | % aged 15y+ unemployed                                        | 6.4%        | Statistics Canada   |
| <b>Income</b>                  | % individuals in private households with low income           | 13%         | 2016 Census         |
| <b>Food security</b>           | % households reporting food insecurity                        | 7%          | 2013/14 CCHS        |
| <b>Housing</b>                 | % of households with a core housing need                      | 13%         | 2016 Census         |
| <b>Political participation</b> | % of registered voters casting a ballot in municipal election | 40%         | 2014 City of Ottawa |

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# WHAT IS THE PURPOSE OF THE REPORT?

The *Status of Mental Health in Ottawa Report* was written in collaboration with mental health experts and community partners. It aims to assess the mental health of Ottawa residents, to understand the characteristics and factors that promote mental health in our community and to support all residents to have a better understanding of the factors that influence mental health. This report will provide only a snapshot of mental health care utilization in Ottawa.

This report:

- Describes the current state of mental health in Ottawa, including the number of residents living with mental illness and substance use disorders;
- identifies factors that influence mental health outcomes in Ottawa; and
- informs programming, services and policies that aim to improve the mental health of residents and foster a resilient community.

# WHY TALK ABOUT MENTAL HEALTH?

The World Health Organization defines mental health as “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (1). Mental health and mental illness are distinct, as mental health refers to the spectrum of emotions, thoughts and feelings that everyone experiences, whereas mental illness is a diagnosed disorder that affects the way a person thinks, feels and/or behaves (2). Poor mental health may sometimes lead to mental illness, as poor physical health can lead to physical illness such as heart disease and diabetes, but not all those with poor mental health suffer from a mental illness, nor do all those with a mental illness have poor mental health.

The state of individual mental health has a significant impact on how a person will live, learn, work, and play throughout their lives. Positive mental health begins in pregnancy as the brain’s architecture is developed, and continues through the lifespan, as a person interacts with their environment and forms relationships (3, 4). Positive mental health is associated with better overall health, resilience and the ability to cope with life’s challenges (5–7). It is a protective factor against suicidal behaviour, poor academic performance (8), and depression (9). Positive mental health is also a protective factor against problematic substance use and reduces the burden of other significant health issues. Positive mental health reduces stroke incidence and improves survival rates, reduces heart disease, and lowers the number of chronic diseases overall (10).

In contrast, poor mental health impacts the quality of life (11) and well-being of individuals, families, communities and society. It can also lead to mental illness and risk taking behaviours, including substance use, problem gambling, and risky sexual practices (3, 12–14). Here are some examples of how mental illness affects Canadians:

- One in five Canadians are affected by mental illness annually (15).
- The burden of mental illness and addictions in Ontario is more than 1.5 times that of all cancers (11).
- 23% of Canadian parents care for children with mental illness (16, 17).
- In 2015, 4,405 deaths by suicide occurred in Canada (18).
- The estimated cost for Canadians for mental illness was \$50 billion in 2011. Health care, social services and income support costs make up the biggest proportion of these costs. It also cost businesses more than \$6 billion in lost productivity from absenteeism and turnover (15, 19).

Positive mental health promotion across the population is a key part of fostering and maintaining a healthy and resilient community. It is also integral in preventing the onset or worsening of mental illness and problematic substance use and enhancing recovery from illness.

# THE PUBLIC HEALTH AGENCY OF CANADA'S POSITIVE MENTAL HEALTH SURVEILLANCE CONCEPTUAL FRAMEWORK

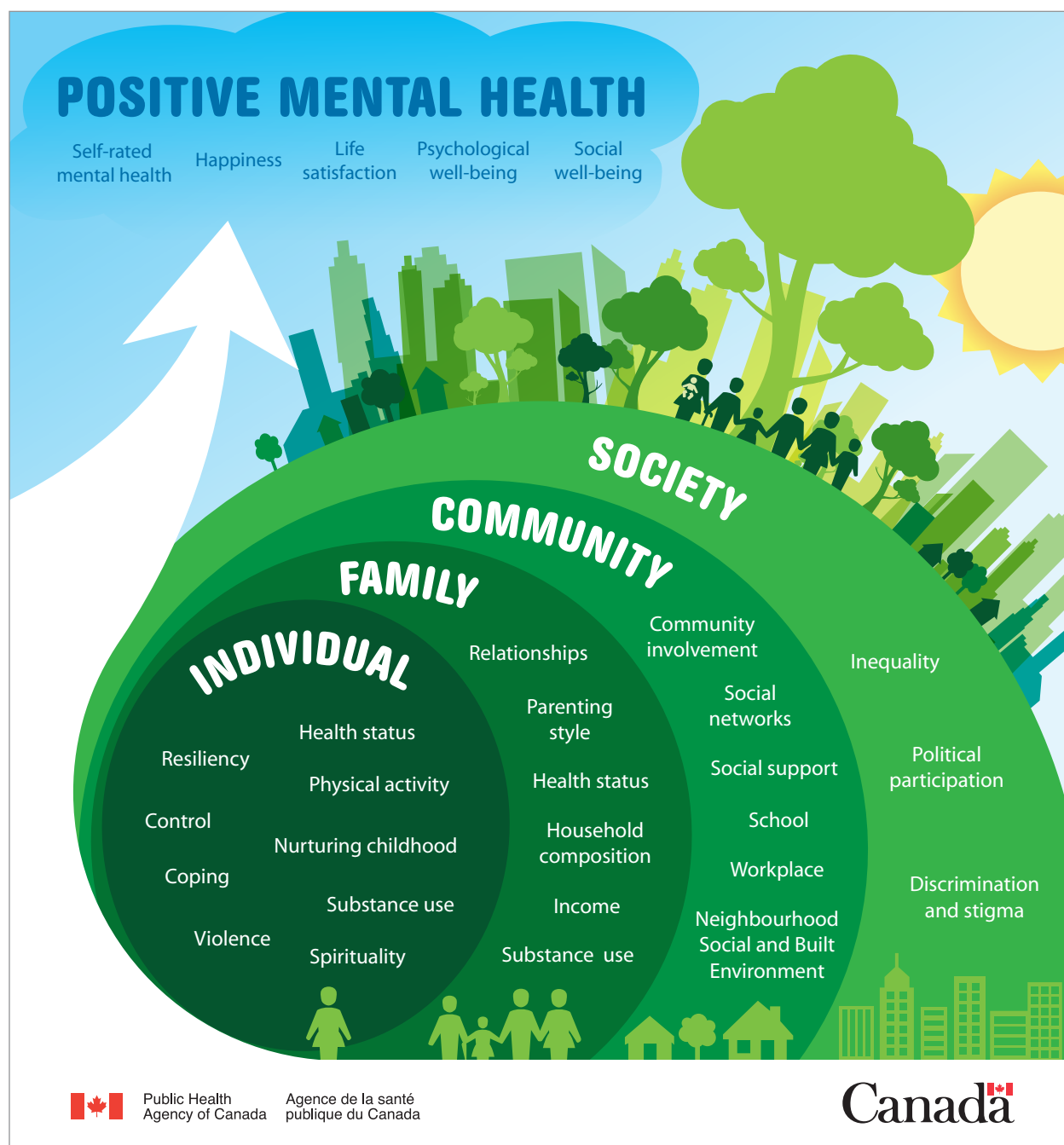
To understand the mental health status of a community, it is necessary to use a population-based model of health. This report uses the Public Health Agency of Canada's (PHAC) *Positive Mental Health Surveillance Conceptual Framework* (Figure 1) to report on mental health outcomes and determinant indicators. Indicators where data were unavailable are not included in this report.

PHAC developed this framework through an iterative consultation process to ensure the information was relevant and actionable to influence change in public health policy and practice; and that indicators were evidence-based, accessible, and could be collected regularly to monitor trends over time (20). This population approach framework identifies factors that influence mental health outcomes, including:

- individual characteristics like physical health, resilience and coping skills; and
- environmental characteristics, including family, community and the larger societal environments where mental health is impacted by economics, societal norms, access to services and urban design (21).

The PHAC's *Positive Mental Health Surveillance Conceptual Framework* is used nationally to inform programs and policies that improve the mental health status of Canadians throughout the life course.

To learn more about this framework, please refer to [Monitoring Positive Mental health and Its Determinants in Canada: the Development of the Positive Mental Health Surveillance Indicator Framework – HPCDP: Volume 36-1, January 2016](#)

**FIGURE 1****Public Health Agency of Canada's Positive Mental Health Surveillance Conceptual Framework**

**Source:** Centre for Chronic Disease Prevention (2016). Positive Mental Health Surveillance Conceptual Framework Infographic, Canada, 2016 Edition. Ottawa (ON): Public Health Agency of Canada. Retrieved September, 2017 from: <https://infobase.phac-aspc.gc.ca/datalab/doc/pmh-smp-framework-eng.pdf>

# METHODOLOGY

## Data Sources

Many data sources were used to report on the mental health of Ottawa residents using indicators from PHAC's *Positive Mental Health Surveillance Conceptual Framework*. Local sources of data include survey data such as the [Ontario Student Drug Use and Health Survey \(OSDUHS\)](#), [Canadian Community Health Survey \(CCHS\)](#), the [Early Development Instrument \(EDI\)](#), the [My Life, My Wellbeing](#) study, death data from the Ontario Coroner or the Vital Statistics Registry, emergency department and hospitalization data, data from the [Ottawa Neighbourhood Study \(ONS\)](#) and [Census](#) data. Where local data were out-of-date (prior to 2012) or unavailable, provincial or national sources of data were used. These data sources include Statistics Canada's [CCHS – Mental Health Survey](#), [General Social Survey](#), [Aboriginal Peoples Survey](#), and the [Ontario Incidence Study of Reported Child Abuse and Neglect](#).

## Analysis

Data from the CCHS were analyzed using StataSE 14 (StataCorp, College Station, Texas) with methods recommended by Statistics Canada. Socio-economic variables assessed included sex, age group, mother tongue, highest level of education, household income level, time since immigration, location of residence (population centre/rural), household composition, home ownership, employment status in the past week, and Indigenous identity.

Statistical significance testing between the outcome and socioeconomic factors were conducted using Chi-square tests at a significance level of  $p < 0.05$ . If there is less than a 5% likelihood that the observed difference was due to chance, then that difference is said to be statistically significant. All socio-economic variables were forced into a multivariable Poisson regression model using two CCHS cycles if available, to determine which factors were statistically significant ( $p < 0.05$ ) when controlling for the others. Reference comparison categories for each variable were male, ages 12 to 19, English mother tongue, post-secondary education, highest household income, Canadian born, population centre, parents with child(ren), home owner, at work in the past week, and non-Indigenous identity. Comparison categories are identified within each figure. If employment status was not significantly associated with the outcome in the model, it was excluded, as it was only asked to respondents aged 15 to 75 years. Not every statistically significant difference is reported. Where comparisons between groups are made and presented in a chart, bars in the chart are striped to indicate statistically significant differences from the comparison category.

Any differences between Ottawa and Ontario-less-Ottawa should be interpreted as Ottawa is different from the average of individuals across Ontario excluding the Ottawa area. It does not mean Ottawa is different from other individual health units across Ontario. No comparisons were made to other individual health unit regions across Ontario.

In this document, percentages (proportions) are rounded to the nearest whole number e.g. 11.7% is rounded to 12%, and rates have been age standardized to the 2011 Canadian population unless otherwise noted. Point estimates are provided with 95% confidence intervals (CI) indicated by error bars on charts. The 95% CI includes the true value 95 times out of 100. For example, if the point estimate for the percentage of Ottawa residents using alcohol is 58% (95% CI: 44–70%), then the range from 44% to 70% will contain the true population value 95% of the time. The narrower the confidence interval is, the more precise the estimate. Data presented in the figures are available in Appendix 2: Data Tables for Figures.

## First Nations, Inuit and Métis Peoples

Some residents are at higher risk of poor mental health or mental illness due to discrimination or inequities related to education, employment, income, and housing. For example, while other population groups experience inequities, First Nations, Inuit and Métis peoples, as the original peoples of Canada, experience the cumulative effect of long-term social and health inequities, combined with the ongoing impacts of colonization, systemic racism, discrimination and social exclusion. To learn more about the mental health of Indigenous peoples, please see the section, Mental Well-being of Indigenous Peoples.

## Limitations

Throughout the report critically appraised local, provincial and national data sources were used. When local data was not available, provincial and national data were used. There was limited access to data for specific populations living in Ottawa. Priority populations, including Indigenous peoples, were considered in the data analysis where possible, however, these populations are not well represented in local data. Examples of other priority populations include immigrants, Francophones, LGBTQ2, residents living in rural areas, and older adults. Access to quality, relevant and timely local data would support a health equity approach to mental health promotion programming, policies and services for the identified priority populations.

To learn more about these populations, please see Appendix 1: Priority Populations.

# POSITIVE MENTAL HEALTH OUTCOMES

Over a lifetime, mental health is shaped by a complex interaction between individual, family, community, and societal factors. These factors can be modified to promote and protect mental health, and reduce the risk of poor mental health or mental illness (21). Mental health outcomes, such as self-rated mental health and psychological well-being, predict the overall health and mental health of a population (6, 22). Understanding mental health outcomes helps to determine what factors promote and protect mental health, and where it may be at risk. This section of the report describes the mental health outcomes across the Ottawa population.

## Highlights for Ottawa

- **Many Ottawa residents reported very good or excellent** self-rated mental health (69%), happiness (75%) and life satisfaction (91%).
- Ottawa residents continued to report **lower levels of strong community belonging** compared to the rest of Ontario. Ottawa residents aged 20 to 44 years reported lowest levels of strong community belonging, whereas youth 12 to 19 years reported the highest levels of strong community belonging.
- **Fewer Ottawa residents** (64%) aged 15 years and older reported **high psychological well-being** compared to the rest of Ontario (70%)
- Certain populations more frequently reported poor mental health outcomes:
  - ▶ **Lower income:** lower self-rated mental health, happiness, life satisfaction
  - ▶ **Lower education levels:** lower self-rated mental health, life satisfaction, psychological well-being
  - ▶ **Increasing age and older adults over 65 years:** lower happiness, life satisfaction, psychological well-being
  - ▶ **Home renters:** lower self-rated mental health, life satisfaction
  - ▶ **Immigrants:** ≤10y in Canada (lower happiness, psychological well-being)
  - ▶ **Unemployed/unable to work:** lower self-rated mental health, life satisfaction
  - ▶ **Living alone:** lower social well-being

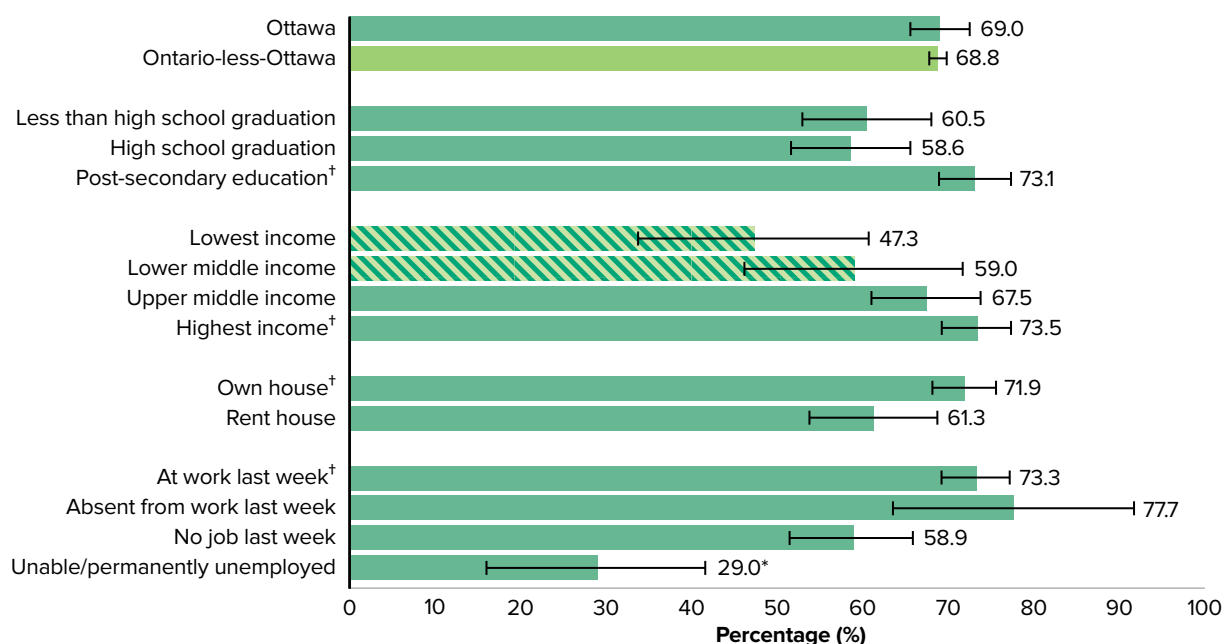
## Self-Rated Mental Health

Self-rated mental health measures an individual's perception of their mental health status. Poor self-rated mental health is associated with poor health outcomes, increased use of health services, and less satisfaction with services (23).

- In 2013/14, more than two-thirds (69%) of Ottawa residents aged 12 years and older reported very good or excellent mental health, which was the same as the rest of Ontario (69%) (24).
- Residents who rent their homes and those 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 (Figure 2) (24).
- When controlling for all factors (age, sex, mother tongue, education, household income, immigration, home ownership, location of residence and Indigenous identity), household income predicts a significant association with self-rated mental health. Residents with the lowest household income and lower middle income were more likely to report fair or poor mental health as compared to those with the highest household income (24).

**FIGURE 2**

**Percentage of Ottawa residents (12 years and older) who reported excellent or very good mental health, by selected socio-economic factors, 2013/14**



**Source:** Canadian Community Health Survey 2013/14. Ontario Share File. Statistics Canada.

\*Interpret with caution due to high sampling variability;

†Comparison category in the regression model

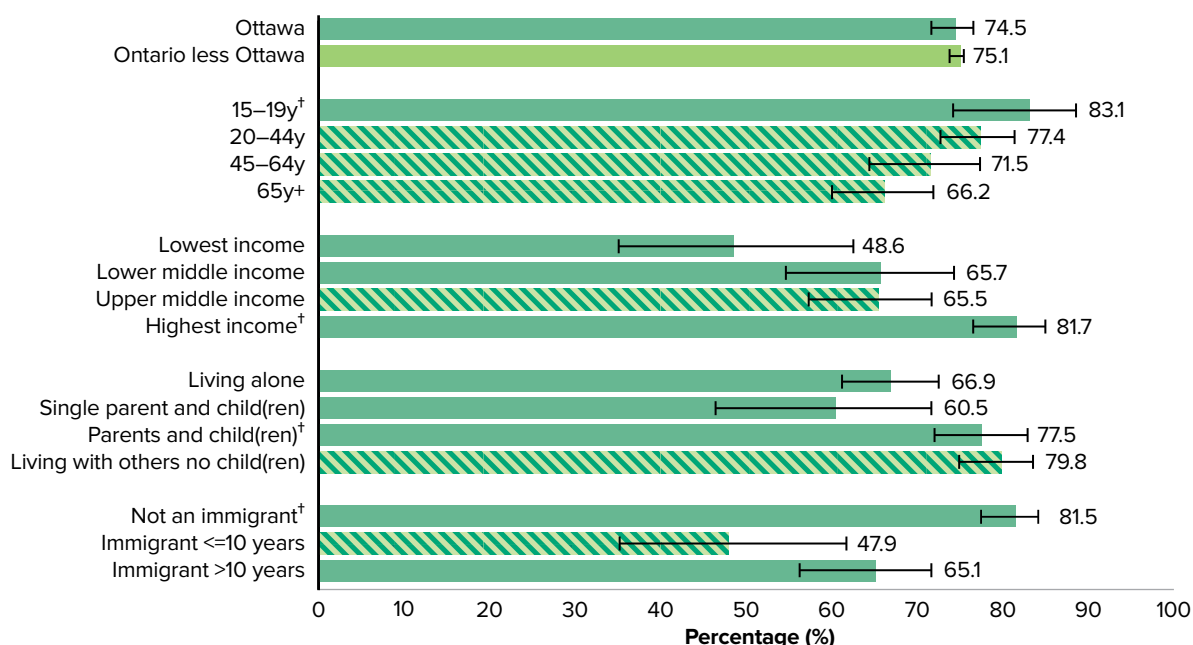
**Note:** Striped bars indicate statistically significant differences compared to the comparison category in the regression model.

## Happiness

Happiness is a positive emotional state that varies over time and reflects our day-to-day experiences (25), such as feeling happy while taking a vacation or participating in a favourite activity. Happiness and life satisfaction are associated with positive mental and physical health outcomes (26, 27).

- In 2011/12, three-quarters (75%) of Ottawa residents reported they felt happy almost every day or every day in the past month, which was the same as residents across the rest of Ontario (75%) (Figure 3) (24).
- Significant associations were found between happiness and age, household income, living situation and time since immigration, when controlling for all socio-economic factors (24).
- As age increased, the proportion of respondents reporting feeling happy almost every day or every day in the past month decreased (15 to 19 years: 83%, 65 years and older: 66%) (Figure 3) (24).
- Residents with the highest income per household size (82%) reported the highest level of happiness in the past month. Past month happiness was lowest among residents with the least income (49%) (Figure 3) (24).
- About 80% of those living with others and no children reported feeling happy almost every day or every day, which was significantly greater than two parents with children (78%) and single parents (61%), when controlling for other socio-economic factors (Figure 3) (24).
- Immigrants who have been in Canada for less than ten years were more likely to not report feeling happy everyday or almost every day in the past month, as compared to Canadian-born residents (Figure 3) (24).

**FIGURE 3**  
**Percentage of Ottawa residents (15 years and older) who reported feeling happy almost every day or every day in the past month, by selected socio-economic factors, 2011/12**



**Source:** Canadian Community Health Survey 2011/12. Ontario Share File. Statistics Canada.

<sup>†</sup>Comparison category in the regression model

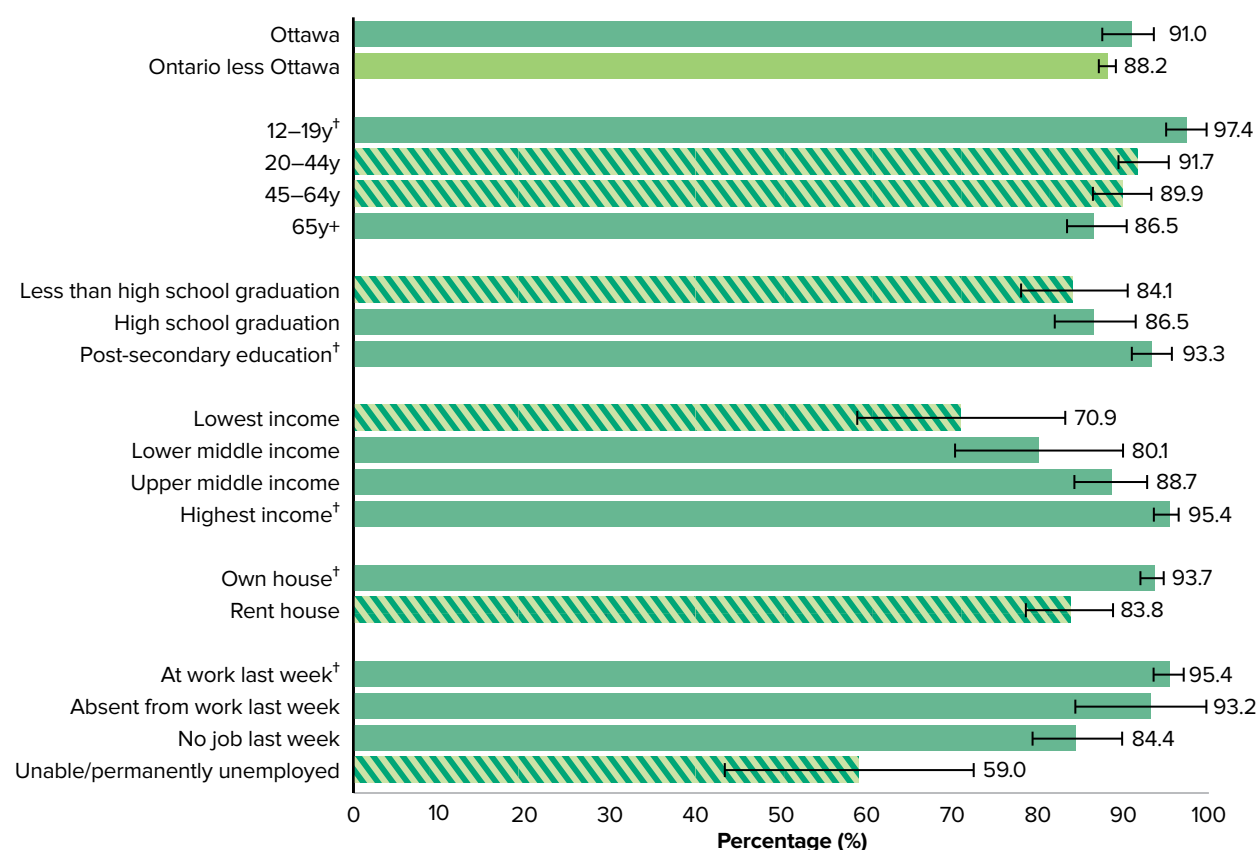
**Note:** Striped bars indicate statistically significant differences compared to the comparison category in the regression model.

## Life Satisfaction

Life satisfaction is a self-assessment of how people think and feel about their life overall. Generally, self-reports of life satisfaction tend to assess longer-term experiences than self-reports of happiness (25). For example, an individual may express life satisfaction as they reflect on the meaningfulness of their work and the economic security it brings for their family. The Organization for Economic Cooperation and Development considers life satisfaction to be a key indicator of overall well-being (28).

- In 2013/14, 91% of Ottawa residents aged 12 years and older, or roughly 732,000 people reported they were satisfied or very satisfied with their life, with an average satisfaction rating of 7.9 on a scale of 0 to 10, which was similar to residents in the rest of Ontario. Reported life satisfaction has not changed significantly over time (2005-2014) (29).
- Lower life satisfaction was reported by those with increasing age, lower levels of education, lower income, a rented home, and unemployment/inability to work (Figure 4) (24).

**FIGURE 4**  
**Percentage of Ottawa residents (12 years and older) satisfied or very satisfied with their life, by selected socio-economic factors, 2013/14**



**Source:** Canadian Community Health Survey 2013/14. Ontario Share File. Statistics Canada.

<sup>†</sup>Comparison category in the regression model

**Note:** Striped bars indicate statistically significant differences compared to the comparison category in the regression model.

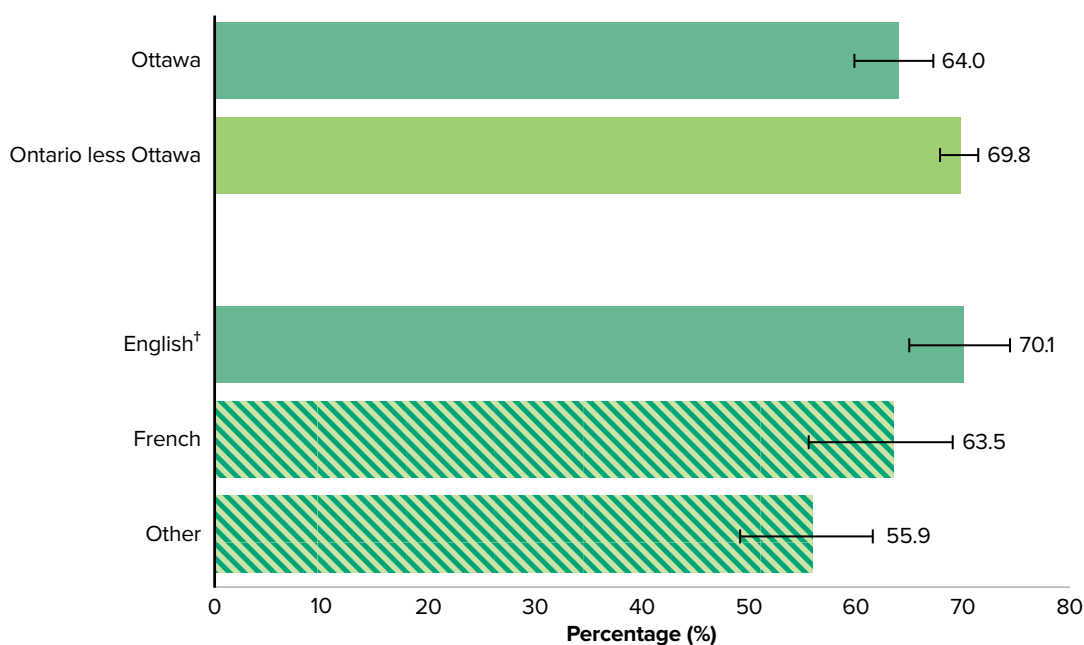
## Psychological Well-Being

The presence of high levels of emotional, social and psychological well-being indicate that an individual's mental health is flourishing. Psychological well-being is shaped by autonomy, environmental mastery/competence, personal growth, positive relations with others, purpose in life and self-acceptance (30).

- In Ottawa, 64% of residents aged 15 years and older reported high psychological well-being in 2011/12, which was lower than the rest of Ontario (70%) (Figure 5) (31).
- High psychological well-being in Ottawa residents was higher in those less than 65 years of age, a mother tongue of English, increasing education level, higher incomes, Canadian born residents and immigrants that arrived more than 10 years ago, home owners, and those who were employed in the past week. When all these factors were examined at the same time, mother tongue was the only factor that remained significant (Figure 5). Those that reported French or another language as their mother tongue were more likely to report low psychological well-being as compared to individuals with English as their mother tongue (31). The relationship between language and psychological well-being has been reported previously (32).
- Across Ontario in 2014/15, 75% of grades 6 to 12 students reported high autonomy (e.g. sense of independence, freedom of self-expression and choice). Nationally, autonomy was reported lowest among grade 6 (74%) and grade 8 (73%) students, and highest among grade 12 students (77%) (Figure 6) (33).
- Across Ontario in 2014/15, 85% of grades 6 to 12 students reported high competence (e.g. sense of mastery and success in their environment). Nationally, competence was reported slightly lower among females (81% vs. 82% for males) and there appears to be a declining gradient from grade 6 to grade 11 (grade 6: 88%, grade 11: 78%) (Figure 6) (33).

**FIGURE 5**

**Percentage of Ottawa residents (15 years and older) who reported high psychological well-being, by mother tongue, 2011/12**



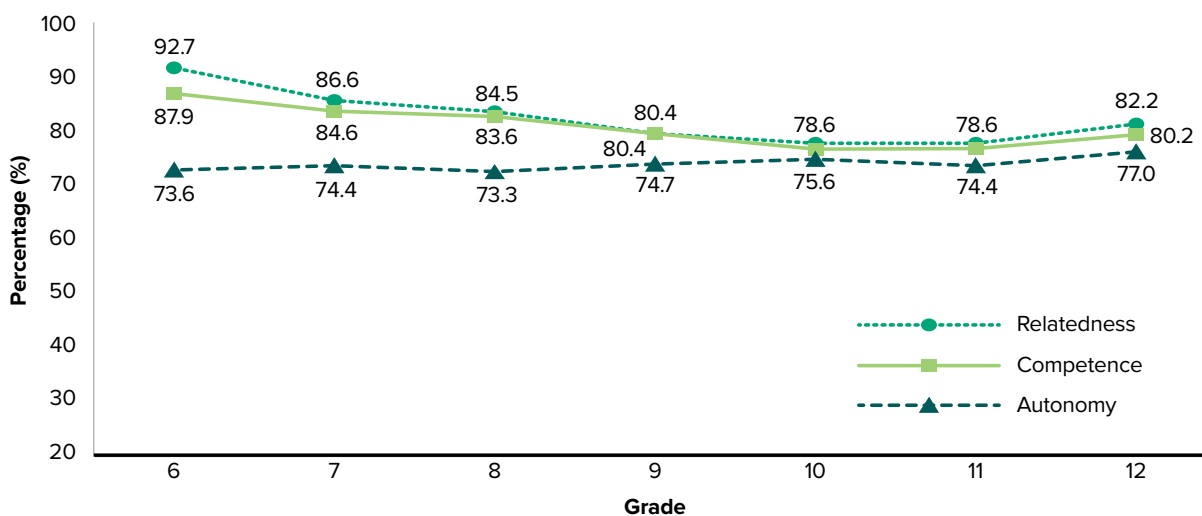
**Source:** Canadian Community Health Survey 2011/12. Ontario Share File. Statistics Canada.

<sup>†</sup>Comparison category in the regression model

**Note:** Striped bars indicate statistically significant differences compared to the comparison category in the regression model.

**FIGURE 6**

**Percentage of students by grade who reported high autonomy, competence and relatedness, Canada, 2014/15**



**Source:** Centre for Chronic Disease Prevention, Public Health Agency of Canada (2016). Positive Mental Health Surveillance Indicator Framework, Public Health Infobase.

**Note:** Grade-specific results were only available at the national level.

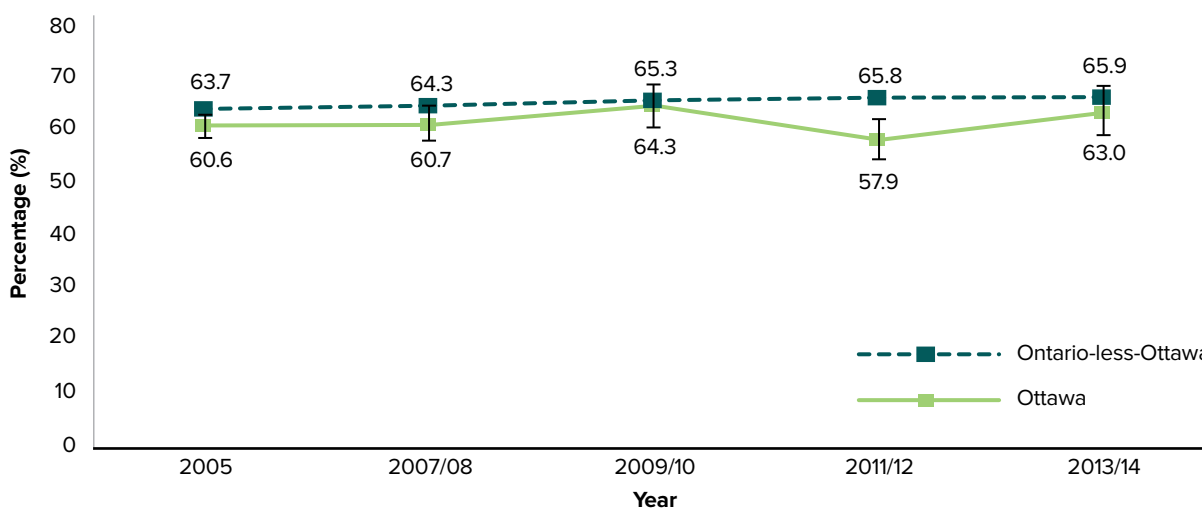
## Social Well-Being

Social well-being, including social connections, is strongly related to positive mental and physical health outcomes, while social isolation tends to be detrimental to health (25, 34). A sense of belonging within the community is one measure of social well-being. It reflects an individual's social attachments, and their level of social engagement and participation in the community.

- Two-thirds (63%) of Ottawa residents aged 12 years and older reported a very or somewhat strong sense of belonging to their local community in 2013/14. Over the past 10 years, Ottawa residents have reported lower levels of strong community belonging compared to residents across the rest of Ontario, except in 2009/10 (Figure 7) (29).
- Over the past 10 years, Ottawa residents aged 20 to 44 years reported the lowest levels of strong community belonging and youth aged 12 to 19 years reported the highest levels of strong community belonging. Residents who lived alone reported lower levels of strong community belonging, compared to those who lived with others, with or without children (Figure 8). These associations exist even when accounting for other factors such as sex, mother tongue, education, household income, immigration, home ownership, and Indigenous identity (24).

**FIGURE 7**

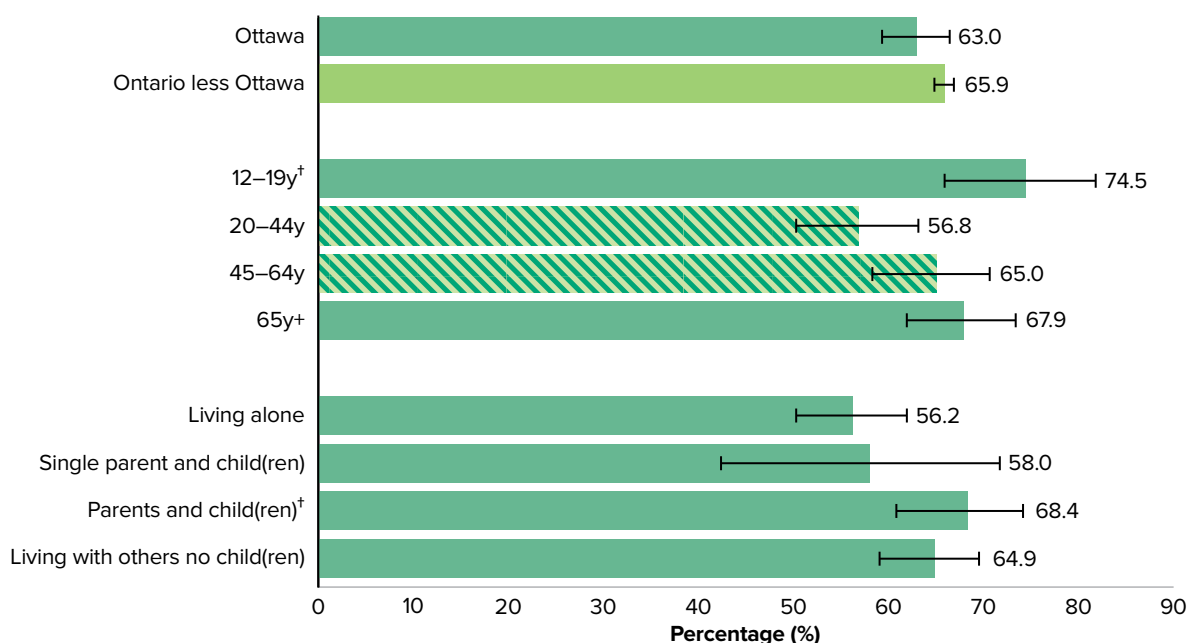
**Percentage of residents (12 years and older) who reported a very or somewhat strong sense of belonging to their local community, Ottawa and Ontario-less-Ottawa, 2005–2014**



**Source:** Canadian Community Health Survey 2005–2014. Ontario Share File. Statistics Canada.

**FIGURE 8**

**Percentage of residents (12 years and older) who reported a very or somewhat strong sense of belonging to their local community, by selected socio-economic factors, Ottawa, 2013/14**



**Source:** Canadian Community Health Survey 2013/14. Ontario Share File. Statistics Canada.

<sup>†</sup>Comparison category in the regression model

**Note:** Striped bars indicate statistically significant differences compared to the comparison category in the regression model.

Among youth, social well-being is measured by social connections found in their daily routines, such as their relationships with peers, parents, and teachers. These social connections involve being close to others and trusting them, and experiencing positive attachments at home, school and within the community (35).

- Across Ontario in 2014/15, 85% of grades 6 to 12 students reported high social connectedness with their teachers, parents and friends. Social connectedness was reported highest among grade 6 students and lowest among grade 10 and 11 students (33). Trends in relatedness by grade are detailed in Figure 6 along with autonomy and competence.

# MENTAL HEALTH CARE UTILIZATION, MENTAL HEALTH CHALLENGES AND ILLNESS, SUBSTANCE USE AND ADDICTION

As part of a population based assessment of Ottawa's mental health, local data on health care utilization and rates of mental illness are informative. Nonetheless, while important, illness rates and health care use are but one component of a community's mental health. In fact, mental health and mental illness are not mutually exclusive. Just as an individual with a physical illness such as Type 2 diabetes, may have a healthy life, so too, those with mental illness can have positive mental health. Similarly, those with no diagnosed mental illness can have poor mental health. Therefore, the data presented in this section regarding utilization and illness rates offer an important but incomplete picture of the community's overall mental health.

## Highlights for Ottawa

Many Ottawa residents sought care for mental health and addictions:

- 16% of residents and 30% of grade 7 to 12 students talked to a health professional about their mental or emotional health in the past year, yet:
  - ▶ **One-third (32%) of students wanted to talk to someone** about a mental health or emotional problem in the past year **but did not know where to turn.**
- 162,496 residents made **728,938 outpatient visits** to physicians for mental health and addictions conditions in 2015.
- 11,185 residents made **17,790 visits to the ED** for a mental health or addictions related condition in 2016. The rate of ED visits for mental health and addictions increased by **46%** since 2006, primarily driven by a sharp climb (more than doubling) among youth and young adults.

- **7,075 residents were hospitalized** for a mental health or addictions condition in 2016. This represents a **45% increase** since 2007, arising from an increase in hospitalizations among young adults and to some extent, older adults.
- Self-harm and suicide continue to be of concern:
  - ▶ Since 2011, the **rate of self-harm ED visits has been increasing**, and it was higher in Ottawa compared to the rest of Ontario in 2016.
  - ▶ In 2017, **one in nine** (11%) grade 7 to 12 students **seriously considered suicide** in the past year, with **60%** of these students reporting that they had wanted to talk to someone but **did not know where to turn**.
  - ▶ In 2017, **more than 1,300** students reported that they attempted suicide in the last year.
  - ▶ On average, there are **80 deaths** by suicide every year in Ottawa (2012-2016 average).
- Substance use often co-occurs with poor mental health. One in five (20%) adults reported frequent binge drinking in the past year (2013/14) and 12% of grade 7 to 12 students reported binge drinking in the past month (2017).
- 13% of adults (2013/14) and 18% of students (2017) used cannabis at least once in the past year.
- Certain populations more frequently sought care for mental health or addictions concerns:
  - ▶ **Children aged 5 to 14 years:** rate of ED visits doubled for mood and anxiety disorders in the past ten years, increase among females in rate of self-harm ED visits
  - ▶ **Youth and young adults 15 to 24 years:** increasing rate of ED visits and hospitalizations for any mental health or addictions condition, including ED visits for mood and anxiety disorders, eating disorders, and self-harm, heavy drinking
  - ▶ **Adults aged 45 to 64 years:** higher rates of outpatient physician visits for mental health and addictions
  - ▶ **Older adults over 65 years:** slight increase in rates of hospitalizations for any mental health or addictions condition; Alzheimer's/ Dementia is a leading cause of death
  - ▶ **Women and girls:** more often talk with a health professional about mental health; higher and increasing rates of self-harm among youth and young adults aged 15 to 24 years; girls in grades 7 to 12 more likely to consider suicide
  - ▶ **Men aged 40 to 64 years:** higher rate of death by suicide
  - ▶ **Lower income:** more often talk with a health professional about mental health
  - ▶ **Unemployed/unable to work:** more often talk with a health professional about mental health
  - ▶ **Less advantaged neighbourhoods:** more than twice the rates of ED visits for mental health and addictions compared to most advantaged neighbourhoods

## Mental Health Care Utilization

Across Ontario, there has been a rising demand for mental health and addictions care in the community and in hospitals. Between 2006 and 2014, there was a 25% increase in physician visits, including psychiatrists, family physicians and pediatricians, for mental health concerns among children and youth in Ontario. At the same time, the rate of emergency department (ED) visits among children and youth for mental health and substance use disorders increased by 56%, with anxiety disorders accounting for the largest increase in acute care service usage. Further, there have been increases in return mental health visits to the emergency department and readmissions. Additionally, only four out of ten children and youth discharged from acute mental health care in 2014 visited a physician for follow-up within a week (36).

This section of the report includes a high-level snapshot of mental health utilization, including select indicators from [The Mental Health of Children and Youth in Ontario: 2017 Scorecard](#) (36). In 2018, the [Mental Health and Addictions System Performance in Ontario: A Baseline Score](#) (37) was released to report on the current state of Ontario's mental health and addiction service delivery for adults aged 16 years and older. The Children's Hospital of Eastern Ontario and the Royal Hospital's [Young Minds Partnership Report Card](#) (38), The Royal Ottawa and Champlain LHIN's [Champlain Pathways to Better Care](#) (39) and the Youth Services Bureau, through their lead agency role, are addressing mental health service needs, such as mapping core services, wait times and data quality improvements.

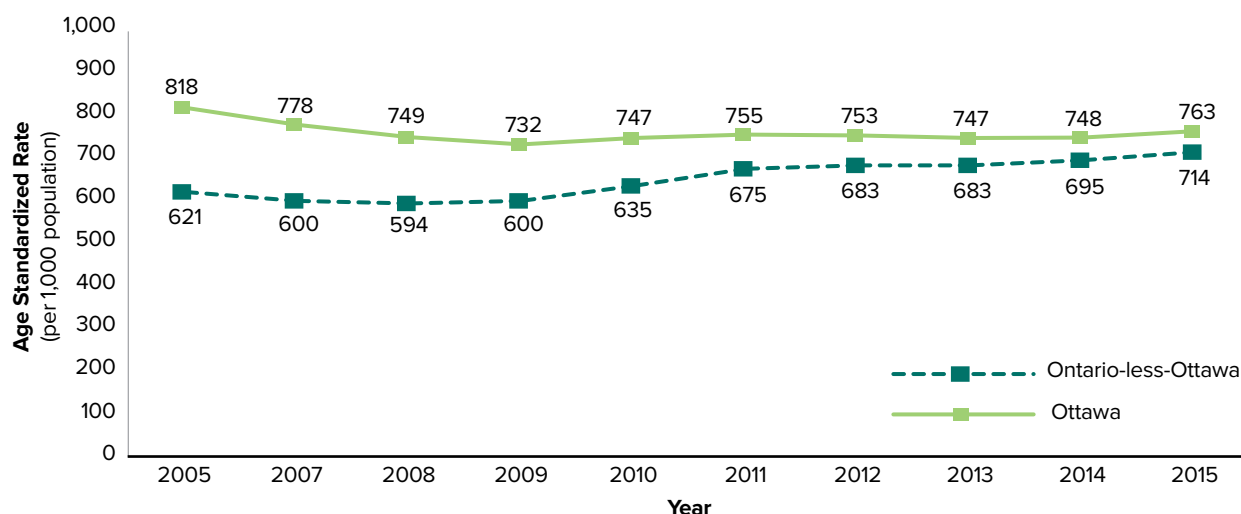
## MENTAL HEALTH AND ADDICTIONS-RELATED PHYSICIAN VISITS

A variety of healthcare, community and social service providers offer mental health support to residents. Based on billing practices of Ontario physicians (general practitioners, family physicians, paediatricians, and psychiatrists) to the Ontario Health Insurance Plan (OHIP), mental health and addictions outpatient service utilization can be measured. Patients may visit their physician(s) more than once in a year. Care provided by community-based mental health and addictions agencies, psychologists and social workers are not included in this section due to data availability, but contribute to a substantial part of mental health care in Ontario.

- In 2015, 162,496 Ottawa residents made 728,938 outpatient visits to physicians for mental health and addictions conditions. While stable in Ottawa, from 2006 to 2015 the rate of visits was higher in Ottawa than for residents in the rest of Ontario (Figure 9) (40).
- Ottawa residents aged 45 to 64 years visited physicians for mental health and addictions related conditions more than other age groups. The rate of visits has increased for Ottawa residents aged 15 to 24 years from 544 visits per 1,000 population in 2006 to 689 visits per 1,000 population in 2015 (Figure 10) (40). A similar trend has been seen across Ontario.

**FIGURE 9**

**Age standardized rate (per 1,000 population) of outpatient physician visits related to mental health and addictions, Ottawa and Ontario-less-Ottawa, 2006–2015**

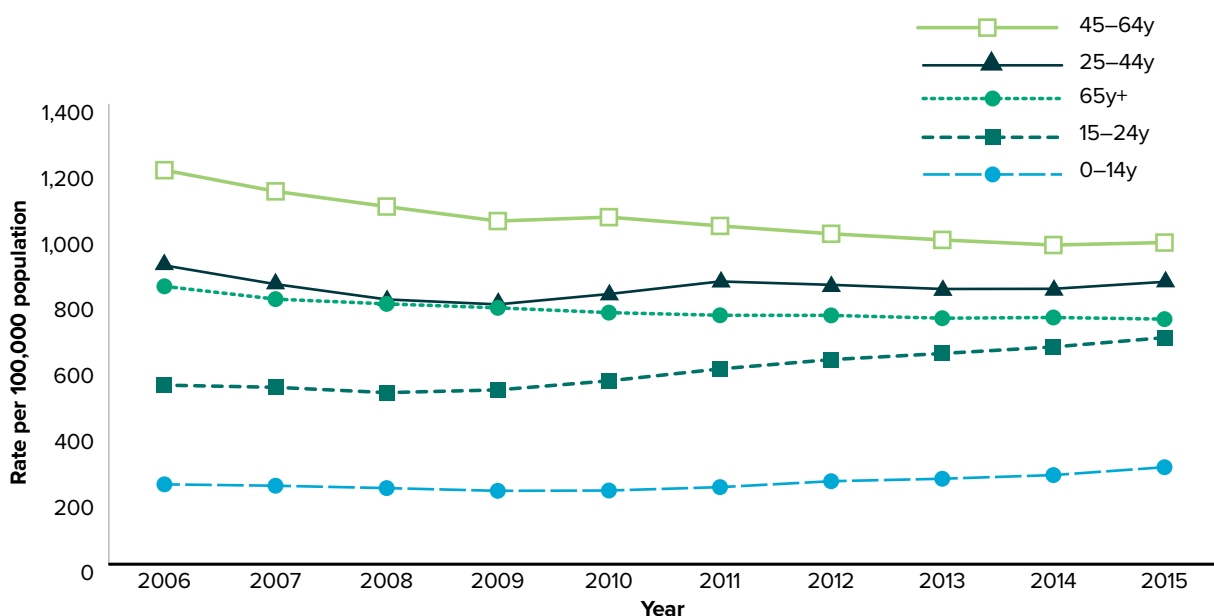


**Source:** Outpatient physician visits for any mental health or addictions condition, Medical Services (OHIP) Dataset [2006–2015]. Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted March 8, 2018 by Ottawa Public Health. Any mental health or addictions condition definition from ICES, 2017 (36).

**Note:** Rates are age standardized to the 2011 Canadian population

**FIGURE 10**

**Age-specific rate (per 1,000 population) of outpatient physician visits related to mental health and addictions, Ottawa, 2006–2015**



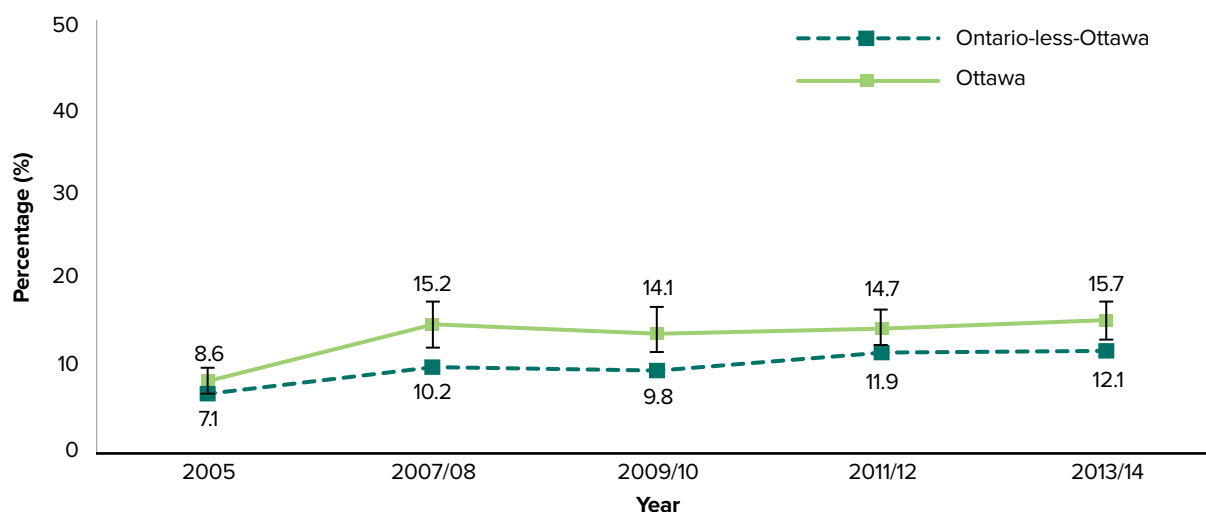
**Source:** Outpatient physician visits for any mental health or addictions condition, Medical Services (OHIP) Dataset [2006–2015]. Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted March 8, 2018 by Ottawa Public Health. Any mental health or addictions condition definition from ICES, 2017 (36).

## MENTAL HEALTH CARE CONTACT

- The percentage of Ottawa residents aged 12 years and older who saw or talked to a health professional about their emotional or mental health in the past 12 months nearly doubled from 9% in 2005 to 16% in 2013/14 and are higher than the rest of Ontario (12% in 2013/14) (Figure 11) (29).
- Women, residents with the lowest household income, and those unable to work or permanently unemployed reported higher levels of seeing or talking to a health professional about their emotional or mental health in the past year. Those with a mother tongue other than English or French reported lower levels of consulting a health professional, compared to residents with an English or French mother tongue (24).
- Women, low household income and being permanently unable to work persist as being significantly associated with higher levels of consulting a health professional about mental health when controlling for all socio-economic factors (24).
- In 2014, gay, lesbian and bisexual Canadians were more likely to have had a consultation with a psychologist in the past 12 months, as compared to heterosexuals (42).
- For Canada's immigrant, refugee, ethno-cultural and racialized populations, mental health care utilization is low due to service accessibility, language, stigma and time allowed for patient-provider interaction (43).

**FIGURE 11**

**Percentage of residents (12 years and older) who reported seeing or talking to a health professional about their emotional or mental health in the past 12 months, Ottawa and Ontario-less-Ottawa, 2005–2014**



**Source:** Canadian Community Health Survey 2005–2014. Ontario Share File. Statistics Canada.

## MENTAL HEALTH CARE CONTACT BY YOUTH

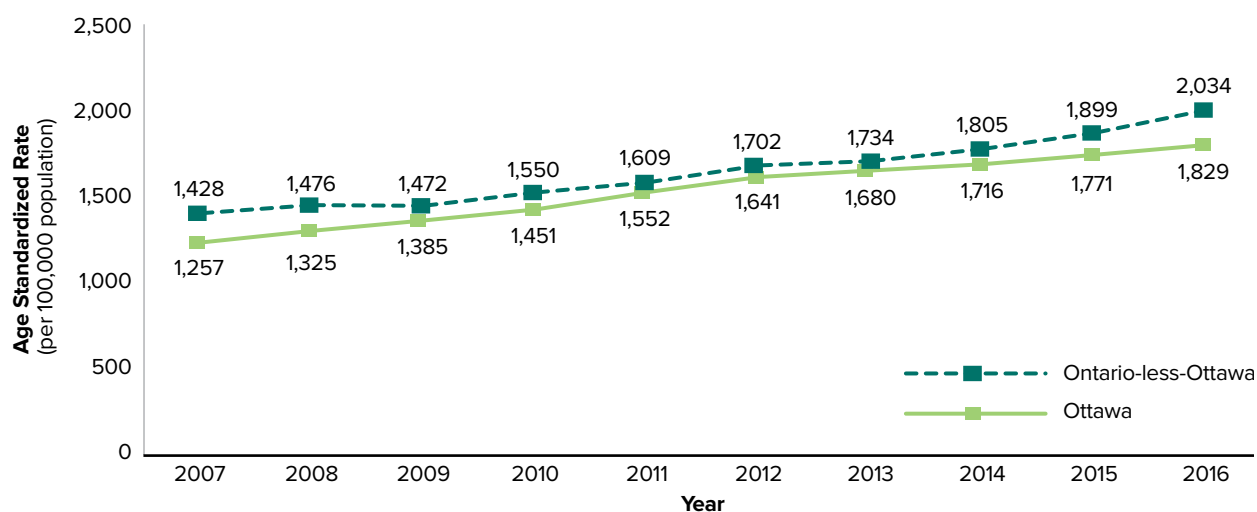
- In 2017, almost one-third (30%) of Ottawa students in grades 7 to 12 reported visiting a doctor, nurse or counsellor at least once in the past 12 months to talk about their mental or emotional health (44).
- One in twenty-five (4%) Ottawa students in grades 7 to 12 reported using a telephone crisis helpline or website to talk about a problem in the past 12 months (44).
- About one-third (32%) of Ottawa students reported they wanted to talk to someone about a mental health or emotional problem in the past year but did not know where to turn (44).

## EMERGENCY DEPARTMENT VISITS FOR MENTAL HEALTH AND ADDICTIONS CONDITIONS

- In 2016, 11,185 Ottawa residents made 17,790 visits to the ED for a mental health or addictions related condition, corresponding with a rate of 1,829 visits per 100,000 population. This rate increased 46% since 2006 (Figure 12) and was primarily driven by a sharp climb (more than doubling) in the rates of use among youth and young adults aged 15 to 24 years (Figure 13) (45). A similar trend has been seen across Ontario.

**FIGURE 12**

**Age standardized rates (per 100,000 population) of emergency department visits for any mental health or addictions condition, Ottawa and Ontario-less-Ottawa, 2007–2016**

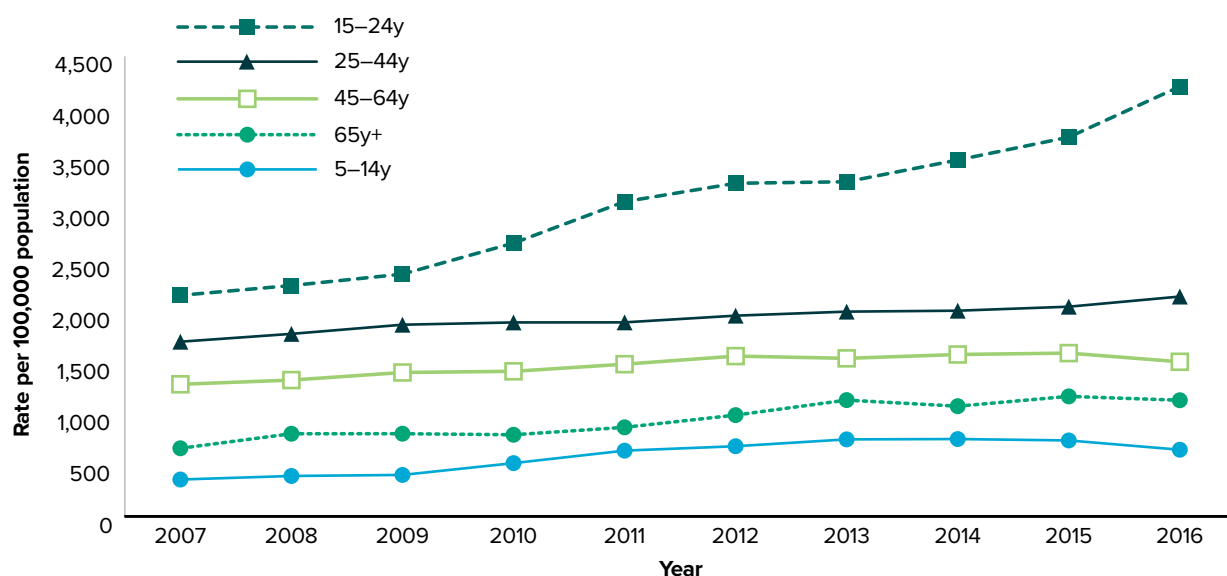


**Source:** Unscheduled ED visits for any mental health or addictions condition, NACRS Dataset [2007–2016]. Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted February 15, 2018 by Ottawa Public Health. Any mental health or addictions condition definition from ICES, 2017 (36).

**Note:** Rates are age standardized to the 2011 Canadian population

**FIGURE 13**

**Age-specific rates (per 100,000 population) of emergency department visits for any mental health or addictions condition, Ottawa, 2007–2016**



**Source:** Unscheduled ED visits for any mental health or addictions condition, NACRS Dataset [2007–2016]. Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted February 15, 2018 by Ottawa Public Health. Any mental health or addictions condition definition from ICES, 2017 (36).

Administrative data such as ED visits do not collect socio-economic measures such as income, education and immigration status. As such, we rely on geographic measures of socio-economic advantage collected from Census data and derived by the [Ottawa Neighbourhood Study](#) (ONS). The ONS divides the City of Ottawa into 103 neighbourhoods and categorizes them into five evenly sized groups (quintiles), based on:

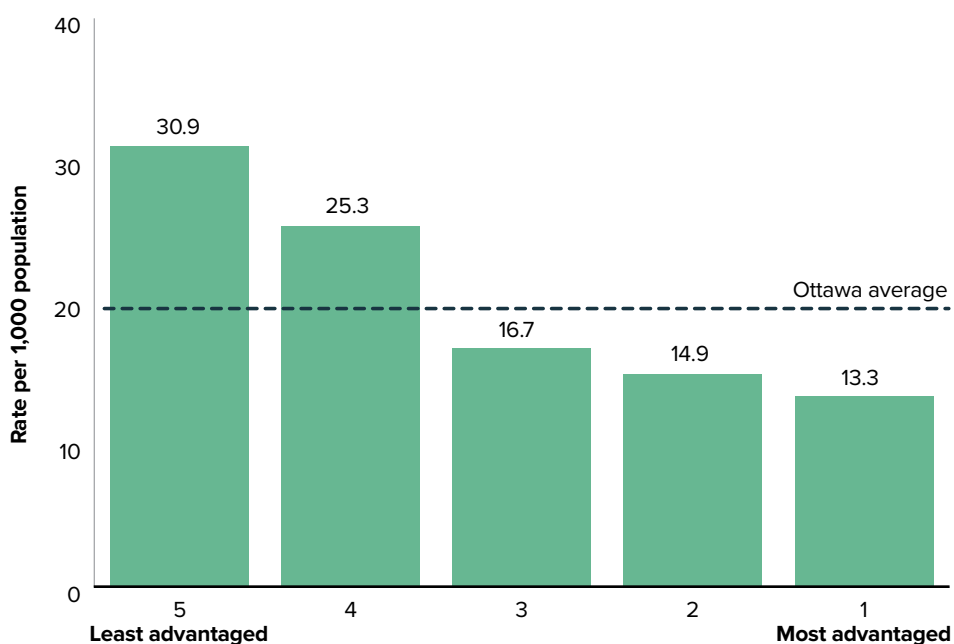
- The percent of a population in a neighbourhood living below the after-tax low income measure.
- The unemployment rate in the neighbourhood.
- The percent of the population aged 24 to 64 without a high school diploma.
- The percent of lone parent families.
- The average household income after tax (46).

Quintile 1 neighbourhoods are the most advantaged in these socio-economic measures and quintile 5 neighbourhoods are considered the least advantaged.

- Mental health and addictions related ED visit rates were highest among people living in the least advantaged neighbourhoods (quintiles 4 and 5) and these rates were more than twice that of those living in the most advantaged neighbourhoods (Figure 14) (47).

**FIGURE 14**

**Crude rate (per 1,000 population) of emergency department visits for any mental health or addictions condition, by Ottawa neighbourhood socio-economic advantage, ages 10 years and older, 2014–2016**



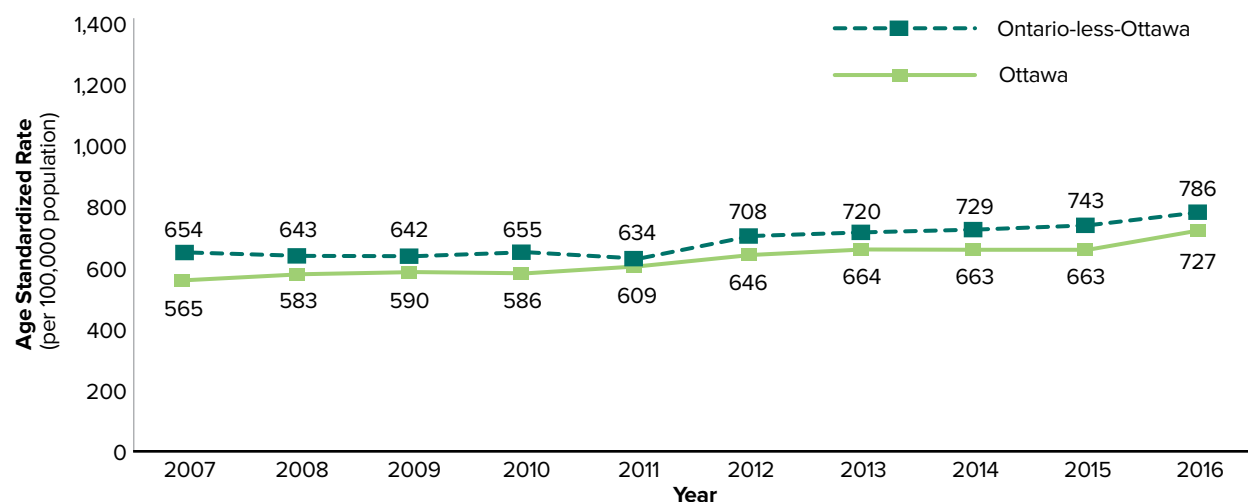
**Source:** Unscheduled ED visits for any mental health or addictions condition, NACRS Dataset [2014–2016]. Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted February 15, 2018 by Ottawa Public Health. Any mental health or addictions condition definition from ICES, 2017 (36). Neighbourhood and socioeconomic status classification from the Ottawa Neighbourhood Study.

## HOSPITALIZATIONS FOR MENTAL HEALTH AND ADDICTIONS CONDITIONS

- In 2016, 7,075 Ottawa residents were hospitalized for a mental health or addictions condition, corresponding with a rate of 727 hospitalizations per 100,000 population. The number of visits increased 45% from 2007 to 2016 (Figure 15), arising from an increase in mental health and addictions condition related hospitalizations among young adults aged 15 to 24 years and to some extent, from adults aged 65 years and older (Figure 16). A similar trend has been seen across Ontario.

**FIGURE 15**

**Age standardized rates (per 100,000 population) of hospitalizations for any mental health or addictions condition, Ottawa and Ontario-less-Ottawa, 2007–2016**

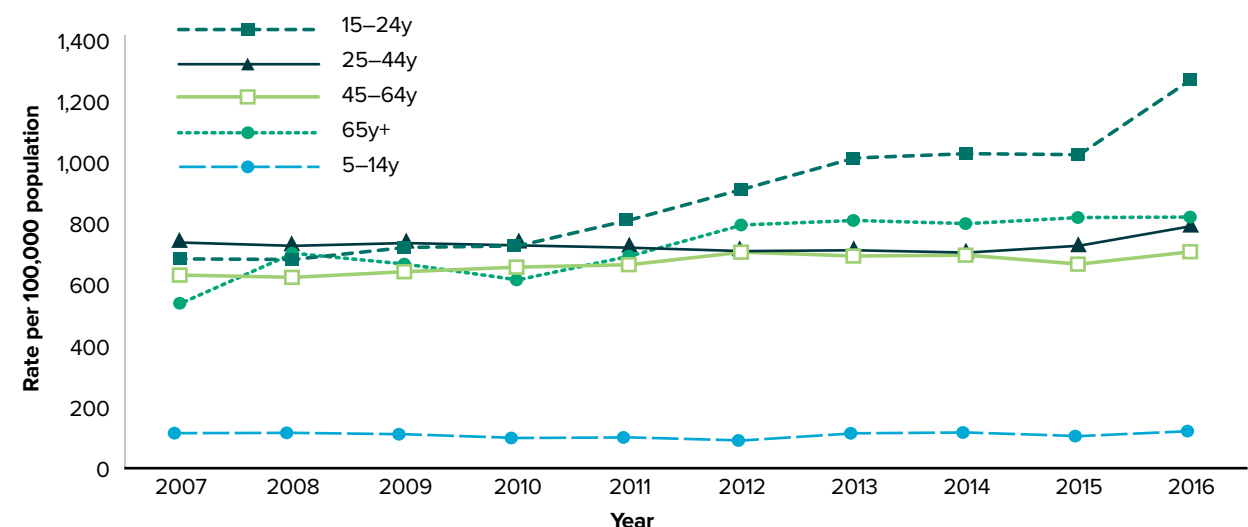


**Source:** Hospitalization for any mental health or addictions condition, DAD Dataset [2007–2016] & OMHRS Dataset [2007–2016]. Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted March 21, 2018 by Ottawa Public Health. Any mental health or addictions condition definition from ICES, 2017 (36).

**Note:** Rates are age standardized to the 2011 Canadian population

**FIGURE 16**

**Age-specific rates (per 100,000 population) of hospitalization for any mental health or addictions condition, Ottawa, 2007–2016**



**Source:** Hospitalization for any mental health or addictions condition, DAD Dataset [2007–2016] & OMHRS Dataset [2007–2016]. Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted March 21, 2018 by Ottawa Public Health. Any mental health or addictions condition definition from ICES, 2017 (36).

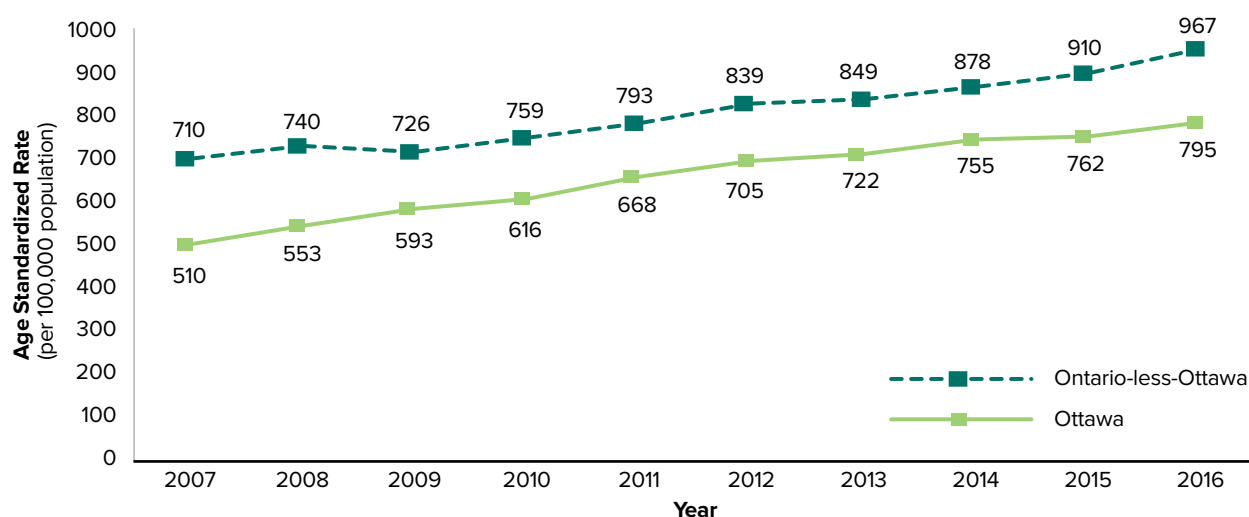
## EMERGENCY DEPARTMENT VISITS FOR MOOD AND ANXIETY DISORDERS

Mood and anxiety disorders are the most common types of mental disorders in Canada. Mood disorders are characterized by a depression or abnormal elevation of a person's mood, while anxiety disorders are characterized by excessive and persistent feelings of anxiety, nervousness and fear. These disorders can have major impacts on the lives of those affected (48).

- In 2016, 43% (7,680 out of 17,790 visits) of all mental health and addictions ED visits in Ottawa were for mood or anxiety disorders. From 2007 to 2016, the rate of ED visits for mood and anxiety disorders in Ottawa increased 56% from 510 visits per 100,000 people in 2007 to 795 visits per 100,000 people in 2016. The rate in Ottawa has consistently been lower than that in Ontario-less-Ottawa (Figure 17) (45).
- The increase in ED visits was predominantly driven by an increase in the number and rate of ED visits among youth aged 15 to 24 years, more than doubling from 1,043 visits in 2007 (856.7 visits per 100,000 population) to 2,615 visits in 2016 (2,032.8 visits per 100,000 population). The rate for ED visits for mood and anxiety disorders for children aged 5 to 14 years more than doubled over the ten years (Figure 18) (45). A similar trend has been seen across Ontario.

**FIGURE 17**

**Age standardized rates (per 100,000 population) of emergency department visits for mood and/or anxiety disorders, Ottawa and Ontario-less-Ottawa, 2007–2016**

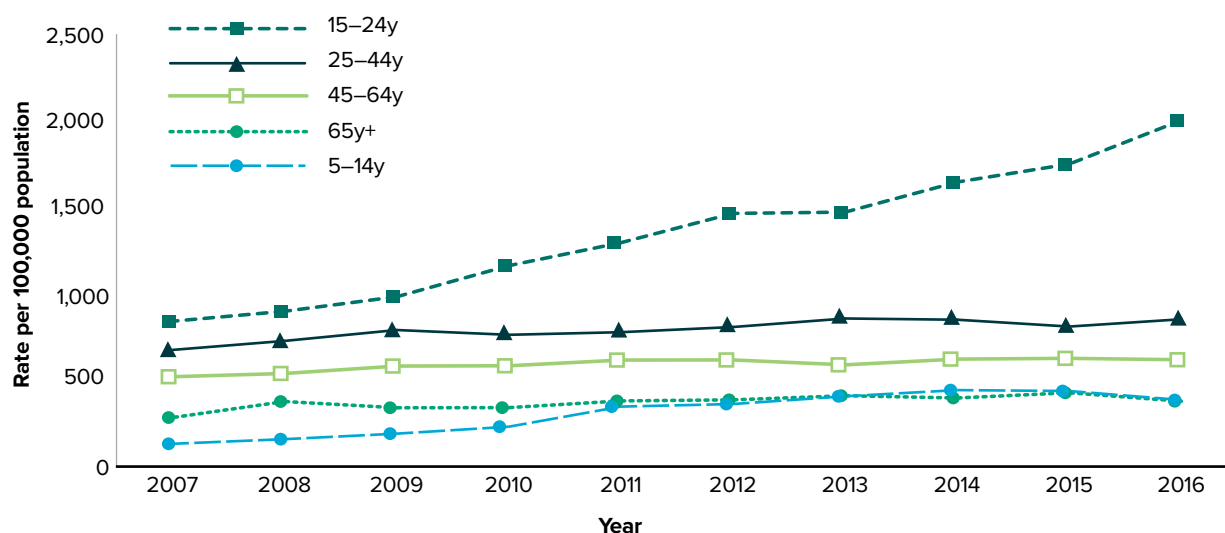


**Source:** Unscheduled ED visits for mood and/or anxiety disorders, NACRS Dataset [2007–2016]. Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted February 15, 2018 by Ottawa Public Health. Mood and/or anxiety disorder definition from ICES, 2017 (36).

**Note:** Rates are age standardized to the 2011 Canadian population

**FIGURE 18**

**Age-specific rates (per 100,000 population) of emergency department visits for mood and/or anxiety disorders, Ottawa, 2007–2016**



**Source:** Unscheduled ED visits for mood and/or anxiety disorders, NACRS Dataset [2007–2017]. Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted February 15, 2018 by Ottawa Public Health. Mood and/or anxiety disorder definition from ICES, 2017 (36).

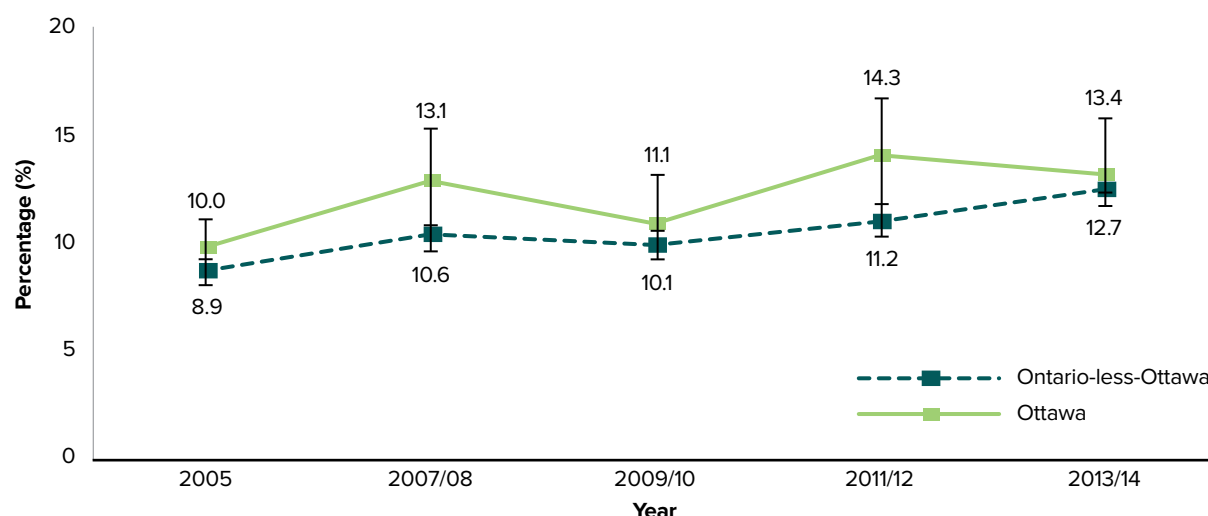
## Mental Health Challenges and Illness

### SELF REPORTED MOOD AND ANXIETY DISORDERS

- In Ottawa in 2013/14, 10% of residents aged 19 years and older, more than 71,000 people, reported ever having a diagnosis of a mood disorder such as depression, dysthymia, bipolar disorder or mania and 8%, about 59,700 people, reported an anxiety disorder such as phobia, obsessive-compulsive or panic disorder (24).
- Over the past ten years, the percentage of Ottawa residents 19 years of age and older who reported a diagnosed mood and/or anxiety disorder has significantly increased from 10% to 13%, which is a similar increase in Ontario-less-Ottawa (9% to 13%) (Figure 19) (29).

**FIGURE 19**

**Percentage of residents (19 years and older) who reported diagnosis with a mood and/or anxiety disorder, Ottawa and Ontario-less-Ottawa, 2005 to 2014**



**Source:** Canadian Community Health Survey 2005–2014. Ontario Share File. Statistics Canada.

## Parents

During pregnancy or after childbirth, some mothers develop mental illnesses such as mood and anxiety disorders, including postpartum depression, birth-related post-traumatic stress, and postpartum psychosis. To live with a mental illness is an additional challenge for parents that may affect their ability to form a healthy parent-child relationship.

- In 2016, 16% of postpartum mothers in Ottawa self-reported a mental health concern during pregnancy to their health care provider. Mental health concerns included anxiety (10%) and depression (6%). Among postpartum mothers who had previously given birth, 3% reported a history of postpartum depression (49).
- In 2017, 18% of families screened through the Healthy Babies Healthy Children program reported that the mother or parenting partner has a history of depression, anxiety or other mental illness (50).

## MOOD AND ANXIETY DISORDERS IN PRIORITY POPULATIONS

### Immigrants

An immigrant is a person who is and may be a landed immigrant or permanent resident, not a Canadian citizen by birth (51). Prevalence of common mental health problems is initially lower among immigrants, but over time it increases to become similar to that in the general population (52). The prevalence of mental health problems is influenced by adversity experienced before migration, during migration and the resettlement process (52).

- From 2005 to 2014, 6%<sup>i</sup> of Ottawa residents 19 years of age and older who arrived to Canada within the past ten years reported a diagnosis with a mood or anxiety disorder, compared to 10% who arrived more than ten years ago, and 14% of non-immigrants (29).

<sup>i</sup> Data should be interpreted with caution because of high sampling variability.

## Francophones

Francophone refers to a person whose mother tongue is French, plus those whose mother tongue is neither French nor English but they have a particular knowledge of French as an official language and use French at home (53). Data are limited for the Francophone population. However, in a report prepared for The Royal Ottawa Health Care Group and its partners, an estimated 25,000 Ottawa Francophones were affected by mental health or addictions in 2010, about 9% of which were youth (54).

## LGBTQ2

LGBTQ2 refers to the lesbian, gay, bisexual, Trans, queer, and two-spirited population. Canadian sexual minority groups, as identified in the CCHS, reported levels of diagnosis with a mood or anxiety disorder higher than those for the heterosexual population. One in four bisexual women reported a mood disorder (55).

The Trans PULSE Project is an Ontario-wide initiative that aims to improve the health of Trans (transgender, transsexual or transitioned) people.

- Depression symptoms were reported by 61% of male-to-female Trans people aged 16 years and older in Ontario in 2009-2010 (56).

For more information on these populations, please refer to Appendix 1: Priority Populations

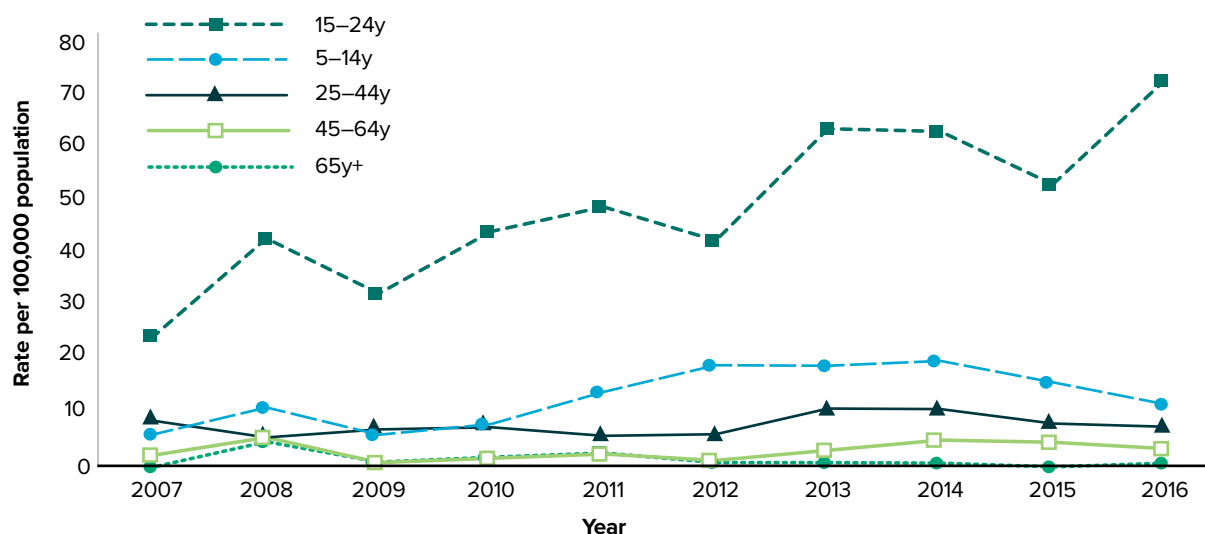
## BODY IMAGE AND EATING DISORDERS

A person's relationship to their body is linked to their self-esteem and social environment, including culture and peers (57, 58). Eating disorders include behaviours such as controlling food intake, bingeing and purging. Eating disorders are more common in young people and females, but can affect anyone (57).

- In 2017, Ottawa students in grades 7 to 12 were surveyed on their thoughts about their weight and if they were intending to change it. Over one third (35%) of Ottawa students who believed they were overweight were within a healthy weight range, as determined by body mass index. One in five (18%) Ottawa students at a healthy weight reported they were trying to lose weight (44).
- In Ottawa, the age-specific rate of emergency department visits for eating disorders, including anorexia and bulimia among other eating disorders, was highest for those aged 15 to 24 years, and has tripled from 2007 to 2016 (Figure 20). From 2007 to 2016, females made about 91% of all emergency department visits for eating disorders in Ottawa (45). A similar trend has been seen across Ontario.

**FIGURE 20**

**Age-specific rate (per 100,000 population) of emergency department visits for eating disorders, Ottawa, 2007–2016**



**Source:** Unscheduled ED visits for eating disorders, NACRS Dataset [2007–2017]. Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted March 20, 2018 by Ottawa Public Health.

## NEUROCOGNITIVE DISORDERS

Alzheimer's disease and dementia, along with other neuro-cognitive disorders are considered mental conditions. Nationally, it has been estimated that 8% of Canadians aged 65 years and older living in the community or in institutional settings have dementia (including Alzheimer's disease), ranging from 2% among those aged 65 to 74 years to 35% among those 85 years and older (59, 60). In 2012, Alzheimer's and dementia surpassed ischemic heart disease to become the leading cause of death among females (374 deaths) and was the third leading cause of death among males (169 deaths) in Ottawa (61).

## SUBSTANCE USE

Problematic substance use is the harmful use of any substance including alcohol, tobacco, illicit drugs, over-the-counter drugs and prescription drugs. Problematic substance use can impact individuals, families, and the community through associated mental illness and addiction, infectious diseases such as HIV and hepatitis C, chronic diseases such as cancer and cardiovascular disease, and injury due to violence, self-harm, suicide, and unintentional injuries (62). Mental illness and substance use disorders often co-occur; the presence of one may increase the risk of developing the other (63, 64).

Estimates of alcohol, drug and tobacco use among Ottawa residents have recently been presented in detail in previous health status reports ([Status of Alcohol in Ottawa: Let's Continue the Conversation, 2016](#) (65); [Ottawa Student Drug Use and Health Report, 2014](#) (66); [Problematic Substance Use in Ottawa, 2016](#) (62)) and are reviewed below along with updated data where available.

## ALCOHOL USE

- In 2013/14, 22% of Ottawa adults aged 19 and older reported exceeding the weekly consumption limits as recommended by [Canada's Low Risk Alcohol Drinking Guidelines](#)<sup>ii</sup>. Men were more likely to exceed weekly limits compared to women and young adults (aged 19 to 24 years) were more likely to exceed weekly limits than adults aged 25 years and older. Twenty percent of Ottawa adults reported frequent binge drinking in the past year. The percentage of the population who drink heavily peaks in young adults (aged 19 to 24 years) at 44%. People in the highest and middle-income groups are more likely to engage in heavy drinking. Immigrants and adults with a mother tongue other than English or French are less likely to engage in heavy drinking or to exceed weekly limits (65).
- In 2017, 12%<sup>iii</sup> of grade 7 to 12 students in Ottawa reported binge drinking (five or more drinks of alcohol on the same occasion) at least once in the past four weeks. Further, 10%<sup>iv</sup> of grade 7 to 12 students reported drinking at hazardous or harmful levels (44).

## DRUG USE

- In 2015, 14% of Ottawa adults aged 19 years and older who have used cannabis more than once in their lifetime have used cannabis in the past year. This is statistically significantly different from the rest of Ontario (11%) (67).
- In 2011/12, 2% of Ottawa adults aged 18 years and older reported using an illicit drug in the past year (62).
- In 2017, 18% of Ottawa students in grades 7 to 12 had used cannabis at least once in the past 12 months and 14% reported non-medical use of prescription drugs (without a doctor's prescription or doctor telling you to take them) once or more in the past year. Nine percent<sup>v</sup> of students in grades 9 to 12 reported using an illicit drug, excluding cannabis and prescription or over-the-counter drugs at least once in the past year. Students who reported using non-medical prescription drugs or illicit drugs were more likely to report at least one visit to a mental health professional in the past year compared to those who did not use these substances (44).
- Drug overdose related emergency department visits in Ottawa have been increasing since about 2009 (62). Overdoses have continued to increase into 2017 (68), the most recent increase being driven by opioid overdoses. Opioid overdose emergency department visits approximately doubled in the summer months of 2017 (an average of 45 visits per month) compared to the same period in 2016 that averaged 22 visits per month. Emergency department visits may under estimate the full extent of drug overdoses because not everyone who overdoses seeks care.

## TOBACCO USE

- In 2013/14, the percentage of current smokers among adults 19 years and older was 17% (69).
- In 2017, 6%<sup>vi</sup> of grade 7 to 12 students reported they had smoked more than once in the previous year (44).

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ii Canada's Low Risk Alcohol Drinking Guidelines are described here:  
<http://www.ccdus.ca/Eng/topics/alcohol/drinking-guidelines/Pages/default.aspx>

iii Data should be interpreted with caution because of high sampling variability.

iv Data should be interpreted with caution because of high sampling variability.

v Data should be interpreted with caution because of high sampling variability.

vi Data should be interpreted with caution because of high sampling variability.

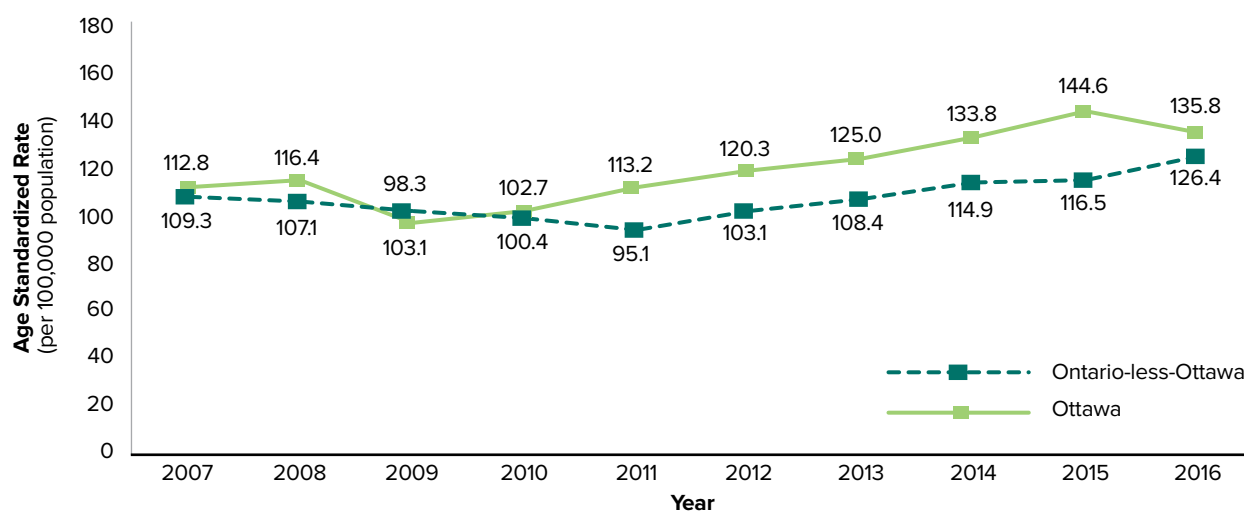
## Self Injury

Self-injury is the intentional act of harming oneself, with or without the intent to die, including cutting and scratching skin, burning skin, and minor medication overdose. In population-based surveys, self-injury was reported by 17 to 24% of youth aged 14 to 21 years (70, 71). Local data are limited to incidents that result in medical attention; therefore, the data may underestimate the extent of self-injury in Ottawa.

- In 2016, self-injury accounted for 2% of injury related emergency department (ED) visits by Ottawa residents (1,283 visits), and 10% (478 hospitalizations) of injury related hospitalizations (45).
- In 2016, the rate of ED visits for self-harm was higher in Ottawa compared with the rest of Ontario. It has been increasing since 2011 (Figure 21) (45).
- The rate of intentional self-harm related ED visits by females aged 15 to 24 years was higher than any other age-sex group. It has increased by 49% from 2012 to 2016. The rate of ED visits for females 5 to 14 years of age has almost doubled from 2012 to 2016, with an increase of 89% over the five years. Males aged 15 to 24 years also experienced a 42% increase in the rate of ED visits for self-harm between 2012 and 2016 (Figure 22, Figure 23) (45). A similar trend has been seen across Ontario.

**FIGURE 21**

**Age standardized rate (per 100,000 population) of intentional self-harm related ED visits, Ottawa and Ontario-less-Ottawa, 2007–2016**

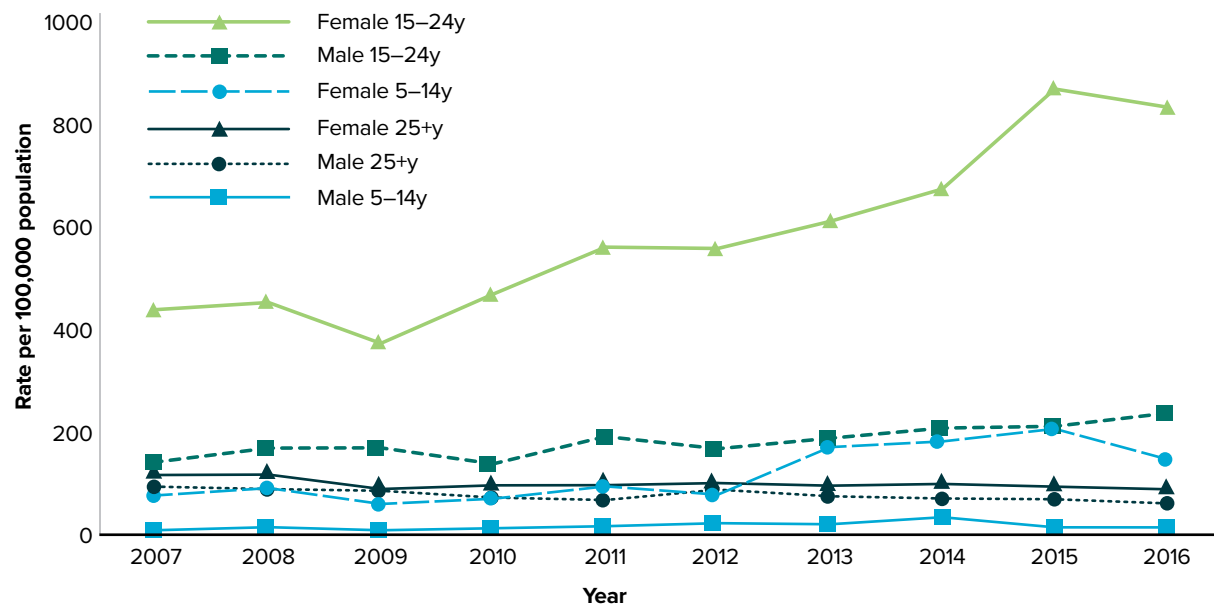


**Source:** Ambulatory emergency external cause 2007 to 2016, Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted March 7, 2018 by Ottawa Public Health. Self-harm (ICD-10–CA: X60–X84, Y87.0).

**Note:** Rates are age standardized to the 2011 Canadian population.

**FIGURE 22**

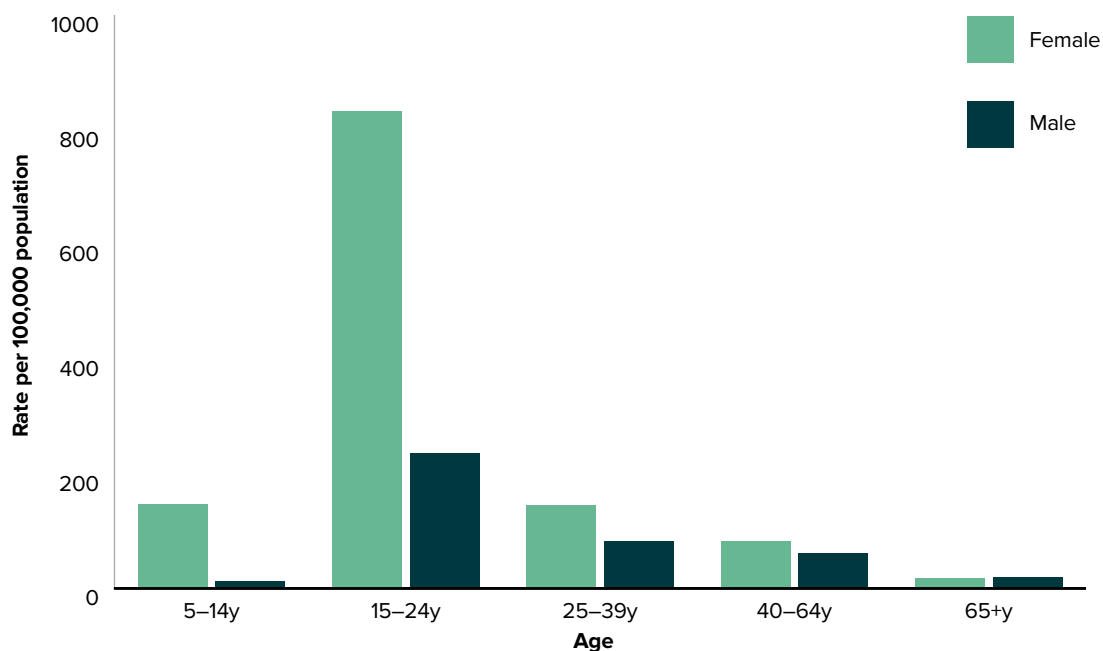
**Age specific rate (per 100,000 population) of intentional self-harm related ED visits by sex, Ottawa, 2007–2016**



**Source:** Ambulatory emergency external cause 2007 to 2016, Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted March 7, 2018 by Ottawa Public Health. Self-harm (ICD-10-CA: X60-X84, Y87.0).

**FIGURE 23**

**Age-specific rate (per 100,000 population) of intentional self-harm related ED visits by sex, Ottawa, 2016**



**Source:** Ambulatory emergency external cause 2007 to 2016, Ontario MOHLTC, IntelliHEALTH ONTARIO. Extracted March 7, 2018 by Ottawa Public Health. Self-harm (ICD-10-CA: X60-X84, Y87.0).

## Suicidal Behaviour

For this report, suicidal behaviour includes thinking about, planning, and attempting suicide.

- One in nine (11%) Ottawa students in grades 7 to 12 reported that they had considered suicide in the past year. Girls were more likely than boys to consider suicide (16% and 7%<sup>vii</sup>, respectively). Of those students that considered suicide, 60% reported that they had wanted to talk to someone about a mental or emotional problem in the past year but did not know where to turn (44).
- More than 1,300 Ottawa students (4%)<sup>viii</sup> reported that they had attempted suicide in the last year (44).
- In 2012, one in ten (11%) Ontarians aged 15 years and older reported they had seriously considered suicide in their lifetime, and 4% considered suicide in the past 12 months. Lifetime suicidal thoughts were slightly lower in Ontario compared to Canada (13%), while past year suicidal thoughts were higher in Ontario compared to Canada (3%) (72).

Several studies have reported suicidal behaviour among sexual minority groups.

- Sexual minority individuals were two and a half times more likely than heterosexuals to have attempted suicide, based on a meta-analysis of several studies (73).
- Over three-quarters (77%) of Trans people in Ontario reported they had seriously considered suicide in their life and 43% reported they had attempted to die by suicide (74).
- About one in three (30%) bisexual youth (16 to 24 years) and 15% of bisexual adults in Ontario reported suicidal ideation in the past year, while 5% and 2%, respectively, reported a suicide attempt in the past year (75).

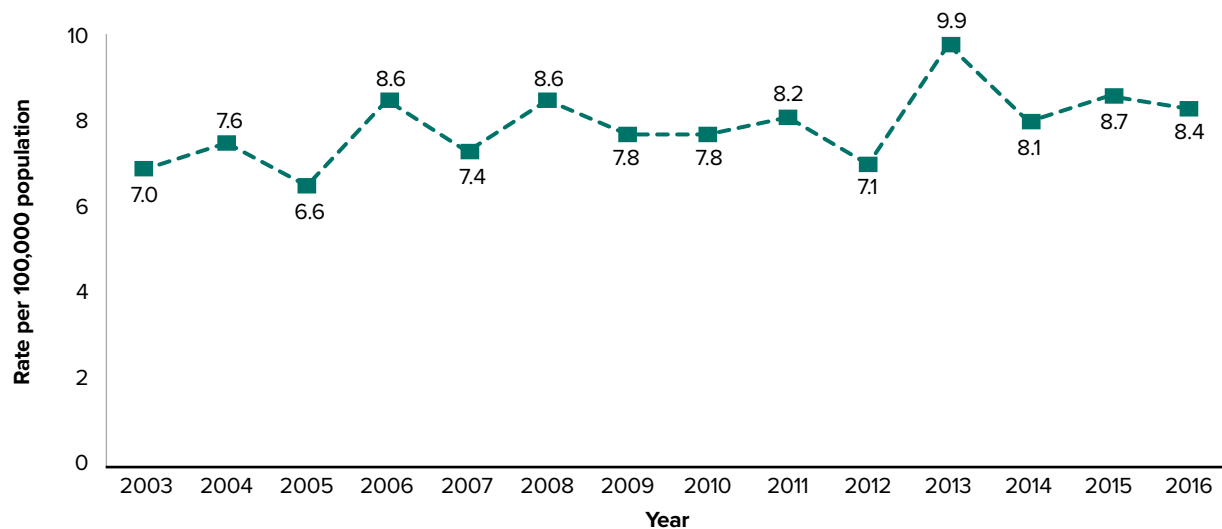
## SUICIDE DEATHS

Suicide is a preventable cause of death, and suicide rates are an important indicator of mental health vitality of the population. Investigations of cause of death can be difficult, resulting in underreporting of deaths by suicide (76–78). However, an examination of suicide rates over time and in relation to sociodemographic and economic factors can help identify populations at higher risk.

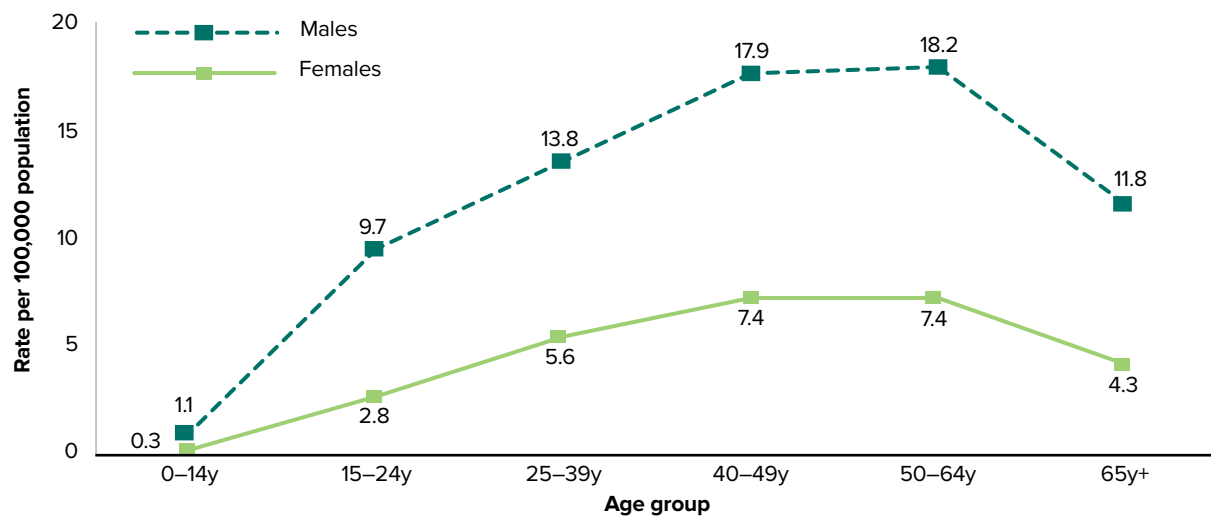
- There are, on average, 80 deaths by suicide each year in Ottawa (2012 to 2016 average). The rate of death by suicide per population in Ottawa varies year-to-year, with a spike in 2013 (Figure 24) (79).
- In Ottawa for every age group, men accounted for more than two thirds of suicide deaths. The highest rates of suicide death were among men aged 50 to 64 years and men aged 40 to 49 years (Figure 25). Approximately 10% of suicide deaths each year occur among youth aged 15 to 24 years (79).

vii Data should be interpreted with caution because of high sampling variability.

viii Data should be interpreted with caution because of high sampling variability.

**FIGURE 24****Crude rate (per 100,000 population) of deaths by suicide, Ottawa, 2003–2016**

**Source:** Office of the Chief Coroner for Ontario, date extracted April 6, 2018

**FIGURE 25****Age-specific rate (per 100,000 population) of deaths by suicide by sex, Ottawa, 2012–2016 average**

**Source:** Office of the Chief Coroner for Ontario, date extracted April 6, 2018

# INDIVIDUAL DETERMINANTS

Individual determinants are the factors that influence a person's mental health throughout life. Some of these determinants are present from birth and are fixed like ethnicity or genetics. Other determinants change throughout a person's life as they encounter various environments. For example, resilience is a skill, learned over time as people encounter various life challenges, learn to problem solve life, and develop strategies to cope with stress and recover. This section will focus on the determinants that promote and protect an individual's mental health.

## Highlights for Ottawa

- **Some Ottawa senior kindergarten children are showing early vulnerabilities** in the development of their social skills/competence (9%, neighbourhood range: 1% to 17%) and emotional maturity (12%, neighbourhood range: 2% to 23%).
- While many (93%) grade 7 to 12 students reported moderate to high self-esteem:
  - ▶ **Over one third (35%)** reported symptoms of moderate to serious psychological distress over the past month.
- **Many grade 9 to 12 students (82%) use electronic devices** such as smartphones, tablets, game consoles, for more than two hours each day and **almost half (48%) show signs of problematic use** (e.g. not being able to control their time spent on them, neglecting homework, losing sleep, feeling anxious about not using them).
- More than **one third (34%) of grade 7 to 12 students gambled for money in the past year.**
- Three in ten (30%) residents reported their regular activities were sometimes or often limited to a "long-term physical or mental condition or health problem."
- Certain populations more frequently reported characteristics that put them at risk for poor mental health outcomes:
  - ▶ **Girls in grades 7 to 12:** lower self-esteem, higher psychological distress
  - ▶ **Increasing age:** higher regular activity limitation, lower physical activity
  - ▶ **Unemployed/unable to work:** higher regular activity limitation, lower physical activity
  - ▶ **Lower education levels:** lower physical activity
  - ▶ **Immigrants:** lower physical activity

## Resilience

Resilience is the ability to function competently or successfully adapt in the face of adversity, disadvantage or stress (80). It includes skills such as problem solving and managing strong feelings and impulses (81). Presently, no population-level quantitative data on resilience exist. Resilience measures are in development by the Public Health Agency of Canada.

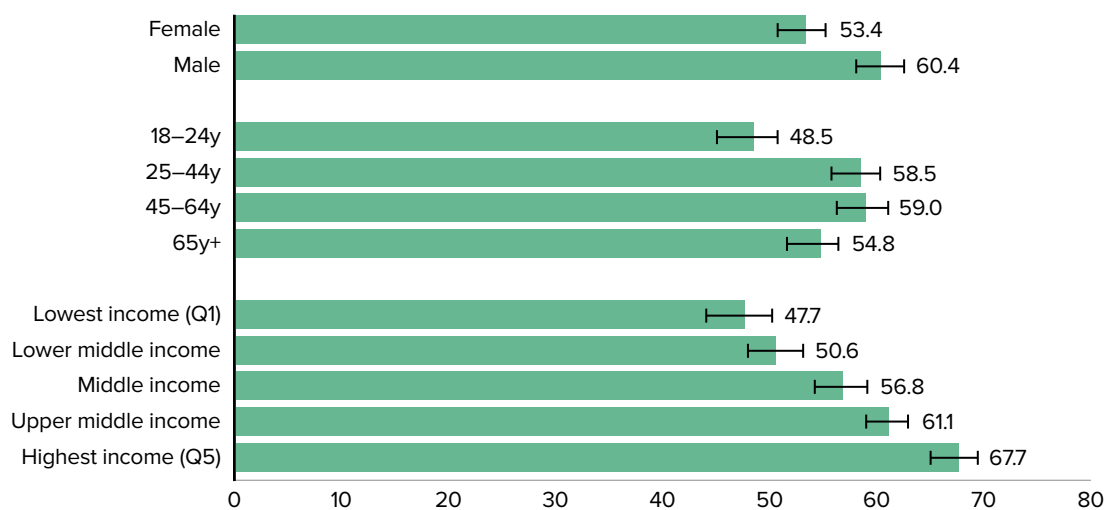
## Coping

Coping refers to the ability to manage stressful situations and the emotions, thoughts and behaviours that accompany these situations (82, 83). Disengaging coping methods, such as avoidance, have been linked to poor mental health outcomes, including self-harm and depression in both adolescents and adults (82, 84).

- In Ontario, 45% of youth aged 15 to 17 years of age and 58% of adults (aged 18 years and older) reported a high level of coping (ability to handle day to day and unexpected demands) (33).
- Among Canadian adults, a higher percentage of males (60%) reported a high level of coping, as compared to females (53%). Reported high coping ability increased with increasing income, with less than half of those in the lowest income quintile reporting a high level of coping. High coping ability also varied by age, with adults aged 25 to 44 years and 45 to 64 years reporting a high level of coping more often than those aged 18 to 24 years and 65 years and older (Figure 26) (33).

**FIGURE 26**

**Percentage of Canadian adults (18 years and older) who reported a high level of coping, by selected socio-economic factors, Canada, 2012**



**Source:** Centre for Chronic Disease Prevention, Public Health Agency of Canada (2016). Positive Mental Health Surveillance Indicator Framework, Public Health Infobase.

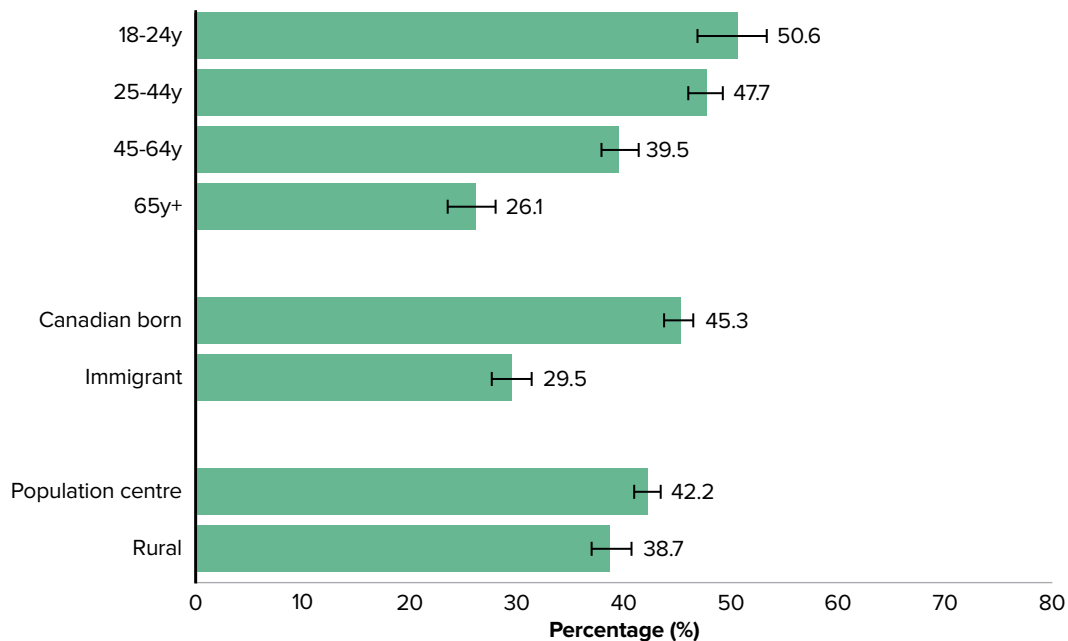
## Control and Self-Efficacy

Self-efficacy refers to our belief in our ability to exert control over our own behaviour, motivation and social environment, or to succeed in influencing or completing tasks and challenges. Strong self-efficacy enhances positive mental health and well-being as it helps individuals to see potentially threatening or challenging situations as manageable, thus helping them to feel less stressful in such situations (85).

- Across Ontario in 2008, 39% of youth (12 to 17 years) and 41% of adults (18 years and older) reported a high level of perceived control over life situations. Nationally, perceived control decreases with increasing age (18 to 24 years: 51%, 25 to 44 years: 48%, 45 to 64 year: 40%, 65 years and older: 26%). Among Canadian adults, immigrants reported lower levels of perceived control, compared to Canadian-born residents and it was slightly lower among those living in a rural location compared to those living in a population centre (Figure 27) (33).

**FIGURE 27**

**Percentage of Canadian adults (18 years and older) who reported a high level of perceived control over life situations, by selected socio-economic factors, Canada, 2008**



**Source:** Centre for Chronic Disease Prevention, Public Health Agency of Canada (2016). Positive Mental Health Surveillance Indicator Framework, Public Health Infobase.

## Social Competence and Emotional Maturity in Young Children

Infants and young children's mental health is the developing capacity of the child from birth to six years of age to form close and secure adult and peer relationships, experience, manage and express a full range of emotions, and explore the environment and learn—all in the context of family, community and culture (86). Brain development begins in pregnancy and undergoes its most rapid period of growth of approximately a million new brain connections every second during the first two-thousand days of a child's life (87). Therefore, the prenatal period and family relationships are important factors to consider in the promotion of infant and early childhood mental health.

The [Early Development Instrument](#) (EDI) is a tool used to measure developmental health of senior kindergarten students, completed by their teachers. The EDI assesses students' growth along five domains that affect a child's development, including physical health and well-being, emotional maturity, social competence, language and cognitive development and communication and general knowledge. According to the 2014/2015 EDI cycle for Ottawa, one in four (26%) children are vulnerable in one or more areas of development. The social competence and emotional maturity domains provide an indication of the mental health of children, particularly as it relates to coping, control and self-efficacy.

Social competence is a multidimensional idea, often referred to as "social skills", which refers to qualities and traits such as frequency of social interactions, positive self-image, social cognitive skills, and positive relations with peers (88). For children, social competence includes knowledge of standards of acceptable public behaviour, ability to control own behaviour, appropriate respect for adult authority, cooperation with others, following rules, ability to play and work with other children, curiosity about the world and eagerness to try new experiences (89).

- There was a small increase in the percentage of Ottawa children vulnerable<sup>ix</sup> in the social competence domain from 7% in 2008/09 to 9% in 2014/15. By neighbourhood, this ranged from 1% (Ottawa South) to 17% (Dalhousie) (90).

Emotional maturity includes the ability to think before acting, to cope with feelings at the age-appropriate level, to be empathetic to other people's feelings and to find a balance between being too fearful and too impulsive (89).

- The percentage of Ottawa children vulnerable in the emotional maturity domain increased from 9% in 2005/06 to 12% in 2014/15. By neighbourhood, this ranged from 2% (Glebe) to 23% (Lower Town, Dalhousie) (90).

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ix "Vulnerable" means that these children scored among the 10% lowest results compared to the provincial average.

## Self-Esteem

Self-esteem is the belief and confidence we have in our ability and value. High self-esteem means having a healthy view of yourself, a positive outlook, a sense of self-worth, and feeling satisfied in oneself (91). Poor self-esteem is a risk factor for developing poor mental health and good self-esteem is associated with mental well-being, happiness, adjustment, academic success and satisfaction (91). Self-esteem was not included as an indicator within PHAC's *Positive Mental Health Surveillance Conceptual Framework*. However, due to the connection with mental health and availability of local data, it has been included as an indicator in this report.

- In 2013, 93% of Ottawa students in grades 7 to 12 reported moderate to high self-esteem. Boys (97%) were more likely than girls (89%) to report moderate to high self-esteem (92).

## Psychological Distress and Youth

Adolescence is an important stage of life and it can be a stressful time for youth, with transitions from elementary to high school and the physical and emotional changes of puberty.

- In 2017, 35% of Ottawa students (grades 7 to 12) scored as having moderate to serious levels of psychological distress over the past four weeks, including symptoms of anxiety and depression such as nervousness, restlessness, worthlessness and sadness. Girls (46%) were more likely than boys (25%) and grades 9 to 12 students (37%) were more likely than grades 7 to 8 students (30%) to have moderate to serious levels of psychological distress over the past four weeks (44).

## Health Status

Physical health effects mental health, and likewise, mental health has an effect on physical health. People who have poor general health or live with chronic physical conditions more often report poor mental health or mental illness. For example, people living with chronic conditions and/or disability are more likely to experience depression and anxiety (93, 94). Good physical health has been identified as a protective factor of mental illnesses (93).

## SELF-PERCEIVED HEALTH

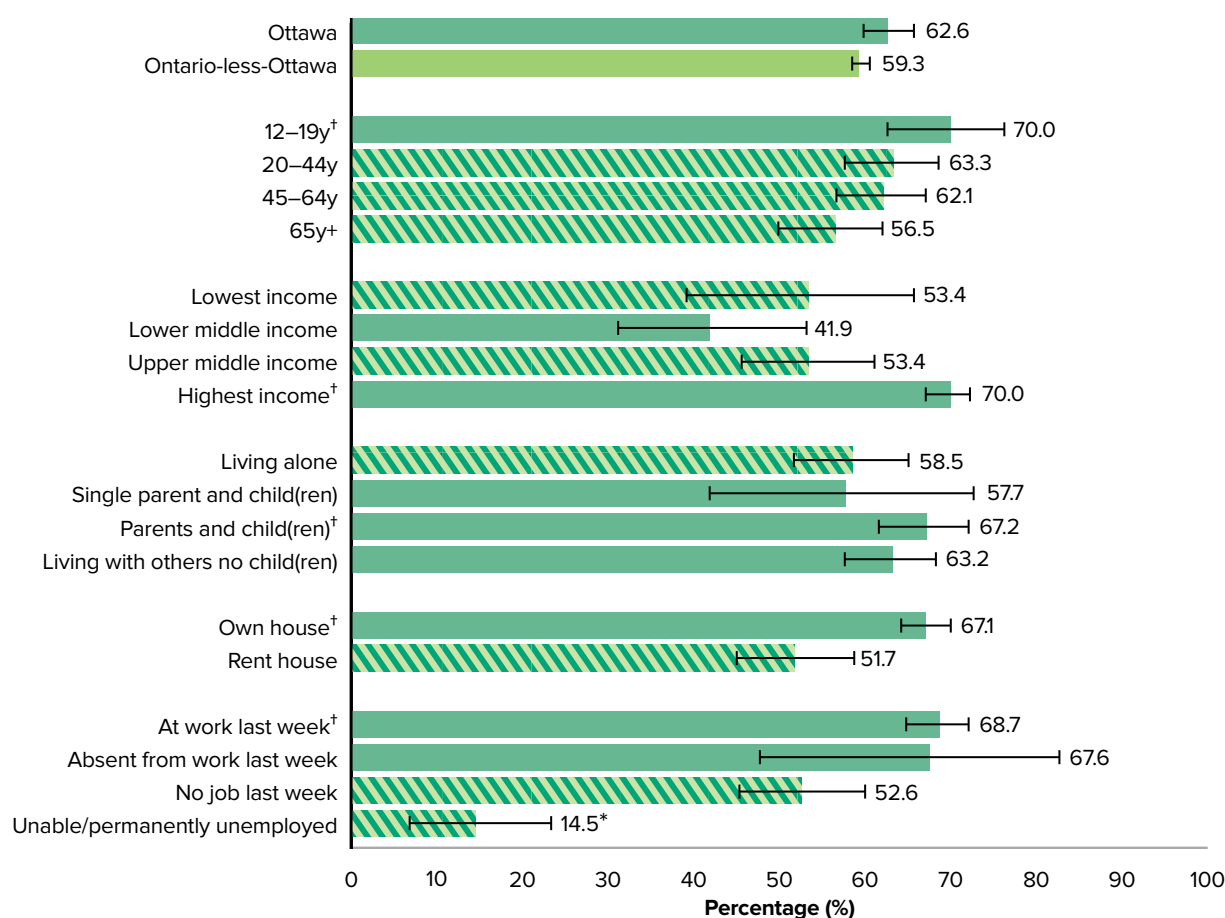
Self-perceived health, while not based on clinical measures, is a reliable measure associated with functional decline, morbidity and mortality (95).

- In 2013/14, 63% of Ottawa residents aged 12 years and older reported their health as very good or excellent. Over the past 10 years, Ottawa residents have reported similar levels of health compared to residents across the rest of Ontario. Except in 2005 and 2007/08, when a higher percentage of Ottawa residents reported very good or excellent health, as compared to residents across the rest of Ontario. Perceived health status has not changed significantly over time in Ottawa (2005 to 2014) (29).
- Almost three-quarters (70%) of those aged 12 to 19 years reported their health was very good or excellent. However, this percentage decreased with increasing age (Figure 28) (24).

- As household income increased, self-rated health also increased. Residents in the lowest income level were more likely to report poor health than those in the highest income level (Figure 28) (24).
- When controlling for other factors, those living alone were less likely to report poor health status than parents living with children. Home ownership was associated with better health status, with those who rented their home more likely to report poor health status. Additionally, those who were unemployed in the past week or unable to work/permanently unemployed reported poor health more than those who attended work in the past week (Figure 28) (24).

**FIGURE 28**

**Percentage of residents (12 years and older) who reported very good or excellent health, by selected socio-economic factors, Ottawa, 2013/14**



**Source:** Canadian Community Health Survey 2013/14. Ontario Share File. Statistics Canada.

\*Interpret with caution due to high sampling variability; <sup>†</sup>Comparison category in the regression model

**Note:** Striped bars indicate statistically significant differences compared to the comparison category in the regression model.

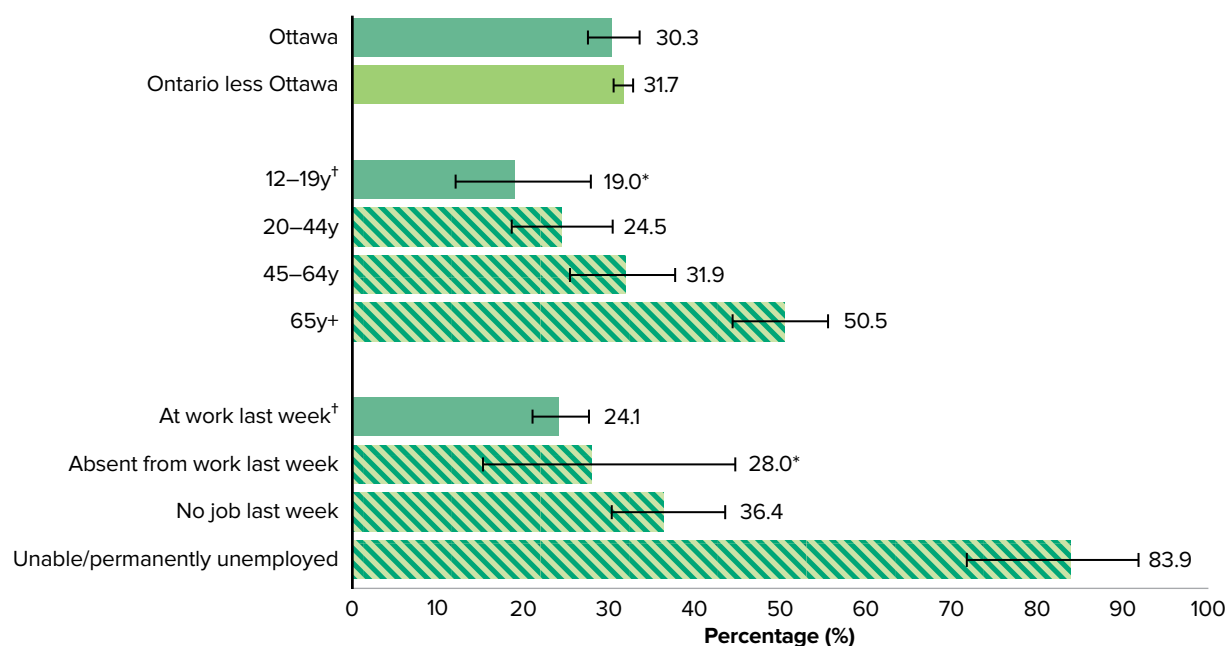
## ACTIVITY LIMITATION

Activity limitations and disabilities can have an effect on mental health (93, 94).

- In 2013/14, 30% of Ottawa residents aged 12 years and older reported their activities were sometimes or often limited due to a “long-term physical or mental condition or health problem” which was similar to residents in the rest of Ontario (32%) (24).
- As age increased, activity limitation also increased. Ottawa residents aged 65 years and older reported often being limited more often than those aged 12 to 19 years, after accounting for other socio-economic factors (Figure 29) (24).
- Employment status in the previous week was associated with activity limitation, with those who were not at work in the past week, or unemployed/unable to work reporting their activities are limited more often than those who were at work in the past week (Figure 29) (24).

**FIGURE 29**

**Percentage of residents (12 years and older) who reported activity limitations sometimes or often, by selected socio-economic factors, Ottawa, 2013/14**



**Source:** Canadian Community Health Survey 2013/14. Ontario Share File. Statistics Canada.

\*Interpret with caution due to high sampling variability; <sup>†</sup>Comparison category in the regression model

**Note:** Striped bars indicate statistically significant differences compared to the comparison category in the regression model.

## Physical Activity

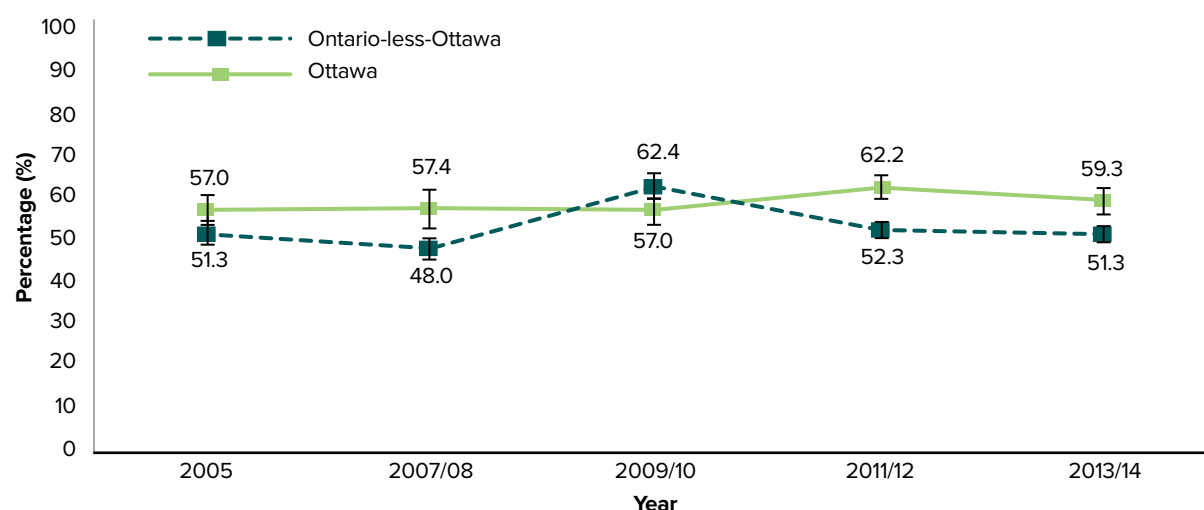
Physical activity has been associated with positive effects on mood, psychological well-being, and self-esteem in all ages with and without identified mental illness (96, 97). It has also been found to protect against or improve symptoms of mental illnesses, such as depression, anxiety, eating disorders, schizophrenia, and substance use disorders (96, 97). Physical activity can be described using different constructs, including leisure time physical activity, overall daily activity, steps per day and active transportation

### LEISURE TIME PHYSICAL ACTIVITY

- In 2013/14, 59% of Ottawa residents aged 12 years and older reported they were active or moderately active in their leisure time in the last three months, compared to 52% of Ontario residents. A higher proportion of Ottawa residents reported being active or moderately active compared to Ontario residents over the past 10 years, except in 2009/10 (Figure 30) (29).
- As age increased, the percentage of residents who reported they were moderately active or active in their leisure time decreased (Figure 31) (24).
- Although similar proportions of the population in each education level reported being moderately active or active, when controlling for the other factors, those who had completed less than high school were more likely to report inactivity as compared to those with post-secondary education (24).
- Immigrants, regardless of the time spent in Canada ( $\leq 10$  years: 49%,  $> 10$  years: 51%) were less likely to report being active compared to Canadian-born residents (63%) (Figure 31) (24).
- Physical activity level did not vary significantly by living situation. However, when controlling for other factors, residents who were not living with children (living alone (57%), living with others -no children (61%)) were more likely to report being moderately active or active, compared to parents living with children (single parent with children (55%), parents with children (61%)) (24).
- Those who reported being permanently unemployed/unable to work were more likely to report being inactive, as compared to those who worked in the past week (Figure 31) (24).

**FIGURE 30**

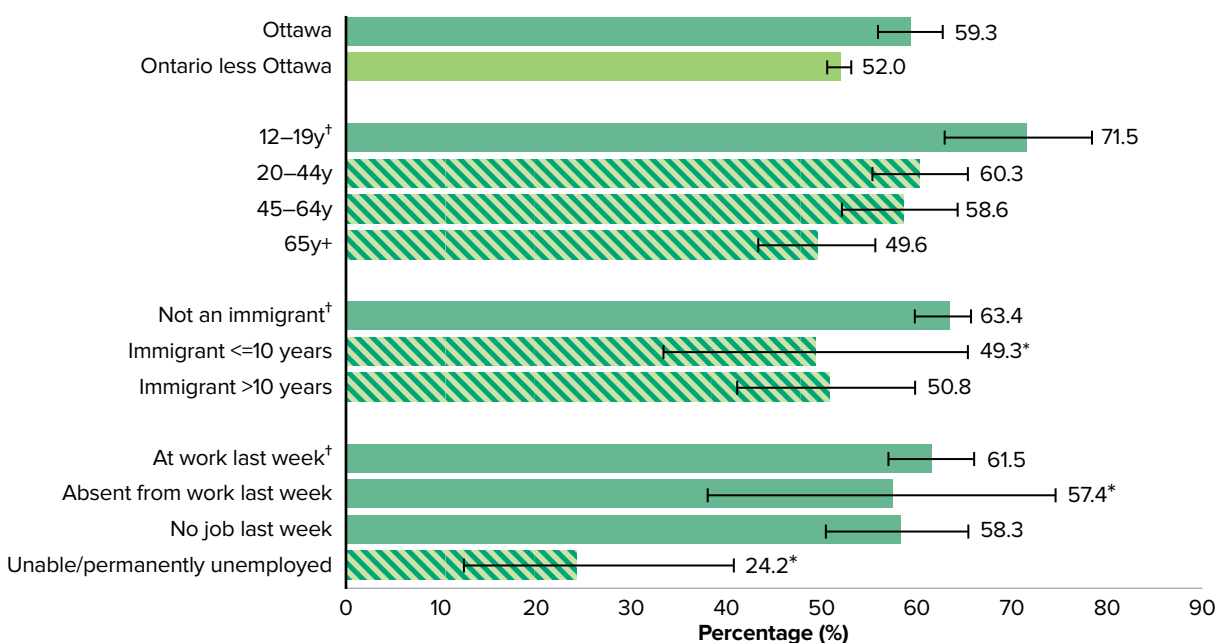
**Percentage of residents (12 years and older) who reported they were moderately active or active in their leisure time, Ottawa and Ontario-less-Ottawa, 2005-2014**



**Source:** Canadian Community Health Survey 2005-2014. Ontario Share File. Statistics Canada.

**FIGURE 31**

**Percentage of residents (12 years and older) who reported they were moderately active or active in their leisure time, by selected socio-economic factors, Ottawa, 2013/14**



**Source:** Canadian Community Health Survey 2013/14. Ontario Share File. Statistics Canada.

\*Interpret with caution due to high sampling variability;

<sup>†</sup>Comparison category in the regression model

**Note:** Striped bars indicate statistically significant differences compared to the comparison category in the regression model.

## CANADIAN 24-HOUR MOVEMENT GUIDELINES

The [Canadian 24–Hour Movement Guidelines](#) recommend children and youth accumulate 60 minutes of moderate-to-vigorous intensity of physical activity every day. While the Canadian Physical Activity Guidelines recommend adults aged 18 years and older accumulate at least 150 minutes of moderate-to-vigorous-intensity physical activity each week (98).

- Nationally, 8% of children aged 5 to 17 years, and 18% of adults aged 18 to 79 years met the guidelines in 2015, as determined by directly measured physical activity monitors. A higher percentage of younger adults aged 18 to 39 years (21%) met the guidelines than older age groups (40 to 59 years: 19%, 60 to 79 years: 13%). More adult males (18%) than adult females (17%), and more male children (12%) than female children (4%) met the requirements (99).

## Problematic Behaviours

PHAC's *Positive Mental Health Surveillance Conceptual Framework* does not include health risk behaviours as indicators of mental health. However, health risk behaviours such as problem gambling, problematic use of electronic devices, video gaming problems and sexual risk taking have been shown to coexist with poor mental health and have a social impact (13, 100-107).

### PROBLEM GAMBLING

Problem gambling is a health risk behaviour that can have negative health and social consequences. It is associated with problematic substance use, delinquent and criminal behaviour, problems with family, work and school, and mental health problems (100).

- In 2015, 68% of Ontario adults over the age of 18 years reported gambling in the past year, and 2% met the criteria for problematic gambling (e.g. spending more money than intended, borrowing money or selling something to get money for gambling, and feeling guilty about gambling behaviour) (108).
- In 2017, more than one third (34%) of Ottawa students (grades 7 to 12) reported gambling for money at least once in the past year (44). In 2013, 1% of Ontario students (grades 7 to 12) had a gambling problem (66).

### PROBLEMATIC USE OF ELECTRONIC DEVICES

Recent years have seen an increase in uptake in use of electronic devices, such as mobile phones and tablets. While research on the relationships between the use of these devices and mental health is new, problematic use of electronic devices has been linked to addictive personality traits, stress, low emotional stability, sleep disturbances, and depression (101–103). Symptoms of problematic use include an irresistible urge or uncontrollable need to use electronic devices, tension or anxiety that can only be relieved by using electronic devices and family members expressing concern.

- In 2014, more than one third (35%) of Ontario adults reported at least one symptom of problematic use of electronic devices. Moderate or severe problematic use was reported by 7% of Ontario residents. One in five (19%) young adults aged 18 to 29 years reported moderate or severe problematic use, which was higher than older age groups (108).
- Over half (56%) of grade 9 to 12 Ottawa students reported they usually use electronic devices for two to four hours a day, and over a quarter (26%) reported five or more hours of use each day (44).
- Almost half (48%) of grade 9 to 12 Ottawa students are at risk of problematic use of electronic devices, as determined through symptoms of obsession, neglect of other things (e.g. homework, sleep, friends) and control disorder (44).

## VIDEO GAMING PROBLEM

- In 2017, 83% of grade 7 to 12 students reported they had played video games at least once in the past year, with 21% of students reporting they play video games every day or almost everyday. Three times as many males (31%) than females (10%) reported playing video games everyday or almost everyday (44).
- One in ten (11%<sup>x</sup>) Ottawa students in grades 7 to 12 met the criteria for a video gaming problem (44).

## SEXUAL RISK TAKING

Risky sexual behaviour has been associated with poor mental health, mental illness, substance use, and sexually transmitted infections (13, 104).

- In 2013/14, 6% of Ottawa residents aged 15 to 49 years reported two or more sexual partners in the past year, which was significantly higher than Ontario-less-Ottawa (5%). Males (8%) were twice as likely as females (4%) to report multiple partners, even when controlling for other socio-economic factors (24).
- In 2013/14, 41% of unmarried<sup>xi</sup> Ottawa residents aged 15 to 49 years with more than one partner in the past 12 months reported they had not used a condom the last time they had sexual intercourse, which was significantly higher than Ontario-less-Ottawa (32%) (24).

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x Data should be interpreted with caution because of high sampling variability.

xi Unmarried refers to those who are not married nor in a common-law relationship.

# FAMILY DETERMINANTS

To understand the mental health of individuals, one must consider the family environment that they live in. Both parents' and children's mental health is impacted by their home life and their shared relationships. For example, parents juggle many responsibilities including employment, finances, housing, and caring for their children or other family members that affect their mental health, and subsequently how they interact as a family. This section will focus on the quality and connectedness of family relationships, the mental health of family members, household composition, and the impact of family violence on mental health.

## Highlights for Ottawa

- Many (84%) grade 7 to 8 students and 74% of grade 9 to 12 students got along very well with at least one parent, however:
  - ▶ **Only one-third (34%) of students usually or always talked about their problems with a parent.** Boys (29%) and grade 11 to 12 students (25%) were less likely to talk about their problems with a parent.
- **16% of families in Ottawa were single parents.**

## Family Relationship Quality and Connectedness

Family relationships refer to the quality of interactions within families including parents/guardians, siblings and other family members. Family relationships include parenting styles, attachment, relationships between members such as parent-child and parent-parent, unpaid care and family decision making (109). The parent-child relationship is the primary experience of early childhood and the foundation of mental health. It shapes the brain's architecture, builds secure attachment, healthy relationships with others and resilience (3, 4). This relationship continues to be important to the development of older children and youth (110).

PHAC's *Positive Mental Health Surveillance Conceptual Framework* does not provide indicators to describe family relationships. Local data related to early childhood experiences and parent-youth relationships have been included to describe some aspects of family relationships quality and connectedness.

## EARLY CHILDHOOD EXPERIENCES

- From 2010 to 2012, 85% of Ottawa families reported that during their child's first year of life, their child remained in their care. Between the ages of 1 to 4 years, approximately 40% of children were cared for by their parents during the day (111).

## PARENT-YOUTH RELATIONSHIPS

- In 2013, 63% of Ottawa students in grades 7 to 8 and 50% of students in grades 9 to 12 reported that they got along very well with both their mother and father, or one parent if a single-parent family. Getting along with at least one parent was reported by 84% of students in grades 7 to 8 and 74% of students in grades 9 to 12. Six percent<sup>xii</sup> of students in grades 7 to 8 and 12% of students in grades 9 to 12 reported that they were not getting along with at least one parent. This compared similarly with the rest of Ontario (92).
- In 2013, two-thirds (65%) of Ottawa students in grades 7 to 8 and 50% of students in grades 9 to 12 reported that at least one parent/guardian knew where they were in their free time away from home. Ottawa students in grades 7 to 8 were less likely to report that their parents always knew where they were in their free time away from home, than grade 7 to 8 students across the rest of Ontario (92).
- In 2017, over one-third (34%) of Ottawa students in grades 7 to 12 reported they usually or always talked about their problems with at least one parent. Females (39%) were more likely than males (29%), and those in grades 7 to 8 (41%) and grades 9 to 10 (38%) were more likely than students in grades 11 to 12 (25%) to usually or always talk about their problems with at least one parent (44).
- 77% of Canadian students in grades 6 to 10 reported that their parents trust them and this decreased with increasing grades (grade 6: 85%, grade 10: 73%) (33).
- 29% of Canadian students in grades 6 to 10 reported that their parents expected too much from them and this increased with increasing grades (grade 6: 23%, grade 10: 34%) (33).

## Mental Health of Family Members

Parents face many challenges and stresses in their ability to build healthy relationships with their children and build family resilience. Parents manage multiple roles, such as parenting, caregiving and working, and parents may face stresses such as living on a low income, unstable housing and unemployment. Some parents have the additional challenge of coping with poor mental health or mental illness. Parental mental health is important for the mental health of their children and the well-being of family life.

- In 2012, 37% of Ontario residents aged 18 years and older reported that they had at least one immediate or extended family member with a mental health, alcohol or drug use problem (33).

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xii Interpret with caution – high sampling variability.

## CAREGIVING

The Mental Health Commission of Canada 2013 report on caregivers highlights the importance “that caregivers have access to the information and supports they need to sustain their own wellbeing, and that their voices are recognized and respected in Canada’s mental health system” (112). In Canada, over eight million adults (28% of the population) provide care to their spouse, parents, adult children, grandparents, other family members, friends or neighbours every day. Those they are caring for can have physical, cognitive and/or mental health needs (113).

Over half a million Canadians are caregivers to people living with mental health challenges or illnesses (114). Being a caregiver for a family member or friend who has a mental health challenge or mental illness can be difficult yet rewarding. There is growing momentum in recognizing the role that caregivers play in the recovery process of individuals living with mental illness (115). Caregivers (23%) reported the most frequent reason for caregiving was the care of young and adult children with mental illnesses (113). Psychological and health-related consequences of caregiving were especially significant for caregivers of people with mental illness (113). Well-supported caregivers can facilitate the recovery of their family member who is living with a mental illness. Enhancing caregiver capacity has a significant clinical impact on the course of their relative’s mental illness (114). The stigma that may affect a person living with mental illness can also extend to the caregiver. This can delay or prevent a caregiver from reaching out for support, which may worsen family relationships and have a negative impact on the caregiver’s wellbeing, as well as the person for which they are caring. Family caregivers may also feel stigmatized and struggle with self-esteem and self-efficacy (114).

To learn more about caregiving and mental health, as well as self-care for the caregiver, refer to the [Mental Health Caregiver Guide](#) (17).

- In 2012, 29% of Ontario residents (15 years and older) reported that they provided care to a family member or friend with a long-term health condition, disability or aging need (113). Nearly half (47%) of caregivers reported caring for parents or in-laws, 13% cared for a spouse or child, 13% for a friend or neighbour, and 24% for another family member (116).
- Nationally, caregivers were more likely to be between the ages of 45 to 64 years, females were more likely to spend more time caring, and more than one quarter (28%) of caregivers were also caring for children at home. Despite that, 95% of caregivers indicated that they were coping well with their caregiving responsibilities. They commonly cited worry and anxiety (55%), tiredness (51%), irritability (36%), feeling overwhelmed (35%), sleep disruption (34%), feeling depressed (19%), resentful (19%) and lonely or isolated (17%) as a result of their caregiving responsibilities (113).

## Family Structure

The household environment, including household composition and family structure, provides the foundations for children's mental health. Population level studies of single parents and their children find both the parents and the children have poorer health outcomes, experience more social exclusion, lower rates of employment, less income and education (117). This association may be related to a single parent's increased responsibility of parenting alone, lower income, employment status, or housing insecurity (118, 119).

- The 2016 Canadian Census counted 254,765 families (married, common-law, single parent with children) in Ottawa. While married and common-law couples are the predominant family structure (84%, 213,535 families), the percentage of single parent families rose slightly from 16.0% in 2006 to 16.2% (41,230 families). Across Ontario, 17% of families were single parent (120).
- Although females (80%) make up the largest percentage of single parent families in Ottawa, the percentage of male lone parent families rose slightly from 20.1% in 2006 to 20.3% in 2016 (120).
- A recent study of lone parents in Ontario found that single fathers were just as likely to describe their mental health as poor but only half as likely as single mothers to seek help from a mental health professional (121).

## Family Violence

Measuring exposure to violence is difficult. Victims may be reluctant to disclose and report their experiences due to fear, shame, denial, dependency on the perpetrator, lack of proof, or a feeling that the violence was not "significant". Many forms of violence are not well defined, like psychological abuse and neglect where symptoms may not be apparent. Data availability are limited to incidents involving the authorities, requiring health care, or surveys limited by underreporting and misinterpretation of the questions. Additionally, frequency and severity of violence is not always available, but it is related to long-term health outcomes (122, 123). It is estimated that reported violence may account for only one tenth of violent incidents (124). This section of the report will provide a snapshot of the impacts of family violence on mental health. To learn more about family violence, please refer to [The Chief Public Health Officer's Report on the State of Public Health in Canada 2016: A Focus on Family Violence in Canada](#) (125).

Exposure to violence is linked to poor physical and mental health, fear, social isolation, and risky behaviours (122–127). Examples of mental illnesses and health risk behaviours related to exposure to violence include depression, anxiety, substance use, self-harm, and eating disorders (122–124, 126, 127). Family violence is one form of violence that negatively impacts mental health. It negatively impacts the quality and connectedness of family relationships and consequently, the mental health of family members. It includes any form of abuse or neglect perpetrated by a family member or intimate partner. It is an abuse of power by one person to hurt and control someone who trusts and depends on them (128). Family violence may include physical, sexual, psychological, and financial abuse as well as neglect (128).

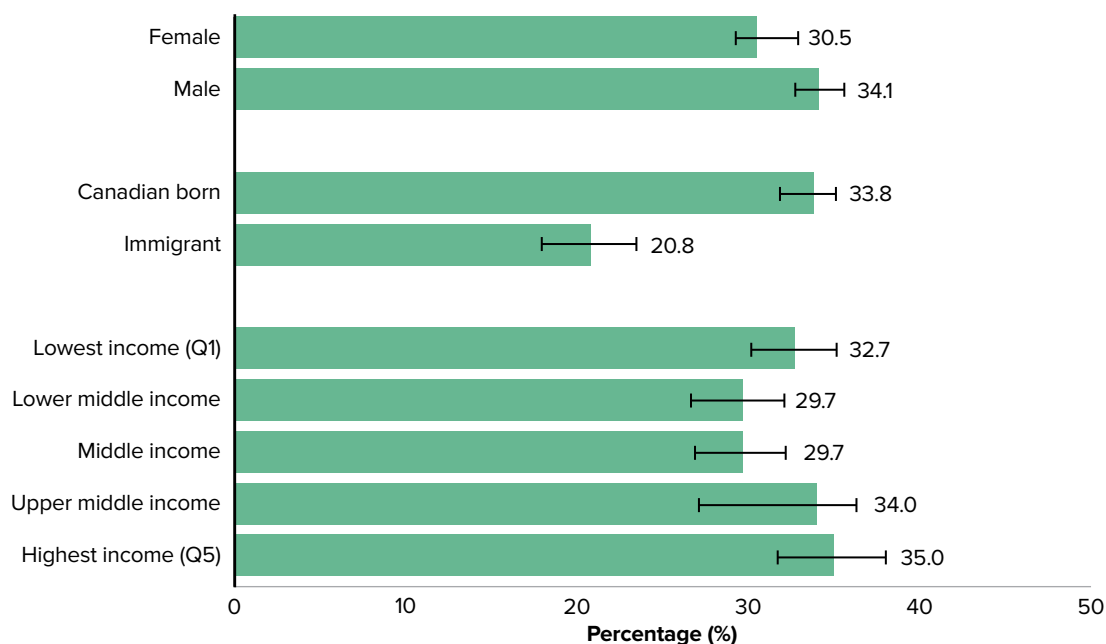
## SELF-REPORTED EXPOSURE TO CHILDHOOD VIOLENCE

Family discord such as conflict, hostility, family break ups and abusive relationships have been described by children and youth as causes of mental health problems (110). Violence during childhood includes the experience of direct violence as well as exposure to intimate partner violence before the age of 16 years.

- In 2012, one-third (32%) of Ontario adults, aged 18 years and older, reported experiencing any of three types of child abuse - physical abuse, sexual abuse or exposure to intimate partner violence, before the age of 16 years. This was the same as Canada (32%) (33).
- More Canadian males (34%) than females (31%) reported experiencing child abuse before the age of 16 years (Figure 32) (33).
- In Canada, Immigrants (28%) reported experiencing child abuse less often than Canadian born residents (34%) (Figure 32) (33).
- Nationally, about the same percentage of those in the lowest income quintile (Q1, 33%) reported any of the three types of child abuse as those in the highest income quintile (Q5, 35%) (Figure 32) (33)
- In 2014, almost half (48%) of Canadians who identified as lesbian, gay or bisexual reported physical and/or sexual abuse during childhood, while childhood abuse was reported by 30% of heterosexual Canadians (129).

**FIGURE 32**

**Percentage of Canadian adults (18 years and older) who experienced physical abuse, sexual abuse or exposure to intimate partner violence before the age of 16 years, by selected socio-economic factors, 2012**



**Source:** Centre for Chronic Disease Prevention, Public Health Agency of Canada (2016). Positive Mental Health Surveillance Indicator Framework, Public Health Infobase.

## CHILD WELFARE INVESTIGATIONS

- In 2013, of all cases investigated by Ontario child welfare agencies, excluding any reports investigated only by police, reports not opened for an investigation and unreported cases, 34% were substantiated, or the maltreatment was verified to have occurred. This amounts to an estimated 43,067 substantiated child maltreatment case investigations (18 investigations per 1,000 children) in Ontario (130).
- Almost half (48%) of the substantiated maltreatment were exposure to intimate partner violence, followed by neglect (24%), physical abuse (13%), emotional abuse (13%), and sexual abuse (2%) (130).

## INTIMATE PARTNER VIOLENCE

Intimate partner violence includes violence between spouses or dating partners in current or former relationships. It can take the form of physical, sexual, psychological or financial abuse, neglect, or stalking.

- In 2014, 3% of Ontario adults reported being the victim of spousal violence in the past five years. Those aged 25 to 44 years were the most affected by spousal violence (33). This excludes spousal violence experienced by those living in institutions, including transition housing, emergency shelters and second-stage housing.

## ELDER MALTREATMENT

Elder maltreatment occurs when an older adult is harmed or distressed due to an action or lack of action by someone they trust. It is also known as elder abuse. Elder maltreatment can take many forms, including physical, sexual, psychological, financial and material abuse, abandonment, neglect and loss of dignity. Elder maltreatment is not well documented among residents of long-term care homes.

- In 2015, 8% of older Canadian adults self-reported they had been mistreated. Psychological abuse (2.7%) and financial abuse (2.6%) were the most frequently reported forms of maltreatment by older adults (65 years and older) (131).
- In 2015, 29 per 100,000 Ottawa older adults aged 65 to 89 were victims of police-reported family violence. This was lower than the rate in Ontario as a whole (including Ottawa; 48 per 100,000) and Canada (60 per 100,000) (129).

# COMMUNITY DETERMINANTS

Sometimes poor mental health leads to poor social ties, while positive social relationships are beneficial for mental health promotion (132). Participation in community and social networks can help promote positive psychological well-being, sense of community belonging, recognition of security and self-worth, and enhanced access to social and societal supports to increase resilience against stressors (132). This section will focus on community involvement, social networks, social support, school and work environments, and the neighbourhood social and built environment.

## Highlights for Ottawa

- **While many grade 7 to 12 students felt their school is a safe place** (91%), felt part of their school (83%), and felt close to people at their school (84%):
  - ▶ **More than 1 in 10** (12%) students were worried about being harmed or threatened at school.
  - ▶ **One in five** (18%) students **reported being bullied at school** in the past year and **one in five** (18%) **reported being cyber bullied**.
- Grade 7 to 12 students living with **poor mental health** and **lower family socio-economic status** were **less likely** to report **feeling a part of the school or feeling close to people** at school.
- **One in six** (17%) grade 7 to 12 students **reported using social media more than five hours every day** and 84% used social media daily.
- One quarter (26%) of adults felt that most days at work were quite a bit or extremely stressful.
- One in ten (11%) residents felt the crime rate in their neighbourhood made it unsafe to go on walks at night.

## Community Involvement

Community involvement appears to have a positive effect on mental health, likely because of the relationship with social contact and self-efficacy (109). Community involvement includes civic engagement in local or national affairs, and social participation, such as parents volunteering at their children's school or joining a club.

- In 2013/14, 67% of Ontario adults aged 18 years and older reported that they were a member or participant of at least one recreational or professional organization, group, association, or club. This was higher than the national average (64%) (33).
- Canadians with higher levels of education and income were more likely to report being a member or participant of a group. Recent immigrants were less likely to report being a member or participant of a group overall, particularly with sports and recreational organizations. However, participation with religious-affiliated groups was higher for immigrants compared to non-immigrants (133).
- 89% of Canadian students in grades 6 to 10 (2013/14) reported that they were involved in at least one club, organization, activity or group (33).
- The majority (94%) of Ontario adults aged 45 years and older reported they participated in social activities at least once a month. As age increased, monthly social participation decreased slightly (45 to 64 years: 95%, 65 to 84 years: 92%, 85 years and older: 86%) (134).

## Social Networks

Social networks are the connections that people have between their family and friends.

- In 2013, 6% of Ontario residents reported having no close friends (people who are non-relatives that they can talk to about what is on their mind or call on for help), 39% reported having one to four close friends and 53% reported having five or more close friends. Few (4%) Ontario residents reported having no close relatives (135).
- In 2013, seven in ten Canadian internet users (aged 15 years and older) accessed a social networking site. Use of social networking sites was more common among young people (136).
- In 2017, one in six (17%) Ottawa students in grades 7 to 12 reported using social media sites for more than five hours every day while only 8% reported no use. More than four in five (84%) students reported using social media sites daily. Girls and grade 9 to 12 students reported more use of social media sites (44). In previous research, students who reported an unmet need for mental health support, poor mental health and experiences of high levels of psychological distress and suicidal ideation were more likely to report using social networking sites for more than two hours every day (137).

## Social Support

Social supports are emotional connections and physical or financial assistance provided by individuals, friends, families, organizations and government. Within populations, higher levels of social supports have been related to better mental health outcomes and perceived health (138, 139).

- In 2012, 96% of Ontario youth aged 15 to 17 years and 94% of Ontario residents aged 18 years and older reported a high level of perceived social support, including emotional support, social integration, assurance of worth or tangible help. Nationally, perceived social support was reported lower by adults living in households with the lowest income (33).

## Workplace Environment

The workplace is where many people spend a large portion of their waking hours. The work environment can affect mental health through organizational policies and the level of stress experienced. Relationships with co-workers, including bullying behaviours also affect the mental health of workers. However, data characterizing these relationships are not readily available. Mental health is a frequent reason for missed work, yet only one-quarter (23%) of Canadian workers would feel comfortable talking to their employers about a mental health issue (140). Literature has shown there is an economic return on investment when comprehensive workplace health promotion programs and stress management projects are implemented at individual and organizational levels (141). For every \$1 spent on mental health and wellness, \$9 are saved in decreased absenteeism (142).

In 2016, there were more than half a million Ottawa residents over 15 years of age in the labour force, working for almost 27,000 employers<sup>xiii</sup> (120, 143). The top three sectors in Ottawa include sales and service, business, finance and administration, and education, law and social, community and government services (120). A 2016 situational assessment survey conducted by Ottawa Public Health with 139 workplaces found that mental health was their top health issue. Stress, work-life balance, and depression were identified as the main concerns. To learn more about mental health in the workplace, refer to the [National Standard for Psychological Health and Safety in the Workplace](#).

## WORKPLACE STRESS

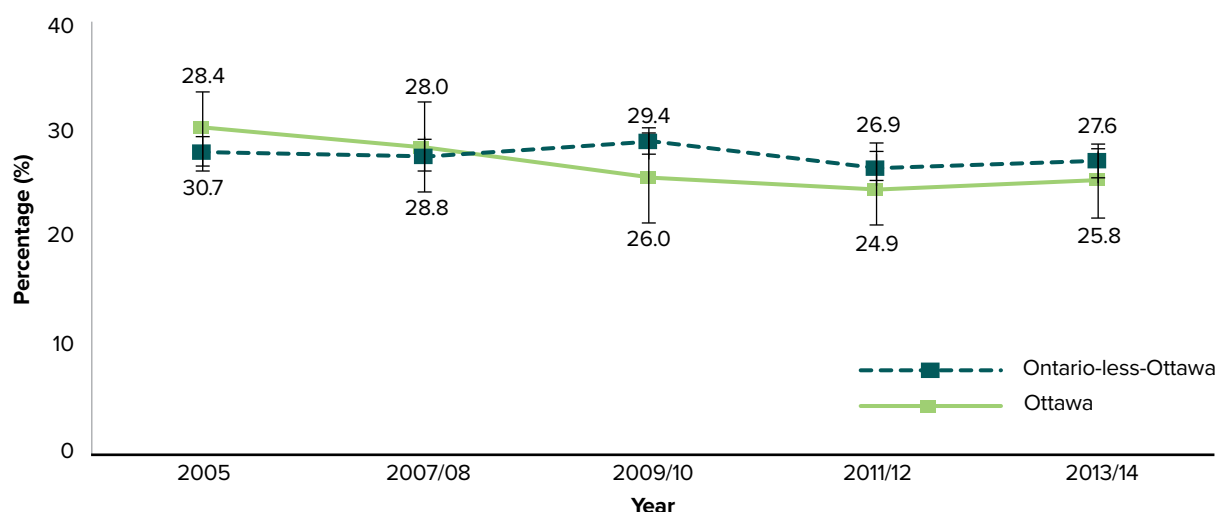
- In 2013/14, about 143,900 (26%) Ottawa residents aged 18 to 75 years who worked in the past 12 months reported that most days at work were quite a bit or extremely stressful. This was similar to those in the rest of Ontario (28%). The percentage of residents reporting quite a bit or extreme stress at work has decreased slightly since 2005 (Figure 33). Reporting quite a bit or extreme stress varied by education level (Figure 34), however, this difference was not significant when controlling for other factors (e.g. age, sex, household income, living situation, etc.) (24).

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xiii The City of Ottawa is currently compiling the results of the 2016 Employment Survey; this estimate may change.

**FIGURE 33**

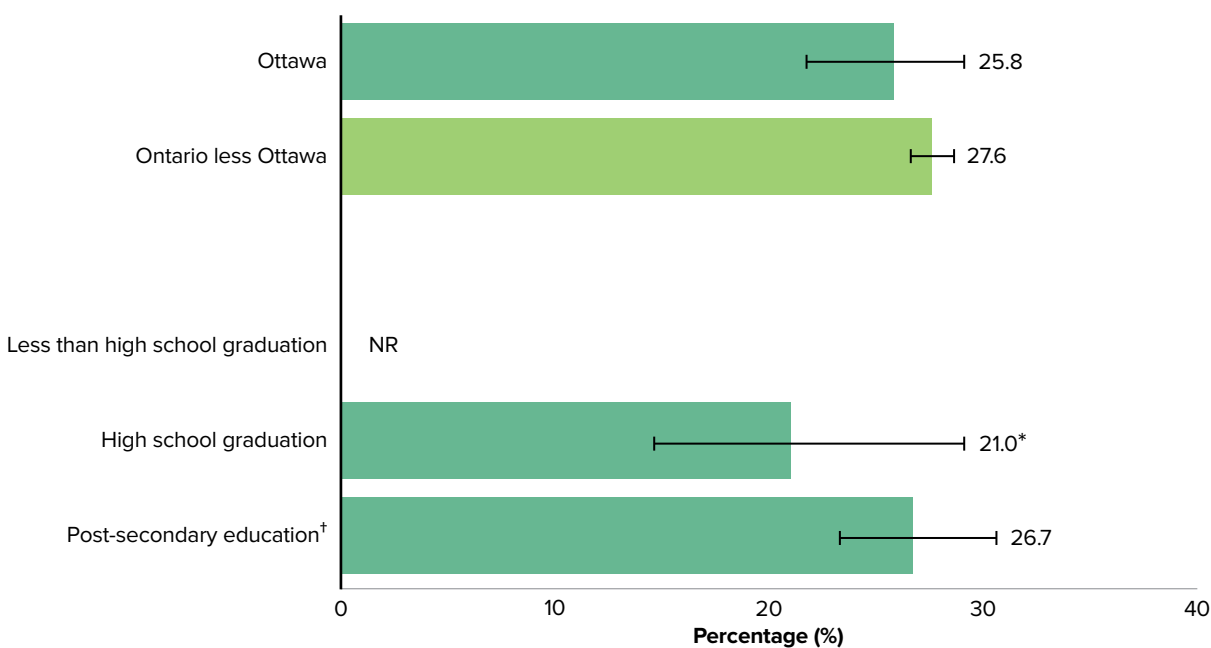
**Percentage of residents (18 to 75 years) who reported most days at work were quite a bit or extremely stressful, Ottawa and Ontario-less Ottawa, 2005–2014**



**Source:** Canadian Community Health Survey 2005-2014. Ontario Share File. Statistics Canada.

**FIGURE 34**

**Percentage of Ottawa residents (18 to 75 years) who reported most days at work were quite a bit or extremely stressful, by highest education level, 2013/14**



**Source:** Canadian Community Health Survey 2013/14. Ontario Share File. Statistics Canada.

\*Interpret with caution due to high sampling variability; NR- Not reportable due to high sampling variability;

†Comparison category in the regression model

## WORKPLACE HARASSMENT AND VIOLENCE

Local data to describe workplace harassment and violence in Ottawa is limited. However, the Government of Canada in 2017 consulted with Canadians about how violence and harassment is being treated in workplaces under federal jurisdiction, and how these approaches could be strengthened. These consultations involved an online survey and roundtable discussions. More detailed methods and findings are available in [Harassment and Sexual Violence in the Workplace Public Consultations- What we heard](#) (144).

- Although not representative of all Canadians, harassment was reported by 60% of online survey respondents, sexual harassment by 30%, and violence by 21%. Most respondents who had experienced an incident in the past two years reported experiencing these behaviours more than once (144).
- Among those who had experienced an incident in the past two years, men were more likely to have experienced harassment than women were. While women were more likely to have experienced sexual harassment and violence. People with disabilities and members of a visible minority group were more likely to experience harassment than other groups (144).

## School Environment

Most children and youth spend a great deal of time at school and their experiences at school contribute significantly to their mental health and education. School attachment and safety, including bullying, are important indicators of the school environment related to mental health (145, 146).

### SCHOOL ATTACHMENT

- In 2017, 83% of grade 7 to 12 Ottawa students felt that they were part of their school and 84% felt close to people at their school. Students reporting fair or poor mental health and lower family socio-economic status were less likely to report feeling that they were a part of their school and feeling close to people at their school (44).

### SCHOOL SAFETY

- In 2017, 91% of grade 7 to 12 Ottawa students reported that they felt safe in their school. Yet, 12%<sup>xiv</sup> of students reported that they were worried about being harmed or threatened at school. Students who reported excellent mental health (95%) were more likely to feel safe in their school than those with fair or poor mental health (80%) (44).

## BULLYING

Bullying is persistent aggression meant to harm or control another person, resulting in a perceived or actual imbalance of power. It can take many forms including teasing, name-calling, harassment, social exclusion, rumours, and physical assault.

- In 2017, about one in five (18%) Ottawa students in grades 7 to 12 reported they were bullied at least once on school property in the current school year. The most prevalent form of victimization among those bullied was verbal or non-physical attacks (81%). Cyber bullying or being bullied on the internet was reported by 18% of Ottawa students (44).

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xiv Data should be interpreted with caution because of high sampling variability.

- One in ten Ottawa students (8%) reported they had bullied other students at school in the current school year, while 8% of students reported they had bullied others through the internet in the past year. Cyberbullying others was reported less frequently by those who usually speak French at home (5%<sup>xv</sup>) compared to those who speak English (9%<sup>xvi</sup>) or another language (9%<sup>xvii</sup>). There were no differences in reported cyberbullying by grade or sex (44).

## Neighbourhoods and the Built Environment

The built environment is the physical environment where we live, learn, work and play. It includes infrastructures such as buildings, roads, public transit systems and green spaces (147). There are certain features of the built environment that are linked to reducing stress, increasing social support and community belonging. Some of these features include housing close to the street with front yards or porches, access to green spaces, walkable destinations, places to gather and socialize, and access to public transportation systems (147, 148). While poor mental health and increased stress has been linked to neighbourhood features, such as poor quality housing that lacks space for social networking, safe play areas for children, residence on high-traffic vehicular volume streets, poor walkability and a lack of green space or pedestrian pathways (149).

## SOCIAL SUPPORT AND RELATIONSHIPS

- In 2009, 89% of Ontario adults aged 18 years and older reported that their neighbourhood is a place where neighbours help each other. Nationally, there was an increase in the perception of neighbourhood safety by increasing age group, and rural living residents were more likely than urban residents to report that neighbours help each other. In contrast, 12% of Ontario adults reported that social disorder in their neighbourhood is a very big or fairly big problem (33).
- Among Canadian youth in grades 6 to 10, 60% felt that they could trust people in the area where they live (33).

## RECREATION

To learn more about Ottawa's neighbourhoods, please refer to the [Ottawa Neighbourhood Study](#) (46).

- Across the city, there are over 4,300 municipally administered recreational sites, including baseball diamonds, basketball courts, beaches, bowling lawns, outdoor pools, outdoor wading pools, outdoor rinks, play structures, skateboard parks, sledding hills, splash pads, sport fields, tennis courts, and volleyball courts. On average, each neighbourhood has 42 recreational sites, with a range of 0 (Woodroffe-Lincoln Heights) to 137 (Stonebridge-Halfmoon Bay-Heart's Desire) sites in each neighbourhood (150). This does not include parks or paths, which may be present in a neighbourhood with no recreational sites.
- There are over 1,200 km of cycling paths and 2,800 km of a pedestrian network within Ottawa. Each neighbourhood has an average of 12 km of cycling (range of <1km (Vanier South, Corkery) to 144km (Greenbelt)) and 28 km of pedestrian networks (range of <1km (Carp Ridge, Constance Bay, Marlborough, Dunrobin, Galetta, Kinburn, Corkery) to 159km (Stonebridge-Halfmoon Bay-Heart's Desire)) (150).

xv Data should be interpreted with caution because of high sampling variability.

xvi Data should be interpreted with caution because of high sampling variability.

xvii Data should be interpreted with caution because of high sampling variability.

## PERCEIVED SAFETY AND CRIME

- One in ten (11%) Ottawa residents agreed that the crime rate in their neighbourhood made it unsafe to go on walks at night (67).
- In 2016, the crime severity index, which weights police-reported crimes based on their frequency and severity, was similar in Ottawa and Ontario (51 and 53, respectively) (151).

## Community Violence

High levels of social engagement create conditions that support trust between people, give a sense of purpose in life, and a sense of belonging (152). Safe neighbourhoods and communities provide an environment for social engagement that benefits mental health. Violence disproportionately affects those who are marginalized or are living with a physical disability, health problem or mental health issue (125). To find out more about community violence in Ottawa, please visit the [Crime Prevention Ottawa](#) website.

## PHYSICAL AND SEXUAL ASSAULT

- In 2014, 4% of Ontario adults reported being the victim of physical or sexual assault in the past 12 months. The percentage of residents who reported assault decreased with age (18 to 24 years: 9%, 25 to 44 years: 5%, 45 to 64 years: 3%, 65 years and older: 1%). Twice as many Canadian-born residents (4%) reported being a victim of physical or sexual assault compared to immigrants (2%) (33).
- Canadians who identified as gay or bisexual had a rate of sexual assault six times higher than those who identified as heterosexual (153).
- Ottawa residents made 1,900 visits to the emergency department due to any assault in 2016, which represented 2% of injury-related hospital visits. This may include family violence as well as community violence. In 2016, Ottawa residents were hospitalized 169 times due to assault (154).

## YOUTH AND PHYSICAL FIGHTS

- In 2017, 5% of Ottawa students in grades 7 to 12 reported they had beat up or hurt someone on purpose in the past 12 months (44).
- One in ten (10%) Ottawa students reported they had been in a physical fight on school property in the past 12 months. About four times as many males (16%) than females (4%<sup>xviii</sup>) reported being in a physical fight on school property. More students in grades 7 to 8 (18%) reported being in a fight on school property than students in grades 9 to 12 (8%<sup>xix</sup>) (44).

xviii Data should be interpreted with caution because of high sampling variability.

xix Data should be interpreted with caution because of high sampling variability.

# SOCIETY DETERMINANTS

Inequities and societal norms shape the environments where people live, work, learn and play. Social and economic inequities may lead to poor mental health and the risk of mental illness (146). Different people will have different experiences, which may contribute to either positive or poor mental health. For example, some people may experience poverty, homelessness, or unemployment during various stages of their life. They may be stigmatized or discriminated against for a variety of reasons, such as their gender, race, or sexuality (155). It is not uncommon for a person to experience multiple inequities at the same time, which may accumulate over the lifespan and impact their mental health. Groups impacted by socio-economic inequities are more likely to experience poor mental health and mental illness (155, 156). Inequities, such as unemployment, poverty, discrimination and stigma, as well as, political participation will be the focus of this section.

## Highlights for Ottawa

- **One in fifteen** (7%) households reported food insecurity.
- **13%** of residents **live in a low income household**. Compared to high income households, residents of low income households were:
  - ▶ **Three times** more likely to report food insecurity.
  - ▶ **Three times** more likely to report fair or poor mental health.
- **35% of dwellings** in Ottawa **were rented**. Those who rent:
  - ▶ Spent more of their income on shelter than home owners.
  - ▶ Were **three times** more likely to report food insecurity than home owners.
- **13%** of households had a core housing need meaning that they **could not afford suitable and adequate housing in their community**.
- **40%** of registered voters **cast a ballot in the municipal election**.

## Inequity

The social and economic inequities a person experiences during their life-time can lead to poor mental health and the risk of mental illness (157). Stable income and employment, as well as access to education, quality housing, and safe neighbourhoods and culturally appropriate services provide people with resources to reach their potential, leading to improved mental health outcomes.

Measures for this indicator are in development by the Public Health Agency of Canada (PHAC). Some indicators that characterize inequities and are important to positive mental health include unemployment, income distribution, food insecurity, housing, and stigma and discrimination.

## UNEMPLOYMENT

Unemployment and poor mental health are intrinsically interrelated to each other. Both short-term and long-term unemployment have a negative effect on mental health, and can induce symptoms of distress, depression, anxiety, and reduce well-being and self-esteem (158, 159). An individual's mental health may also interact with their employment status, as people living with poor mental health face more challenges in keeping their job, while the unemployed are less likely to find a new job (158, 159).

The unemployment rate is the percentage of the population in the labour force that is unemployed. The labour force includes all people who are employed. It also includes people who are unemployed but available to work and had looked for work in the past four weeks. People who had been laid off and those who would be starting a new job in four weeks or less were considered unemployed. People who are unemployed and not looking for employment have not been counted in these data (120).

- In 2016, the unemployment rate in the City of Ottawa was 6.4% for those 15 years of age and older, which was about the same as 2015 (6.3%), and similar to Ontario (6.5% in 2016) (160).
- In 2012, 14% of Ontario residents with any disability (including a mental or psychological disability) were unemployed, and 23%<sup>xx</sup> of Ontarians with a mental or psychological disability were unemployed (161).

Many immigrants experience barriers to meaningful employment and the impact of low income can have a major impact on children and youth, older adults, and on racialized minorities groups among the immigrant population (162).

- Nearly one in five immigrants experience a state of chronic low income which is more than twice the rate of Canadian-born individuals (163).
- Unemployment rate for immigrant women is six times higher than Canadian-born women, and 2.5 times higher than immigrant men (164).

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xx Data should be interpreted with caution because of high sampling variability.

## INCOME DISTRIBUTION

Rates of mental illness vary among high income countries but are generally better in societies where income is more equally distributed (165). It is hypothesized that greater inequality increases competition and insecurity about social status, increasing the risk of depression, anxiety, substance use and personality disorder (165).

- In 2015, a household of four in Ottawa was considered low income if its after-tax income was less than \$44,266. For a person living alone, the low income threshold was \$22,133 (120).
- In 2015, 13% of individuals in private households in Ottawa were low income compared to 14% for Ontario. The prevalence of low income is 16% in those under 18 years old; 12% in those 18 to 64 years; and 9% in those over 65 years of age (120).
- In Ottawa, residents of household earning a low income were over three times as likely to report fair or poor mental health compared to those in the highest income group (13% compared to 4%) (166).

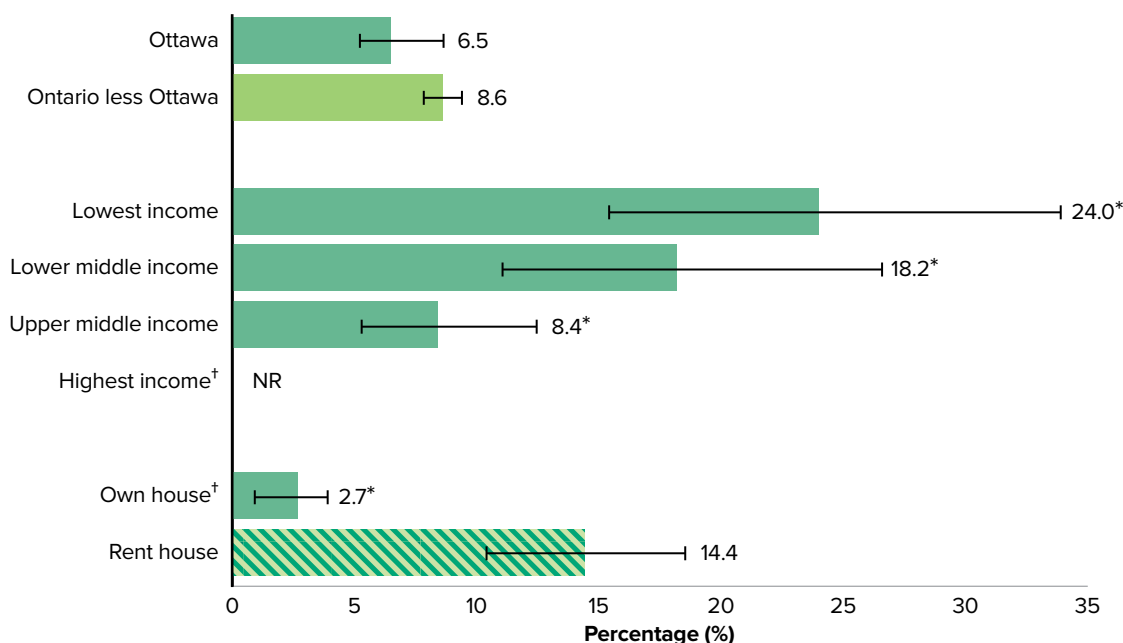
## FOOD INSECURITY

Nutritious food promotes brain development and function, mental health and resilience (167). To avoid the long-term impacts of poor nutrition, people need access to nutritious food. Food insecurity refers to the ability to physically and economically access sufficient safe and nutritious food in order to maintain a healthy life (168). Food insecurity is when an individual or household either cannot afford balanced meals, goes hungry by eating less or skipping meals, or does not have access to the variety and quantity of food that they need due to lack of money. Food insecurity has been linked to poor mental and physical health, anxiety, stress, depression and chronic diseases (169–173). Some immigrant, refugee, ethno-cultural and racialized populations are at greater risk for food insecurity. The poverty rate among racialized groups is double the overall poverty rate in Canada which puts Canada's racialized populations at an increased risk for food insecurity (43). To learn more about food insecurity in Ottawa, please refer to Ottawa Public Health's [Nutritious Food Basket Report](#) (174).

- In 2017, it cost a minimum of \$873 a month to feed a family of four, which represents a 19% increase from 2009 (174).
- In 2013/14, one in fifteen (7%) Ottawa households reported food insecurity, which was similar to Ontario-less-Ottawa (9%). Food insecurity has remained stable since 2007/08 in Ottawa (24).
- Food insecurity was more likely in households with lower incomes and homes that were rented compared to owned when controlling for other household factors such as living situation, time since immigration, and mother tongue (Figure 35) (24).

**FIGURE 35**

**Percentage of Ottawa households reporting food insecurity by selected socio-economic factors, 2013/14**



**Source:** Canadian Community Health Survey 2013/14. Ontario Share File. Statistics Canada.

\*Interpret with caution due to high sampling variability; NR- Not reportable due to high sampling variability;

†Comparison category in the regression model

## HOUSING

Housing is a key social determinant of health and a fundamental resource for health identified in the Ottawa Charter for Health Promotion (175).

- In 2016, there were 373,755 private dwellings in Ottawa. About two-thirds (65%) of these dwellings are owned, while 35% are rented. The average monthly cost for owned dwellings is \$1,505 and for rented dwellings is \$1,148 (120).
- The average household size in Ottawa is 2.5 people. Ninety-five percent of Ottawa households are suitable for the number of people that live in them, based on the number of bedrooms (120).
- One-person households make up 28% of households in Ottawa. One quarter (25%) of households are married or common-law couples with no children and 40% of households are couples or lone parents with children (120).
- One quarter (24%) of private households spend more than 30% of their income on shelter costs. It is recommended to spend up to 30% of gross income (before taxes) on housing. Of those that rent, 42% spend more than 30% of income on shelter, and 16% of renting households are in subsidized housing. Fourteen percent of owner households spend more than 30% of their income on shelter (120).

- Core housing need is a measure that considers suitability (number of bedrooms), adequacy (in need of major repairs) and affordability (proportion of income spent on shelter) of a dwelling. A household living in a dwelling that is unsuitable, inadequate or unaffordable, and whose income level would not allow alternative suitable and adequate housing is considered in a core housing need. In 2016, 13% of Ottawa households were in a core housing need (120).
- As of 2016, there are over 10,500 active households on the [Centralized Waiting List](#) for subsidized housing (176).
- Close to 550 of the households on the waiting list are individuals or families where the primary applicant's age is 16 to 24 years (176).
- Over 1,700 households were moved into permanent housing in 2016 (176).

For more information on housing and homelessness in Ottawa please see the City of Ottawa's [10 Year Housing and Homelessness Plan](#).

## Stigma

Stigma due to mental health problems can create challenges to accessing support. An individual or family may be reluctant to seek care because they fear being treated unfairly or labelled. Although stigma toward mental illness exists in every society, the extent of stigma varies according to the cultural and sociological backgrounds of a community (177). In some cultures, mental illness in one family member can have negative effects for the entire family (177). Therefore, the decision to receive treatment is not only a personal choice but may also have social consequences for the entire family.

- Almost three-quarters (71%) of Canadians aged 15 years and older with an unmet mental health care need reported personal circumstances, including not knowing where to seek help, lack of confidence in health care system or social services, expense, and fear of what others may think, as a barrier to meeting their need (178).
- In 2012, 25% of Ontario residents being treated for an emotional or mental health problem reported being affected by negative opinions or unfair treatment due to their mental health problem, which was higher than in Canada (21%) (33).
- Almost one-third (28%) of 24 to 44 year old Canadians with a mental health problem reported being affected by negative opinions or unfair treatment due to their mental health problem, which was more than other age groups (18 to 24 years: 20%<sup>xxi</sup>; 45 to 64 years: 18%, 65 years and older: 6%<sup>xxii</sup>) (33).
- More than twice as many Canadians in the lowest income quintile with a mental health problem reported being affected by negative opinions than in the highest income quintile (28% and 13%<sup>xxiii</sup>, respectively) (33)

xxi Data should be interpreted with caution because of high sampling variability.

xxii Data should be interpreted with caution because of high sampling variability.

xxiii Data should be interpreted with caution because of high sampling variability.

## Discrimination

Discrimination is the negative treatment of an individual or group based on their characteristics, such as age, race, family status, religion, or disability, among others (179). The Canadian Human Rights Act protects against discriminatory practices, including denying someone goods or services, following policies or practices that deprive people of employment opportunities, and harassment (179).

Discrimination may affect someone's dignity and self-esteem, and can lead to a feeling of social isolation. The perception of discrimination has been associated with poor mental health outcomes, including low self-esteem, depression, psychological distress, anxiety, and problematic substance use (180). Discrimination may also compound the effects of poor mental health by making it more difficult to seek and receive care, as well as exacerbating or triggering mental health disabilities and addictions (181).

Perceived discrimination and institutionalized discrimination creates structural barriers to accessing mental health services for Canada's diverse communities (177). Discrimination can result in lack of access to opportunities, marginalization and social exclusion, which negatively impact mental health. The experience of discrimination and racism stimulates the body's stress response and causes negative emotional states such as anxiety, depression and low self-esteem (182).

- One third (32%) of Canadian adults reported they experienced unfair treatment based on their characteristics, such as sex, age, race or appearance. Younger Canadians reported unfair treatment more often than older Canadians (18 to 24 years: 48%, 25 to 44 years: 40%, 45 to 64 years: 29%, 65 years and older: 16%). Those living in a population centre (33%) reported unfair treatment more often than those living in rural areas (28%) (33).

## Political Participation

Political participation and voter turn out provides information about people's level of civic engagement. Voter turnout may indicate societal issues, like lack of trust in political institutions and marginalization (183). Furthermore, it is an indicator of community vitality and resilience, and it is related to self-rated health and psychological well-being (183, 184). In part, social belonging and an understanding of society determine psychological well-being, and this may affect a person's drive to vote (185).

To measure political participation, voter turnouts in Ottawa for the most recent municipal, provincial, and federal elections were used. Voter turnout is the percentage of ballots cast out of the total population registered to vote. This measure does not account for those who may have been eligible to vote, but were not registered.

### MUNICIPAL

- In the 2014 City of Ottawa Municipal Election, 40% of registered voters cast a ballot. Voter turnout by Ward ranged from 30% (Cumberland) to 48% (Kitchissippi) (186).

### PROVINCIAL

- In the 2014 Provincial Election, 51% of eligible Ontario voters cast a ballot.
- By electoral district, voter turnout ranged from 49% (Ottawa-Vanier) to 59% (Ottawa-Orleans), with a total turnout in the seven electoral districts within the City of Ottawa of 55% (187).

### FEDERAL

- In the 2015 Federal Election, 68% of registered Canadian voters cast a ballot, with 68% of registered Ontario voters casting a ballot.
- In Ottawa ridings, voter turnout varied from 76% (Ottawa-Vanier and Ottawa South/Ottawa-Sud) to 81% (Orleans). Overall turnout for the eight ridings within the City of Ottawa was 77% (188).

# MENTAL WELLBEING OF INDIGENOUS PEOPLES

The term 'Indigenous' is used here to refer collectively to the original peoples of Canada. It represents all First Nations, Inuit, and Métis populations, their ancestors and descendants, and recognizes the tremendous diversity within and among the groups, their unique histories, knowledge, traditions and cultural practices.

In Ottawa, local Indigenous service providers recognize the legacy and impact of colonization and ongoing systemic racism on the health and well-being of First Nations, Inuit and Métis peoples (189). Enduring the trauma, oppression, discrimination and social exclusion caused by colonial policies has had a chronic, inter-generational and cumulative effect on the socio-economic and political well-being of Indigenous peoples, as well as on physical and mental health, family relationships, culture and language (190).

Addressing mental health and addictions from a holistic perspective that considers all of the social determinants of health is a community priority. Assets- based approaches that build on local strengths, successes, and have a focus on culture and collective well-being, are seen as essential features for policies and programs to effectively improve mental wellness for Indigenous peoples in Ottawa (189). Local service providers promote a sense of belonging, inclusiveness and social connectedness by offering supportive, flexible, holistic and culturally-based programs and services. The short video, [A Story of Impact](#), provides an example of local initiatives that promote infant and early childhood mental health and well-being (191).

In order to address the legacy and impact of colonization on Indigenous peoples, and advance the process of reconciliation, the Truth and Reconciliation Commission of Canada (TRC) recognizes the need to identify and measure the gap in health outcomes between Indigenous and non-Indigenous populations. As part of this [call to action](#), data detailing the determinants of mental health inequities, and related challenges experienced by Indigenous peoples, are reported. While local data on the mental health and well-being of Indigenous peoples are limited, it has been included where possible, and is supported by provincial and Canadian data sources. Examples include the [My Life, My Wellbeing](#) report on the mental health and well-being of Indigenous youth in the Champlain region, the [Aboriginal Peoples Survey](#), and data reports released by Statistics Canada. The data presented in this section should not be compared to other data in the report.

## Self reported Mood and Anxiety Disorders

- Nationally, 14% of off-reserve First Nations people, 12% of Métis and 7% of Inuit reported being diagnosed with a mood disorder, and 14% of off-reserve First Nations people, 13% of Métis and 5% of Inuit reported an anxiety disorder (192).
- Half (48%) of Indigenous youth in the Champlain region had symptoms of internalizing disorders such as depression, anxiety or suicidal thoughts (193).
- Two in five (40%) Indigenous youth in the Champlain region had symptoms of Attention Deficit Hyperactivity Disorder, disruptive behaviours or other externalizing disorders (193).

## Substance Use

- 29% of Indigenous youth in the Champlain region showed symptoms of problematic substance use (193).

## Self Injury

- 13% of Indigenous youth in the Champlain region reported significant problems with self-harm (193).

## Suicidal Behaviour

- One in six (16%) Indigenous youth in the Champlain region reported they had thought about ending their life or dying by suicide in 2012 (193).
- In 2012, 19% of Indigenous adults (aged 18 years and older) living off-reserve in Ontario ever seriously considered dying by suicide (194).

## Self-reported Exposure to Childhood Violence

- In 2014, 40% of Indigenous people in Canada reported being the victim of physical and/or sexual abuse as a child, as compared to 29% of non-Indigenous people (129).
- Almost one-third (29%) of Indigenous youth in the Champlain region reported having been mentally or emotionally abused in the last year, one in ten (11%) reported they were a victim of family violence, and 8% reported they were a victim of a traumatic event (193).

## Physical and Sexual Assault

- The rate of sexual assault among those who identified as Indigenous was three times higher than non-Indigenous. One in five (22%) young Indigenous women in Canada self-reported sexual assault in the previous 12 months (153).

## Food Insecurity

- In 2012, almost one in five (18%) Indigenous people aged six years and older living off-reserve in Ontario reported low or very low food security (195).

## Stigma

- Indigenous youth in the Champlain region reported that some youth are hesitant to use services due to the stigma attached to mental health problems (193).

## Discrimination

- Over half of Indigenous youth surveyed in the Champlain Region reported they had been discriminated against or put down because they are Indigenous. Racism and disrespect were the main reasons youth hesitated to access services (193).

Given the noted data limitations, this information only represents a partial picture of the indicators of mental wellbeing reported by Indigenous peoples. Further access to timely, quality, and relevant local data would support an evidence-informed approach to mental health programming, policies and culturally based care for Indigenous peoples in Ottawa as recommended in *Now, Now, Now: Mental Wellness for Indigenous Youth in the Champlain Region* (196).

### To learn more:

- [First Nations, Métis, and Inuit in Canada: Diverse and Growing Population](#) (197)
- [Diversity Snapshot: Aboriginal Peoples \(First Nations, Inuit, Métis\)](#) (198)
- [Honouring the Truth, Reconciling for the Future](#) (199)
- [My Life, My Wellbeing](#) (193)
- [Now Now Now: Mental Wellness for Indigenous Youth in the Champlain Region](#) (196)
- [Our Health Counts](#) (200)
- [Considerations for Indigenous Child and Youth Population Mental Health Promotion](#) (201)
- [First Nations Regional Health Survey](#) (202)
- [First Nations Mental Wellness Continuum Framework](#) (203)

# CONCLUSION

The *Status of Mental Health in Ottawa Report* supports OPH's strategic direction to [Foster Mental Health in Our Community](#) (204) and the continued need to promote the mental health of all residents and to build a resilient community. The PHAC *Positive Mental Health Surveillance Conceptual Framework* has provided a structure to understand the complex and integrated nature of the determinants of mental health across the individual, family, community and society domains in Ottawa. Overall, the mental health outcomes demonstrate that Ottawa residents report very good or excellent mental health. The report has identified residents who are at higher risk of developing poor mental health due to social and economic inequities, stigma and discrimination.

Building on the findings of this report, there is an opportunity to enhance mental health promotion, policies, and programs and service delivery planning. OPH is committed to working together to contribute to these actions in order to improve the mental health and wellbeing of Ottawa residents.

# GLOSSARY

| TERM                                                            | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Addiction</b>                                                | <p>Addiction is a complex process where problematic patterns of substance use or behaviours can interfere with a person's life. Addiction can be broadly defined as a condition that leads to a compulsive engagement with a stimuli, despite negative consequences. This can lead to physical and/or psychological dependence. Addictions can be either substance related (such as the problematic use of alcohol or cocaine) or process-related, also known as behavioural addictions (such as gambling or internet addiction). Both can disrupt an individual's ability to maintain a healthy life.</p> <p>A simple way of understanding and describing addiction is to use the 4C's approach:</p> <ul style="list-style-type: none"> <li>• <b>C</b>raving</li> <li>• <b>L</b>oss of control of amount or frequency of use</li> <li>• <b>C</b>ompulsion to use</li> <li>• <b>C</b>ontinued substance use despite consequences (205)</li> </ul> |
| <b>Confidence Interval</b>                                      | The interval within which the true value of a variable such as a mean, proportion or rate is contained. This is calculated to a 95 percent probability in this report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Household Composition: Living alone</b>                      | Lives alone (household size of 1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Household Composition: Single parent and child(ren)</b>      | One adult with child(ren) and no other relationships                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Household Composition: Parents and child(ren)</b>            | Lives with spouse/partner and child(ren)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Household Composition: Living with others, no child(ren)</b> | Lives with spouse/partner only (household size of 2) or lives with others without a marital/common-law or parent relationship                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Mental Health</b>                                            | A state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community (1).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Mental Illness</b>                                           | A biological condition of the brain that causes alterations in thinking, mood or behaviour associated with significant distress and impaired functioning (2).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

*continued on next page*

| TERM                             | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Problematic Substance Use</b> | Refers to alcohol and/or other drug use, which is harmful for an individual. Individuals may experience social, financial, psychological, physical or legal problems as a result of the substance use (205).                                                                                                                                                                                                                |
| <b>Risk Factor</b>               | A factor that is associated with an elevated frequency of occurrence of the disease or condition                                                                                                                                                                                                                                                                                                                            |
| <b>Sampling Variability</b>      | Sampling variability is the inconsistency among samples drawn from the same population, which can occur as individuals are selected by chance from that population. High sampling variability can indicate that an estimate is not as precise as it could be. Factors that increase sampling variability include a small sample size and an event with low prevalence or a rare condition.                                  |
| <b>Statistical Significance</b>  | An observed difference between groups that is most likely to be a real difference and is unlikely to have occurred by chance. This difference is often calculated to the 95 per cent probability of a true difference being observed.                                                                                                                                                                                       |
| <b>Sexual Minority</b>           | Includes a variety of gender and sexual identities and expressions that differ from cultural norms. For example, it may include lesbian, gay, bisexual, transgender individuals (206).                                                                                                                                                                                                                                      |
| <b>Substance Use Disorder</b>    | Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home. According to the DSM-5, a diagnosis of substance use disorder is based on evidence of impaired control, social impairment, risky use, and pharmacological criteria (207). |

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# APPENDIX 1: PRIORITY POPULATIONS

| POPULATION         | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Francophone</b> | <p>Refers to a person whose mother tongue is French, plus those whose mother tongue is neither French nor English but they have a particular knowledge of French as an Official Language and use French at home (53).</p> <p><b>To learn more:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Francophone: Equity and Inclusion Lens Snapshot 2016</a></li> <li>• <a href="#">Promoting Recovery in French: Directions in Mental Health in French</a></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Immigrant</b>   | <p>Refers to a person who is, or who has ever been, a landed immigrant or permanent resident. They were born outside of Canada, and they have been given the right to live in Canada permanently (208).</p> <p><b>To Learn more:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Immigrants: Equity and Inclusion Lens Snapshot 2016</a></li> <li>• <a href="#">Racialized People: Equity and Inclusion Lens Snapshot 2016</a></li> <li>• <a href="#">Multicultural Mental Health Resource Centre</a></li> <li>• <a href="#">The Case for Diversity: Building the Case to Improve Mental Health Services for Immigrant, Refugee, Ethno-cultural and Racialized Populations</a></li> <li>• <a href="#">Improving Mental Health Services for Immigrant, Refugee, Ethno-cultural and Racialized Groups: Issues and Options for Service Improvement</a></li> </ul> |
| <b>LGBTQ2</b>      | <p>Refers to lesbian, gay, bisexual, trans, queer, two-spirited population.</p> <p><b>To learn more:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">LGBTQ: Equity and Inclusion Lens Snapshot 2016</a></li> <li>• <a href="#">Rainbow Health Ontario</a></li> <li>• <a href="#">Ontario Gay Men's Sexual Health Alliance</a></li> <li>• <a href="#">Researching for LGBTQ Health</a></li> <li>• <a href="#">Trans Pulse</a></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                        |

| POPULATION                             | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Older Adults</b>                    | <p>Refers to adults over the age of 65 years old.</p> <p><b>To learn more:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Older Adults: Equity and Inclusion Lens Snapshot 2016</a></li> <li>• <a href="#">Mental Health Commission of Canada: Seniors</a></li> <li>• <a href="#">Fountain of Health</a></li> </ul>                                                                                                                           |
| <b>People living with a disability</b> | <p>Refers to anyone living with a physical, mental, developmental, or learning disability or limitation (209).</p> <p><b>To learn more:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">People Living with a disability: Equity and Inclusion Lens Snapshot 2017</a></li> </ul>                                                                                                                                                                |
| <b>People living in poverty</b>        | <p>Refers to any family who lives on an income below the average household income and struggles to meet their basic necessities (210).</p> <p><b>To learn more about people living in poverty in Ottawa:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">People living in Poverty: Equity and Inclusion Lens Snapshot 2017</a></li> <li>• <a href="#">Towards a Poverty Reduction Strategy: A backgrounder on poverty in Canada</a></li> </ul> |
| <b>Residents Living in Rural Areas</b> | <p>Refers to residents living in the rural area surrounding Ottawa.</p> <p><b>To learn more:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Rural Residents: Equity and Inclusion Lens Snapshot 2017</a></li> </ul>                                                                                                                                                                                                                           |

# APPENDIX 2: DATA TABLES FOR FIGURES

**TABLE 2**

**Percentage of Ottawa residents (12 years and older) who reported excellent or very good mental health, by selected socio-economic factors, 2013/14**

| SOCIO-DEMOGRAPHIC FACTOR              | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|---------------------------------------|-----------------------|---------------------|
| Ottawa                                | 69.0                  | 65.6–72.3           |
| Ontario-less-Ottawa                   | 68.8                  | 68.0–69.7           |
| Less than high school graduation      | 60.5                  | 52.7–67.8           |
| High school graduation                | 58.6                  | 51.6–65.3           |
| Post-secondary education <sup>†</sup> | 73.1                  | 68.7–77.1           |
| Lowest income                         | 47.3                  | 34.0–61.0           |
| Lower middle income                   | 59.0                  | 45.7–71.2           |
| Upper middle income                   | 67.5                  | 60.7–73.5           |
| Highest income <sup>†</sup>           | 73.5                  | 69.2–77.3           |
| Own house <sup>†</sup>                | 71.9                  | 68.1–75.5           |
| Rent house                            | 61.3                  | 53.6–68.5           |
| At work last week <sup>†</sup>        | 73.3                  | 68.9–77.3           |
| Absent from work last week            | 77.7                  | 60.7–88.7           |
| No job last week                      | 58.9                  | 51.8–65.7           |
| Unable/permanently unemployed         | 29.0 <sup>*</sup>     | 17.9–43.5           |

<sup>\*</sup>Interpret with caution due to high sampling variability;

<sup>†</sup>Comparison category in the regression model

**TABLE 3**

**Percentage of Ottawa residents (15 years and older) who reported feeling happy almost every day or every day in the past month, by selected socio-economic factors, 2011/12**

| SOCIO-DEMOGRAPHIC FACTOR                                     | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|--------------------------------------------------------------|-----------------------|---------------------|
| Ottawa                                                       | 74.5                  | 71.2–77.6           |
| Ontario-less-Ottawa                                          | 75.1                  | 74.2–75.9           |
| 15–19 years <sup>†</sup>                                     | 83.1                  | 74.0–89.4           |
| 20–44 years                                                  | 77.4                  | 72.4–81.7           |
| 45–64 years                                                  | 71.5                  | 64.5–77.6           |
| 65+ years                                                    | 66.2                  | 60.0–71.9           |
| Lowest income                                                | 48.6                  | 35.2–62.2           |
| Lower middle income                                          | 65.7                  | 55.8–74.3           |
| Upper middle income                                          | 65.5                  | 58.8–71.7           |
| Highest income <sup>†</sup>                                  | 81.7                  | 77.8–85.0           |
| Unattached living alone                                      | 66.9                  | 61.1–72.3           |
| Single parent and child(ren)                                 | 60.5                  | 47.9–71.8           |
| Parents and child(ren) <sup>†</sup>                          | 77.5                  | 71.7–82.4           |
| Partner living with partner or unattached living with others | 79.8                  | 75.3–83.7           |
| Not an immigrant <sup>†</sup>                                | 81.5                  | 78.0–84.6           |
| Immigrant ≤10 years                                          | 47.9                  | 35.0–61.1           |
| Immigrant >10 years                                          | 65.1                  | 57.8–71.7           |

<sup>†</sup>Comparison category in the regression model

**TABLE 4**

**Percentage of Ottawa residents (12 years and older) satisfied or very satisfied with their life, by selected socio-economic factors, 2013/14**

| SOCIO-DEMOGRAPHIC FACTOR              | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|---------------------------------------|-----------------------|---------------------|
| Ottawa                                | 91.0                  | 88.9–92.7           |
| Ontario-less-Ottawa                   | 88.2                  | 87.6–88.8           |
| 12–19 years <sup>†</sup>              | 97.4                  | 94.0–98.9           |
| 20–44 years                           | 91.7                  | 87.5–94.6           |
| 45–64 years                           | 89.9                  | 86.1–92.8           |
| 65+ years                             | 86.5                  | 82.2–89.9           |
| Less than high school graduation      | 84.1                  | 76.8–89.4           |
| High school graduation                | 86.5                  | 81.0–90.6           |
| Post-secondary education <sup>†</sup> | 93.3                  | 90.5–95.3           |
| Lowest income                         | 70.9                  | 56.9–81.8           |
| Lower middle income                   | 80.1                  | 68.2–88.3           |
| Upper middle income                   | 88.7                  | 83.6–92.4           |
| Highest income <sup>†</sup>           | 95.4                  | 93.9–96.5           |
| Own house <sup>†</sup>                | 93.7                  | 92.1–94.9           |
| Rent house                            | 83.8                  | 77.9–88.4           |
| At work last week <sup>†</sup>        | 95.4                  | 93.3–96.8           |
| Absent from work last week            | 93.2                  | 80.0–97.9           |
| No job last week                      | 84.4                  | 78.3–89.0           |
| Unable/permanently unemployed         | 59.0                  | 43.7–72.7           |

<sup>†</sup>Comparison category in the regression model

**TABLE 5**

**Percentage of Ottawa residents (15 years and older) who reported high psychological well-being, by mother tongue, 2011/12**

| SOCIO-DEMOGRAPHIC FACTOR           | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|------------------------------------|-----------------------|---------------------|
| Ottawa                             | 64.0                  | 60.6–67.2           |
| Ontario-less-Ottawa                | 69.8                  | 68.8–70.7           |
| English mother tongue <sup>†</sup> | 70.1                  | 65.7–74.2           |
| French mother tongue               | 63.5                  | 56.7–69.8           |
| Other mother tongue                | 55.9                  | 49.7–62.0           |

<sup>†</sup>Comparison category in the regression model

**TABLE 6**

**Percentage of students by grade who reported high autonomy, competence and relatedness, Canada, 2014/15**

| GRADE | AUTONOMY (CI)    | COMPETENCE (CI)  | RELATEDNESS (CI) |
|-------|------------------|------------------|------------------|
| 6     | 73.6 (72.9–74.2) | 87.9 (87.4–88.4) | 92.7 (92.4–93.1) |
| 7     | 74.4 (73.8–75.0) | 84.6 (84.0–85.1) | 86.6 (86.2–87.1) |
| 8     | 73.3 (72.6–74.0) | 83.6 (83.0–84.3) | 84.5 (84.0–85.0) |
| 9     | 74.7 (74.1–75.2) | 80.4 (79.9–80.9) | 80.4 (79.8–80.9) |
| 10    | 75.6 (74.5–76.7) | 77.5 (76.7–78.4) | 78.6 (77.7–79.5) |
| 11    | 74.4 (73.7–75.2) | 77.6 (77.1–78.1) | 78.6 (78.1–79.1) |
| 12    | 77.0 (76.0–78.0) | 80.2 (79.5–80.9) | 82.2 (81.6–82.8) |

**TABLE 7**

**Percentage of residents (12 years and older) who reported a very or somewhat strong sense of belonging to their local community, Ottawa and Ontario-less-Ottawa, 2005-2014**

| YEAR    | OTTAWA (CI)      | ONTARIO-LESS-OTTAWA (CI) |
|---------|------------------|--------------------------|
| 2005    | 60.6 (57.7–63.4) | 63.7 (62.8–64.6)         |
| 2007/08 | 60.7 (57.2–64.1) | 64.3 (63.5–65.2)         |
| 2009/10 | 64.3 (61.2–67.3) | 65.3 (64.3–66.3)         |
| 2011/12 | 57.9 (54.3–61.4) | 65.8 (64.8–66.7)         |
| 2013/14 | 63.0 (59.1–66.8) | 65.9 (65.0–66.8)         |

**TABLE 8**

**Percentage of residents (12 years and older) who reported a very or somewhat strong sense of belonging to their local community, by selected socio-economic factors, Ottawa, 2013/14**

| SOCIO-DEMOGRAPHIC FACTOR                                     | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|--------------------------------------------------------------|-----------------------|---------------------|
| Ottawa                                                       | 63.0                  | 59.1–66.8           |
| Ontario-less-Ottawa                                          | 65.9                  | 65.0–66.8           |
| 12–19 years <sup>†</sup>                                     | 74.5                  | 67.9–80.2           |
| 20–44 years                                                  | 56.8                  | 50.0–63.4           |
| 45–64 years                                                  | 65.0                  | 58.5–70.9           |
| 65+ years                                                    | 67.9                  | 62.4–73.0           |
| Unattached living alone                                      | 56.2                  | 50.1–62.1           |
| Single parent and child(ren)                                 | 58.0                  | 42.8–71.7           |
| Parents and child(ren) <sup>†</sup>                          | 68.4                  | 61.9–74.3           |
| Partner living with partner or unattached living with others | 64.9                  | 59.7–69.9           |

<sup>†</sup>Comparison category in the regression model

**TABLE 9**

**Age standardized rate (per 1,000 population) of outpatient physician visits related to mental health and addictions, Ottawa and Ontario-less-Ottawa, 2006-2015**

| YEAR | OTTAWA (CI)         | ONTARIO-LESS-OTTAWA (CI) |
|------|---------------------|--------------------------|
| 2006 | 817.7 (815.7-819.7) | 621.3 (620.9-621.8)      |
| 2007 | 778.3 (776.5-780.2) | 600.2 (599.8-600.7)      |
| 2008 | 749.4 (747.5-751.2) | 594.3 (593.8-594.7)      |
| 2009 | 732.1 (730.3-733.9) | 600.0 (599.6-600.5)      |
| 2010 | 746.5 (744.7-748.3) | 634.5 (634.1-635.0)      |
| 2011 | 754.9 (753.1-756.7) | 674.8 (674.3-675.2)      |
| 2012 | 752.5 (750.7-754.3) | 683.4 (682.9-683.9)      |
| 2013 | 746.6 (744.8-748.3) | 683.4 (683.0-683.9)      |
| 2014 | 747.6 (745.8-749.3) | 695.2 (694.7-695.6)      |
| 2015 | 763.1 (761.4-764.9) | 714.4 (713.9-714.9)      |

**TABLE 10**

**Age-specific rate (per 1,000 population) of outpatient physician visits related to mental health and addictions, Ottawa, 2006–2015**

| YEAR | 0–14 YRS | 15–24 YRS | 25–44 YRS | 45–64 YRS | 65+ YRS |
|------|----------|-----------|-----------|-----------|---------|
| 2006 | 242.7    | 544.4     | 908.6     | 1198.2    | 844.9   |
| 2007 | 238.5    | 537.8     | 851.5     | 1133.8    | 806.0   |
| 2008 | 231.3    | 521.7     | 805.1     | 1087.6    | 791.6   |
| 2009 | 223.0    | 529.9     | 790.0     | 1043.5    | 779.5   |
| 2010 | 223.9    | 557.5     | 821.5     | 1055.4    | 765.0   |
| 2011 | 234.2    | 593.8     | 859.8     | 1028.7    | 756.9   |
| 2012 | 252.2    | 622.1     | 849.5     | 1004.8    | 756.6   |
| 2013 | 259.7    | 640.7     | 836.9     | 986.1     | 748.0   |
| 2014 | 270.9    | 660.6     | 837.4     | 970.6     | 750.2   |
| 2015 | 294.8    | 688.9     | 858.6     | 978.1     | 745.2   |

**TABLE 11**

**Percentage of residents (12 years and older) who reported seeing or talking to a health professional about their emotional or mental health in the past 12 months, Ottawa and Ontario-less-Ottawa, 2005–2014**

| YEAR    | OTTAWA (CI)      | ONTARIO-LESS-OTTAWA (CI) |
|---------|------------------|--------------------------|
| 2005    | 8.6 (7.3–10.2)   | 7.1 (6.7–7.5)            |
| 2007/08 | 15.2 (12.8–17.8) | 10.2 (9.7–10.6)          |
| 2009/10 | 14.1 (11.9–16.6) | 9.8 (9.3–10.3)           |
| 2011/12 | 14.7 (12.3–17.3) | 11.9 (11.3–12.5)         |
| 2013/14 | 15.7 (13.3–18.5) | 12.1 (11.5–12.7)         |

**TABLE 12**

**Age standardized rates (per 100,000 population) of emergency department visits for any mental health or addictions condition, Ottawa and Ontario-less-Ottawa, 2007–2016**

| YEAR | OTTAWA (CI)            | ONTARIO-LESS-OTTAWA (CI) |
|------|------------------------|--------------------------|
| 2007 | 1256.5 (1233.0-1280.3) | 1428.1 (1421.3-1434.9)   |
| 2008 | 1324.7 (1300.8-1349.0) | 1476.2 (1469.3-1483.0)   |
| 2009 | 1384.9 (1360.7-1409.4) | 1471.7 (1464.9-1478.6)   |
| 2010 | 1450.5 (1425.9-1475.4) | 1549.9 (1543.0-1556.9)   |
| 2011 | 1552.4 (1527.1-1577.9) | 1609.1 (1602.0-1616.2)   |
| 2012 | 1640.9 (1615.0-1667.0) | 1701.7 (1694.5-1709.0)   |
| 2013 | 1679.5 (1653.4-1705.9) | 1733.6 (1726.4-1740.9)   |
| 2014 | 1716.2 (1690.0-1742.8) | 1805.0 (1797.6-1812.4)   |
| 2015 | 1771.3 (1744.7-1798.2) | 1899.0 (1891.4-1906.6)   |
| 2016 | 1828.6 (1801.7-1855.9) | 2034.3 (2026.4-2042.1)   |

**TABLE 13**

**Age-specific rates (per 100,000 population) of emergency department visits for any mental health or addictions condition, Ottawa, 2007–2016**

| YEAR | 5–14 YRS | 15–24 YRS | 25–44 YRS | 45–64 YRS | 65+ YRS |
|------|----------|-----------|-----------|-----------|---------|
| 2007 | 360.2    | 2162.2    | 1708.3    | 1291.7    | 665.8   |
| 2008 | 395.0    | 2257.9    | 1785.1    | 1333.0    | 808.0   |
| 2009 | 405.2    | 2369.4    | 1874.6    | 1407.3    | 808.5   |
| 2010 | 520.6    | 2672.9    | 1897.0    | 1418.7    | 798.1   |
| 2011 | 642.8    | 3078.4    | 1897.5    | 1488.5    | 870.9   |
| 2012 | 686.0    | 3258.1    | 1963.2    | 1567.6    | 990.2   |
| 2013 | 752.9    | 3273.0    | 2002.6    | 1545.6    | 1137.2  |
| 2014 | 756.2    | 3485.9    | 2011.7    | 1583.3    | 1077.6  |
| 2015 | 742.5    | 3709.4    | 2050.9    | 1596.9    | 1173.7  |
| 2016 | 651.8    | 4204.0    | 2150.0    | 1512.1    | 1135.7  |

**TABLE 14**

**Crude rate (per 1,000 population) of emergency department visits for any mental health or addictions condition, by Ottawa neighbourhood socio-economic advantage, ages 10 years and older, 2014–2016**

| NEIGHBOURHOOD SES QUINTILE | CRUDE RATE |
|----------------------------|------------|
| 1 (most advantaged)        | 13.3       |
| 2                          | 14.9       |
| 3                          | 16.7       |
| 4                          | 25.3       |
| 5 (least advantaged)       | 30.9       |
| Ottawa average             | 20.4       |

**TABLE 15**

**Age standardized rates (per 100,000 population) of hospitalizations for any mental health or addictions condition, Ottawa and Ontario-less-Ottawa, 2007–2016**

| YEAR | OTTAWA (CI)         | ONTARIO-LESS-OTTAWA (CI) |
|------|---------------------|--------------------------|
| 2007 | 564.5 (548.6-580.7) | 653.8 (649.2-658.4)      |
| 2008 | 583.0 (567.0-599.4) | 643.4 (638.9-648.0)      |
| 2009 | 590.0 (574.1-606.3) | 642.2 (637.7-646.7)      |
| 2010 | 585.7 (570.0-601.8) | 655.4 (650.9-660.0)      |
| 2011 | 608.7 (592.8-625.0) | 634.1 (629.6-638.5)      |
| 2012 | 645.7 (629.4-662.3) | 707.9 (703.2-712.6)      |
| 2013 | 663.8 (647.4-680.6) | 720.0 (715.3-724.7)      |
| 2014 | 663.2 (646.8-679.8) | 728.5 (723.8-733.2)      |
| 2015 | 662.8 (646.5-679.3) | 743.2 (738.5-747.9)      |
| 2016 | 726.6 (709.7-743.9) | 786.3 (781.4-791.1)      |

**TABLE 16**

**Age-specific rates (per 100,000 population) of hospitalization for any mental health or addictions condition, Ottawa, 2007–2016**

| YEAR | 5–14 YRS | 15–24 YRS | 25–44 YRS | 45–64 YRS | 65+ YRS |
|------|----------|-----------|-----------|-----------|---------|
| 2007 | 118.0    | 688.3     | 741.8     | 635.3     | 543.1   |
| 2008 | 118.9    | 686.3     | 731.0     | 627.9     | 706.7   |
| 2009 | 114.3    | 725.8     | 740.1     | 646.5     | 671.2   |
| 2010 | 102.1    | 730.8     | 732.6     | 661.4     | 619.5   |
| 2011 | 104.0    | 816.0     | 724.9     | 669.4     | 697.6   |
| 2012 | 94.0     | 916.0     | 713.8     | 710.4     | 799.3   |
| 2013 | 117.5    | 1018.5    | 716.5     | 697.7     | 814.1   |
| 2014 | 120.1    | 1032.7    | 708.9     | 700.5     | 803.8   |
| 2015 | 108.3    | 1029.4    | 731.3     | 671.2     | 823.7   |
| 2016 | 124.7    | 1275.7    | 795.6     | 711.9     | 825.2   |

**TABLE 17**

**Age standardized rates (per 100,000 population) of emergency department visits for mood and/or anxiety disorders, Ottawa and Ontario-less-Ottawa, 2007–2016**

| YEAR | OTTAWA (CI)         | ONTARIO-LESS-OTTAWA (CI) |
|------|---------------------|--------------------------|
| 2007 | 510.0 (495.1-525.3) | 710.4 (705.6-715.2)      |
| 2008 | 553.3 (537.9-569.1) | 740.2 (735.4-745.1)      |
| 2009 | 592.7 (576.9-608.9) | 726.4 (721.6-731.2)      |
| 2010 | 615.8 (599.9-632.1) | 759.1 (754.2-764.0)      |
| 2011 | 668.1 (651.5-684.9) | 793.1 (788.1-798.1)      |
| 2012 | 704.8 (687.9-722.0) | 839.2 (834.1-844.3)      |
| 2013 | 721.5 (704.4-738.8) | 848.7 (843.6-853.8)      |
| 2014 | 755.0 (737.6-772.7) | 877.6 (872.5-882.8)      |
| 2015 | 762.2 (744.8-780.0) | 910.1 (904.8-915.3)      |
| 2016 | 795.2 (777.4-813.3) | 967.4 (962.0-972.8)      |

**TABLE 18**

**Age-specific rates (per 100,000 population) of emergency department visits for mood and/or anxiety disorders, Ottawa, 2007–2016**

| YEAR | 5–14 YRS | 15–24 YRS | 25–44 YRS | 45–64 YRS | 65+ YRS |
|------|----------|-----------|-----------|-----------|---------|
| 2007 | 139.2    | 856.7     | 688.8     | 531.9     | 292.8   |
| 2008 | 166.3    | 915.1     | 741.5     | 550.8     | 386.7   |
| 2009 | 198.6    | 1000.1    | 805.2     | 594.3     | 350.1   |
| 2010 | 239.3    | 1182.0    | 777.2     | 595.9     | 350.9   |
| 2011 | 356.9    | 1316.6    | 792.5     | 629.4     | 390.2   |
| 2012 | 372.0    | 1487.9    | 822.8     | 630.0     | 396.4   |
| 2013 | 417.3    | 1495.4    | 872.7     | 601.4     | 420.6   |
| 2014 | 453.5    | 1671.5    | 865.5     | 635.0     | 407.4   |
| 2015 | 448.1    | 1776.9    | 825.5     | 639.4     | 437.9   |
| 2016 | 395.6    | 2032.8    | 868.3     | 631.2     | 388.6   |

**TABLE 19**

**Percentage of residents (19 years and older) who reported diagnosis with a mood and/or anxiety disorder, Ottawa and Ontario-less-Ottawa, 2005–2014**

| YEAR    | OTTAWA (CI)      | ONTARIO-LESS-OTTAWA (CI) |
|---------|------------------|--------------------------|
| 2005    | 10.0 (8.4–11.9)  | 8.9 (8.5–9.4)            |
| 2007/08 | 13.1 (10.8–15.7) | 10.6 (10.1–11.1)         |
| 2009/10 | 11.1 (9.4–13.2)  | 10.1 (9.5–10.7)          |
| 2011/12 | 14.3 (12.0–17.0) | 11.2 (10.6–11.9)         |
| 2013/14 | 13.4 (11.2–16.0) | 12.7 (12.1–13.4)         |

**TABLE 20**

**Age-specific rate (per 100,000 population) of emergency department visits for eating disorders, Ottawa, 2007–2016**

| YEAR | 5–14 YRS | 15–24 YRS | 25–44 YRS | 45–64 YRS | 65+ YRS |
|------|----------|-----------|-----------|-----------|---------|
| 2007 | 6.1      | 24.5      | 8.6       | 2.2       | 0.0     |
| 2008 | 11.1     | 42.7      | 5.5       | 5.5       | 4.7     |
| 2009 | 6.0      | 32.4      | 7.0       | 0.8       | 0.9     |
| 2010 | 8.0      | 44.0      | 7.4       | 1.6       | 1.8     |
| 2011 | 14.0     | 48.6      | 5.8       | 2.4       | 2.6     |
| 2012 | 19.0     | 42.3      | 6.1       | 1.2       | 0.8     |
| 2013 | 18.9     | 63.2      | 10.9      | 3.1       | 0.8     |
| 2014 | 19.8     | 62.7      | 10.8      | 5.0       | 0.7     |
| 2015 | 15.8     | 52.8      | 8.1       | 4.6       | 0.0     |
| 2016 | 11.7     | 72.3      | 7.5       | 3.4       | 0.7     |

**TABLE 21**

**Age standardized rate (per 100,000 population) of intentional self-harm related ED visits, Ottawa and Ontario-less-Ottawa, 2007–2016**

| YEAR | OTTAWA (CI)         | ONTARIO-LESS-OTTAWA (CI) |
|------|---------------------|--------------------------|
| 2007 | 112.8 (105.9–120.0) | 109.3 (107.5–111.2)      |
| 2008 | 116.4 (109.4–123.6) | 107.1 (105.2–108.9)      |
| 2009 | 98.3 (91.9–104.9)   | 103.1 (101.3–104.9)      |
| 2010 | 102.7 (96.3–109.5)  | 100.4 (98.6–102.2)       |
| 2011 | 113.2 (106.5–120.2) | 95.1 (93.3–96.8)         |
| 2012 | 120.3 (113.3–127.5) | 103.1 (101.3–104.9)      |
| 2013 | 125.0 (117.9–132.4) | 108.4 (106.6–110.2)      |
| 2014 | 133.8 (126.5–141.4) | 114.9 (113.0–116.8)      |
| 2015 | 144.6 (137.0–152.5) | 116.5 (114.6–118.4)      |
| 2016 | 135.8 (128.5–143.5) | 126.4 (124.4–128.4)      |

**TABLE 22**

**Age specific rate (per 100,000 population) of intentional self-harm related ED visits by sex, Ottawa, 2007–2016**

| YEAR | FEMALE<br>5–14 YRS | FEMALE<br>15–24 YRS | FEMALE<br>25+ YRS | MALE<br>5–14 YRS | MALE<br>15–24 YRS | MALE<br>25+ YRS |
|------|--------------------|---------------------|-------------------|------------------|-------------------|-----------------|
| 2007 | 75.8               | 437.5               | 115.5             | 8.0              | 140.9             | 92.8            |
| 2008 | 90.0               | 451.4               | 116.3             | 13.9             | 167.9             | 88.1            |
| 2009 | 59.1               | 371.8               | 88.2              | 7.9              | 168.4             | 84.8            |
| 2010 | 69.3               | 467.7               | 95.4              | 11.8             | 137.2             | 71.6            |
| 2011 | 93.4               | 559.2               | 95.7              | 15.8             | 190.4             | 66.8            |
| 2012 | 77.2               | 556.6               | 99.8              | 21.7             | 166.7             | 87.0            |
| 2013 | 169.8              | 609.4               | 94.7              | 19.6             | 187.1             | 74.1            |
| 2014 | 180.9              | 672.5               | 98.1              | 33.3             | 206.9             | 69.8            |
| 2015 | 205.4              | 867.1               | 92.8              | 13.6             | 210.3             | 68.3            |
| 2016 | 146.2              | 831.8               | 87.7              | 13.5             | 235.9             | 60.2            |

**TABLE 23**

**Age-specific rate (per 100,000 population) of intentional self-harm related ED visits by sex, Ottawa, 2016**

| AGE<br>(YEARS) | FEMALE<br>RATE | MALE<br>RATE |
|----------------|----------------|--------------|
| 15–24          | 831.8          | 235.9        |
| 25–39          | 145.9          | 82.7         |
| 40–64          | 83.2           | 61.8         |
| 65+            | 18.5           | 20.0         |

**TABLE 24**  
Crude rate (per 100,000 population) of  
deaths by suicide, Ottawa, 2003–2016

| YEAR | RATE |
|------|------|
| 2004 | 7.6  |
| 2005 | 6.6  |
| 2006 | 8.6  |
| 2007 | 7.4  |
| 2008 | 8.6  |
| 2009 | 7.8  |
| 2010 | 7.8  |
| 2011 | 8.2  |
| 2012 | 7.1  |
| 2013 | 9.9  |
| 2014 | 8.1  |
| 2015 | 8.7  |
| 2016 | 8.4  |

**TABLE 25**  
Age-specific rate (per 100,000 population)  
of deaths by suicide by sex, Ottawa,  
2012–2016 average

| AGE (YEARS) | FEMALE RATE | MALE RATE |
|-------------|-------------|-----------|
| 15–24       | 2.8         | 9.7       |
| 25–39       | 5.6         | 13.8      |
| 40–49       | 7.4         | 17.9      |
| 50–64       | 7.4         | 18.2      |
| 65+         | 4.3         | 11.8      |

**TABLE 26**  
Percentage of Canadian adults (18 years and older) who reported a high level of coping,  
by selected socio-economic factors, Canada, 2012

| SOCIO-DEMOGRAPHIC FACTOR | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|--------------------------|-----------------------|---------------------|
| Female                   | 53.4                  | 51.9–55.0           |
| Male                     | 60.4                  | 58.9–62.0           |
| 18–24 years              | 48.5                  | 45.7–51.3           |
| 25–44 years              | 58.5                  | 56.6–60.5           |
| 45–64 years              | 59.0                  | 57.0–61.0           |
| 65+ years                | 54.8                  | 52.7–56.8           |
| Lowest income (Q1)       | 47.7                  | 44.9–50.4           |
| Lower middle income      | 50.6                  | 48.0–53.2           |
| Middle income            | 56.8                  | 54.4–59.1           |
| Upper middle income      | 61.1                  | 59.0–63.3           |
| Highest income (Q5)      | 67.7                  | 65.4–69.9           |

**TABLE 27**

**Percentage of Canadian adults (18 years and older) who reported a high level of perceived control over life situations, by selected socio-economic factors, Canada, 2008**

| SOCIO-DEMOGRAPHIC FACTOR | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|--------------------------|-----------------------|---------------------|
| 18–24 years              | 50.6                  | 47.4-53.8           |
| 25–44 years              | 47.7                  | 46.2-49.2           |
| 45–64 years              | 39.5                  | 38.2-40.8           |
| 65+ years                | 26.1                  | 24.6-27.6           |
| Canadian born            | 45.3                  | 44.5-46.2           |
| Immigrant                | 29.5                  | 27.5-31.5           |
| Population centre        | 42.2                  | 41.3-43.2           |
| Rural                    | 38.7                  | 37.0-40.5           |

**TABLE 28**

**Percentage of residents (12 years and older) who reported very good or excellent health, by selected socio-economic factors, Ottawa, 2013/14**

| SOCIO-DEMOGRAPHIC FACTOR                                     | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|--------------------------------------------------------------|-----------------------|---------------------|
| Ottawa                                                       | 62.6                  | 59.8–65.3           |
| Ontario-less-Ottawa                                          | 59.3                  | 58.5–60.2           |
| 12–19 years <sup>†</sup>                                     | 70.0                  | 62.6–76.5           |
| 20–44 years                                                  | 63.3                  | 57.9–68.3           |
| 45–64 years                                                  | 62.1                  | 56.7–67.2           |
| 65+ years                                                    | 56.5                  | 50.7–62.2           |
| Lowest income                                                | 53.4                  | 39.9–66.5           |
| Lower middle income                                          | 41.9                  | 31.4–53.2           |
| Upper middle income                                          | 53.4                  | 46.1–60.6           |
| Highest income <sup>†</sup>                                  | 70.0                  | 67.0–72.8           |
| Unattached living alone                                      | 58.5                  | 51.3–65.3           |
| Single parent and child(ren)                                 | 57.7                  | 41.5–72.5           |
| Parents and child(ren) <sup>†</sup>                          | 67.2                  | 61.9–72.2           |
| Partner living with partner or unattached living with others | 63.2                  | 57.8–68.3           |
| Own house <sup>†</sup>                                       | 67.1                  | 64.0–70.0           |
| Rent house                                                   | 51.7                  | 45.4–57.9           |
| At work last week <sup>†</sup>                               | 68.7                  | 64.3–72.8           |
| Absent from work last week                                   | 67.6                  | 48.7–82.1           |
| No job last week                                             | 52.6                  | 45.2–60.0           |
| Unable/permanently unemployed                                | 14.5*                 | 8.1–24.8            |

\*Interpret with caution due to high sampling variability;

<sup>†</sup>Comparison category in the regression model

**TABLE 29**

**Percentage of residents (12 years and older) who reported activity limitations sometimes or often, by selected socio-economic factors, Ottawa, 2013/14**

| SOCIO-DEMOGRAPHIC FACTOR       | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|--------------------------------|-----------------------|---------------------|
| Ottawa                         | 30.3                  | 9.2–13.9            |
| Ontario-less-Ottawa            | 31.7                  | 12.6–13.7           |
| 12–19 years <sup>†</sup>       | 19.0*                 | 12.2–28.5           |
| 20–44 years                    | 24.5                  | 19.6–30.3           |
| 45–64 years                    | 31.9                  | 26.5–37.8           |
| 65+ years                      | 50.5                  | 44.8–56.1           |
| At work last week <sup>†</sup> | 24.1                  | 20.2–28.4           |
| Absent from work last week     | 28.0*                 | 15.5–45.1           |
| No job last week               | 36.4                  | 30.1–43.1           |
| Unable/permanently unemployed  | 83.9                  | 71.8–91.5           |

\*Interpret with caution due to high sampling variability;

<sup>†</sup>Comparison category in the regression model

**TABLE 30**

**Percentage of residents (12 years and older) who reported they were moderately active or active in their leisure time, Ottawa and Ontario-less-Ottawa, 2005–2014**

| YEAR    | OTTAWA (CI)      | ONTARIO-LESS-OTTAWA (CI) |
|---------|------------------|--------------------------|
| 2005    | 57.0 (54.0–60.0) | 51.3 (49.9–52.6)         |
| 2007/08 | 57.4 (54.0–60.8) | 48.0 (47.2–48.9)         |
| 2009/10 | 57.0 (54.0–60.0) | 62.4 (58.7–66.1)         |
| 2011/12 | 62.2 (58.5–65.7) | 52.3 (51.3–53.3)         |
| 2013/14 | 59.3 (56.3–62.2) | 51.3 (49.9–52.6)         |

**TABLE 31**

**Percentage of residents (12 years and older) who reported they were moderately active or active in their leisure time, by selected socio-economic factors, Ottawa, 2013/14**

| SOCIO-DEMOGRAPHIC FACTOR       | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|--------------------------------|-----------------------|---------------------|
| Ottawa                         | 59.3                  | 56.3–62.2           |
| Ontario-less-Ottawa            | 52.0                  | 51.0–53.0           |
| 12–19 years <sup>†</sup>       | 71.5                  | 63.7–78.2           |
| 20–44 years                    | 60.3                  | 55.1–65.2           |
| 45–64 years                    | 58.6                  | 52.2–64.7           |
| 65+ years                      | 49.6                  | 43.1–56.1           |
| Not an immigrant <sup>†</sup>  | 63.4                  | 59.9–66.7           |
| Immigrant ≤10 years            | 49.3*                 | 33.4–65.4           |
| Immigrant >10 years            | 50.8                  | 41.6–59.8           |
| At work last week <sup>†</sup> | 61.5                  | 57.1–65.8           |
| Absent from work last week     | 57.4*                 | 37.8–74.9           |
| No job last week               | 58.3                  | 50.7–65.4           |
| Unable/permanently unemployed  | 24.2*                 | 13.1–40.2           |

\*Interpret with caution due to high sampling variability;

<sup>†</sup>Comparison category in the regression model

**TABLE 32**

**Percentage of Canadian adults (18 years and older) who experienced physical abuse, sexual abuse or exposure to intimate partner violence before the age of 16 years, by selected socio-economic factors, 2012**

| SOCIO-DEMOGRAPHIC FACTOR | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|--------------------------|-----------------------|---------------------|
| Female                   | 30.5                  | 29.0–31.9           |
| Male                     | 34.1                  | 31.1–33.4           |
| Canadian born            | 33.8                  | 32.5–35.0           |
| Immigrant                | 20.8                  | 25.8–30.3           |
| Lowest income (Q1)       | 32.7                  | 30.3–35.0           |
| Lower middle income      | 29.7                  | 27.1–32.2           |
| Middle income            | 29.7                  | 27.6–31.6           |
| Upper middle income      | 34.0                  | 31.4–36.6           |
| Highest income (Q5)      | 35.0                  | 32.6–37.4           |

**TABLE 33**

**Percentage of residents (18 to 75 years) who reported most days at work were quite a bit or extremely stressful, Ottawa and Ontario-less Ottawa, 2005–2014**

| YEAR    | OTTAWA (CI)      | ONTARIO-LESS-OTTAWA (CI) |
|---------|------------------|--------------------------|
| 2005    | 30.7 (27.3–34.2) | 28.4 (27.5–29.4)         |
| 2007/08 | 28.8 (24.7–33.4) | 28.0 (27.0–29.0)         |
| 2009/10 | 26.0 (22.4–29.9) | 29.4 (28.4–30.5)         |
| 2011/12 | 24.9 (21.2–29.0) | 26.9 (25.8–28.0)         |
| 2013/14 | 25.8 (22.3–29.5) | 27.6 (26.5–28.7)         |

**TABLE 34**

**Percentage of Ottawa residents (18 to 75 years) who reported most days at work were quite a bit or extremely stressful, by highest education level, 2013/14**

| SOCIO-DEMOGRAPHIC FACTOR         | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|----------------------------------|-----------------------|---------------------|
| Ottawa                           | 25.8                  | 22.3–29.5           |
| Ontario-less-Ottawa              | 27.6                  | 26.5–28.7           |
| Less than high school graduation | NR                    | –                   |
| High school graduation           | 21.0*                 | 14.5–29.4           |
| Post-secondary education†        | 26.7                  | 23.0–30.8           |

\*Interpret with caution due to high sampling variability;

NR: Not reportable due to high sampling variability;

†Comparison category in the regression model

**TABLE 35**

**Percentage of Ottawa households reporting food insecurity by selected socio-economic factors, 2013/14**

| SOCIO-DEMOGRAPHIC FACTOR | PERCENT OF POPULATION | CONFIDENCE INTERVAL |
|--------------------------|-----------------------|---------------------|
| Ottawa                   | 6.5                   | 5.1–8.2             |
| Ontario-less-Ottawa      | 8.6                   | 8.0–9.1             |
| Lowest income            | 24.0*                 | 16.1–34.0           |
| Lower middle income      | 18.2*                 | 11.8–27.1           |
| Upper middle income      | 8.4*                  | 5.2–13.3            |
| Highest income†          | NR                    | –                   |
| Own house†               | 2.7*                  | 1.6–4.7             |
| Rent house               | 14.4                  | 10.8–18.9           |

\*Interpret with caution due to high sampling variability;

NR: not reportable due to high sampling variability;

†Comparison category in the regression model

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