

Halton Region Mental Health Report 2018



A profile of mental health and wellbeing in Halton Region

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Highlights

The Halton Region Mental Health Report provides a snapshot of the mental health of Halton residents across the lifespan.

Data from the Canadian Community Health Survey show that 4 out of 5 Halton residents (ages 12+) reported having very good or excellent mental health, which was higher than Ontario. Having a higher income, a strong sense of community belonging, and being a post-secondary graduate were associated with better self-reported mental health.

Some Halton residents face mental health challenges: 23% reported that most days were quite a bit or extremely stressful, and 9% reported ever having been diagnosed with a mood and/or anxiety disorder.

This report also examined trends in emergency department (ED) visits and hospitalizations over time for mental illness. For the purposes of this report, mental illness includes a wide range of mental illnesses including organic disorders like

dementia and Alzheimer's disease, mental and behavioural disorders due to substance use, mood disorders, and various other disorders of psychological development.

From 2006 to 2015, there was an increase in ED visits and hospitalizations for mental illness among Halton residents, although rates were consistently lower in Halton than Ontario. Rates of ED visits for mental illness were highest among those aged 15 to 24. Rates of hospitalizations were highest among 15 to 24 year olds, as well as adults aged 85 and over. Rates of ED visits and hospitalizations for mental illness were lower in high income neighbourhoods compared to low income neighbourhoods.

Children and youth

Data from the Tell Them From Me/OurSCHOOL Survey show that differences in mental health exist within Halton's student population. Grade 9 students had lower depression, and higher self esteem, sense of belonging and positive relationships compared to grade 12

students. Elementary and secondary students who were born in Canada were most likely to have positive relationships with their peers, while newcomers (less than five years in Canada) were least likely. Newcomer secondary students were less likely than both Canadian-born students and those who immigrated five or more years ago to have a positive sense of belonging. Living in a two-parent household was also associated with positive mental health and social connectedness.

The rate of ED visits for mental illness has increased for 10-17 year olds in Halton and Ontario over the past 10 years (particularly among females), with the greatest increase occurring between 2010 and 2013. The rate of ED visits for mental illness was about 2.5 times higher among Halton females compared to males aged 10-17 from 2013 to 2015. Hospitalizations also increased in this age group during approximately the same time period.

Pregnancy and parenthood

From 2013 to 2015, an average of 778 women per year in Halton (13.9% of women who gave birth) reported experiencing one or more mental health concerns during pregnancy. Pregnant women in Halton were less likely to have experienced one or more mental health concerns during pregnancy compared to Ontario.

Halton parents who felt close to other parents, were able to take time for their own wellbeing, and felt supported in parenting were less likely to report feeling stressed.

Adults

Good physical health, having a job, and higher household income was associated with better self-reported mental health among Halton adults. However, one in three Halton adults reported being stressed most days at work.

Like other age groups, there has been a rise in ED visits and hospitalizations for mental illness among Halton adults (18-64), but the rates have remained well below the provincial average.

Older adults

In Halton, life satisfaction decreased as age increased. However, older adults (65+) reported being less stressed and having a stronger sense of community belonging than adults aged 18-64.

There was no significant trend in ED visits for mental illness among adults aged 65+ from 2006 to 2015, however rates of hospitalizations for mental illness in this age group increased during this time period.

Data notes

Data sources

Five data sources are presented in this report. The table below provides a brief summary of each data source. For more information on data sources including limitations, see [Appendix A](#).

DATA SOURCE	SECTION	YEARS	DESCRIPTION
Tell Them From Me/OurSCHOOL Survey	Youth	2015-16 school year	The Tell Them From Me/OurSCHOOL is a voluntary, online survey asked of elementary and high school students in the Halton District School Board and Halton Catholic District School Board. The survey explores topics such as student engagement, bullying, emotional and physical wellbeing. For the 2015-16 school year, approximately 18,000 Grade 4-6 students and 17,500 grade 9-12 students completed the survey. Results should not be compared between elementary and secondary school students, as they completed different versions of the survey.
Better Outcomes Registry and Network (BORN)	Parents and pregnancy	2013-15	BORN includes data on pregnancy and birth (including home births) in Ontario from hospitals, labs, midwifery practice groups, and clinical programs.
Halton Kindergarten Parent Survey (KPS)	Parents and pregnancy	2015	The KPS is a voluntary online survey by the Our Kids Network, which is distributed to parents of kindergarten children in the Halton District School Board and Halton Catholic District School Board. The KPS explores topics related to the health and wellbeing of kindergarten children and their parents. In 2015, 2,257 parents completed the KPS.
Canadian Community Health Survey (CCHS)	Adults, Older adults	2009-14	The CCHS is a voluntary survey conducted in-person or by phone by Statistics Canada. CCHS collects data related to health status, healthcare, and health determinants across Canada. About 600 Halton residents complete the CCHS each year.
National Ambulatory Care Reporting System (NACRS)	Youth, Adults, Older adults	2006-15	NACRS contains data for all hospital-based and community-based ambulatory care in Ontario hospitals. This report includes NACRS data on emergency department visits and hospital admissions where the patient's main problem or diagnosis as determined by the emergency department was a mental illness (ICD-10-CA: F00-F99, G30, O993).

Years of data presented

The years of data presented throughout this report vary, as the years of data available differ depending on the data source. Where counts were small, multiple years of data were combined to account for unstable rates in the population which can occur when examining a single year of data.

Statistical significance

Differences between groups were tested for statistical significance by calculating 95% confidence intervals for rates. If the confidence intervals between groups did not overlap, differences were considered statistically significant. Trends over time were tested for significance using linear regression and adjusting for auto-correlation. If a trend is referred to as “increasing” or “decreasing” throughout the report, the trend described is statistically significant. Differences between groups described in the report are also statistically significant, unless otherwise stated.

Coefficient of variation

The coefficient of variation refers to the precision of an estimate. With survey data, where the coefficient of variation was between 16.6-33.3, estimates are marked

with an asterisk (*) and should be interpreted with caution due to high variability.

Definitions

A complete list of definitions of indicators and key terms presented in this report can be found in [Appendix B](#).

Survey data

The indicators “anxiety” and “depression” from the Tell Them from Me/OurSCHOOL survey are based on a series of self-reported survey questions and should not be interpreted as rates of clinically diagnosed anxiety and depression.

ED and hospital admission data

For this report the term “mental illness” refers to codes F00-F99, G30, O993 from the Canadian version of the International Statistical Classification of Diseases (ICD-10-CA).¹ This includes a wide range of mental illnesses including organic disorders like dementia and Alzheimer’s disease, mental and behavioural disorders due to substance use, mood disorders, and various other disorders of psychological development. The report presents ED visits and hospitalizations where a mental illness

was the Most Responsible Diagnosis – the one diagnosis or condition most responsible for a patient’s stay in a facility. Note that ED visits and hospital admissions for self-harm are not included in this report, but can be found in the [Halton Self-Harm and Suicide Report](#). See [Appendix C](#) for a complete list of ICD-10-CA codes and groupings included in this report.

It is important to keep in mind throughout this report that the ED and hospital admission data are not intended to reflect the true burden of mental illness in the population, but rather to identify trends in mental health service use for mental illness in the population. This report does not capture those who sought help for mental illness from other sources such as family doctors, walk-in clinics, counselors, or psychologists.

Data tables

Please note that data tables to accompany the graphs, figures and key findings presented in this report are available upon request.

Introduction

The Halton Region Mental Health Report provides a snapshot of the mental health of children and youth, parents, adults, and older adults living in Halton Region. The United Nations defines mental health as:

“a state of wellbeing 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 her or his community.”²

While the terms “mental health” and “mental illness” are often used interchangeably, the two terms have different meanings.³ Everyone has mental health, just like everyone has physical health.^{3,4} Mental health is the ability to feel, think and act in ways that help people to enjoy life and deal with any challenges they may face.⁴ Mental illness, on the other hand, refers to mental health problems that are diagnosed and treated by mental health professionals.⁵ A person can have a mental illness and still experience mental wellbeing.⁶ It is also possible for a person who does not have a

diagnosed mental illness to experience poor mental health.⁶

Mental health is important at every stage of life, from birth and early childhood to adolescence and throughout adulthood. Mental health is also dynamic. It changes over time depending on various factors such as life experiences, levels of stress, health and lifestyle behaviours, and genetics.³

Evidence shows that creating supportive environments, increasing resiliency, improving mental health literacy, and reducing stigma around mental illness can help improve mental health at all ages and stages of life.⁷

Promoting positive mental health in the community is an important goal of Halton Region’s 2015-2018 Strategic Action Plan.⁸ The Halton Region Health Department works towards this goal by providing information, programs and resources on a variety of mental health topics to teens, parents, adults, older adults, caregivers,

community service providers, educators, and health care providers in the community.

The purpose of the Halton Region Mental Health Report is to provide data on trends, emerging issues, and the current status of mental health in Halton to inform mental health programs, services and policies in our community. The report also seeks to identify populations within Halton’s community who may be disproportionately affected by poor mental health.

This report is divided into four major sections focusing on mental health during various ages and stages in life, including mental health among children and youth, parents and pregnancy, adults, and older adults. While it is recognized that the foundation for good mental health begins early in life,⁹ the early years are not included as an area of focus in this report due to data limitations.

This report also includes stories that illustrate the impact of mental health on the lives of Halton residents.

Social determinants of mental health

Like physical health, mental health is influenced by the social and economic factors in the environments where people live, learn, work and play. These factors, such as income, education, social support networks and housing are often referred to as the social determinants of health.¹⁰ Sometimes these factors limit access to the opportunities and resources needed to be healthy, and this can lead to avoidable differences in health.

Three important social determinants of mental health include:

- social inclusion,
- freedom from discrimination and violence, and
- access to economic resources.¹¹

Social inclusion refers to the degree to which individuals feel connected to their communities, and includes concepts such as supportive relationships, participation in community and group activities, and civic engagement.¹¹ Social connectedness and inclusion is an important protective factor for

positive mental health.¹¹ Belonging to a strong social support network can act as a buffer against stress, promote positive health, and help people to feel cared for and valued.¹² Social connectedness leads to stronger and more resilient communities.¹²

Discrimination and violence can lead to poor mental health. Discrimination refers to actions taken to exclude or treat others differently due to factors such as their race, ethnicity, gender, sexual orientation and/or disability.¹¹ Communities that value diversity, promote physical security, and empower individuals with the opportunity to take control over their lives provide greater opportunities for positive mental health.¹¹

Access to economic resources, such as work, education, money and adequate housing, is another important social determinant of mental health. Participation in the economy not only provides access to adequate income, but it also can improve social connectedness and increase opportunities for control over one's life.¹¹

Interwoven throughout this report are stories of individuals in our community and their experiences with the social determinants of mental health.*

Some of the differences in mental health between groups described in this report are related to individual factors such as biology. However, some differences are related to the social determinants of mental health. By taking action to address the social determinants of mental health, the conditions of everyday life can be improved and avoidable barriers to good health can be reduced or eliminated.¹³ This means that everyone has a fair and just opportunity to be as healthy as possible both physically and mentally.

*note that the stories presented in this report are works of fiction to help illustrate the important connection between mental health and the social determinants of health.



Overview of mental health in Halton

This section of the report provides a high level overview of indicators of the mental health of Halton residents aged 12 and over using data from the Canadian Community Health Survey. Also included is an overview of trends in emergency department visits and hospitalizations for mental illness for all ages.

Background

Mental illness is one of the most common causes of disability in Canada.¹⁴ It is estimated that in a given year, one in five Canadians will experience a mental illness or addiction.¹⁵ In Ontario, the burden of mental illness is one and a half times higher than all cancers put together, and more than seven times that of all infectious diseases.¹⁶

Mental illness places a substantial burden on the healthcare system, on employers, and individuals affected by mental illness.¹⁴ It is estimated that the economic burden of mental illness in Canada is \$51 billion dollars per year, which includes costs associated with healthcare, lost productivity, and reduced health-related quality of life.¹⁴



In order to promote positive mental health and work towards improving the lives of those living with mental illness in Halton, it is important to gain a better understanding of the picture of mental health in Halton across the lifespan. Indicators of mental health (such as self-reported mental health and life satisfaction), mental illness (such as self-reported diagnosis with a mood or anxiety disorder), and health service utilization (such as emergency department visits and hospitalizations) can be used to help identify issues, set priorities, and monitor progress in improving the mental health of the population.¹⁷



Mental health promotion in Halton

Mental health promotion refers to initiatives that aim to create living conditions and environments that support mental health and allow people to adopt and maintain healthy lifestyles.¹⁸ By working to enhance factors that promote mental wellness (such as sense of belonging and good physical health) and reduce risk factors for poor mental health (such as discrimination, isolation, and stress) it is possible to increase the proportion of the population experiencing good mental health.¹⁹

A recent review of the literature conducted by the Halton Region Health Department found four areas of opportunity to improve the mental health of Halton residents:

- promoting opportunities to foster social connectedness;
- creating supportive, healthy, safe and inclusive environments where Halton residents live, learn, work and play;
- increasing resiliency of Halton residents (i.e. ability to bounce back after major challenges) by promoting individual protective factors for mental wellness; and
- Improving awareness and understanding of mental illness and reducing stigma.⁷

General mental health and wellbeing

Positive mental health is about both feeling good and functioning well. In Halton from 2009-2014:



4 out of 5 Halton residents reported that their mental health was very good or excellent



94% of Halton residents reported that they were satisfied with life

7 out of 10 Halton residents reported a very or somewhat strong sense of community belonging



81% of Halton residents reported that they were happy every day or almost every day this past month (2011-12 only)



Compared to Ontario, Halton residents were more likely to rate their mental health as very good or excellent, and to indicate that they were satisfied with life.

Some Halton residents also experience mental health challenges. From 2009-2014,



23% of Halton residents reported that most days of their life were quite a bit or extremely stressful



9% of Halton residents reported ever having been diagnosed with a mood and/or anxiety disorder



12% of Halton residents reported consulting a health professional about their mental health in the last year



The social determinants of mental health impact people differently, and this can lead to differences in mental health in the population.

In Halton from 2009-2014,

- Life satisfaction decreased with age, while the middle age group (18-64) reported higher stress and a lower sense of community belonging than youth (12-17) and older adults (65+)
- Females were more likely than males to report consulting a mental health professional, and having been diagnosed with a mood and/or anxiety disorder
- As income increased, life satisfaction and self-reported mental health increased, while reported diagnosis with a mood and/or anxiety disorder decreased
- Self-reported mental health was higher among post-secondary graduates compared to non-post-secondary graduates
- Halton residents with a strong sense of community belonging also had higher self-reported mental health and life satisfaction, and lower reported life stress and diagnosis with a mood or anxiety disorder
- There were no significant differences by immigrant status.

Emergency department visits for mental illness

Most common mental illness ED visits

From 2013-15, there were an average of 2,800 ED visits per year among males and 2,929 ED visits per year among females in Halton for mental illness. The most common mental illnesses were:



1. Substance disorders (915 ED visits per year)
2. Anxiety (515 ED visits per year)
3. Depression (426 ED visits per year)



1. Anxiety (730 ED visits per year)
2. Depression (621 ED visits per year)
3. Substance disorders (575 ED visits per year)

Differences by neighbourhood income

In Halton from 2013-15, the rate of ED visits for mental illness decreased as neighbourhood income group increased. See [Appendix B](#) for income group definition.



Figure 1: Age-standardized rate of ED visits for mental illness, Halton Region, by neighbourhood income group, 2013-2015 combined.

Trends over time

Over the past ten years, there has been a significant increase in the rate of ED visits for mental illness in Halton and Ontario. Rates of ED visits were consistently lower in Halton compared to Ontario.

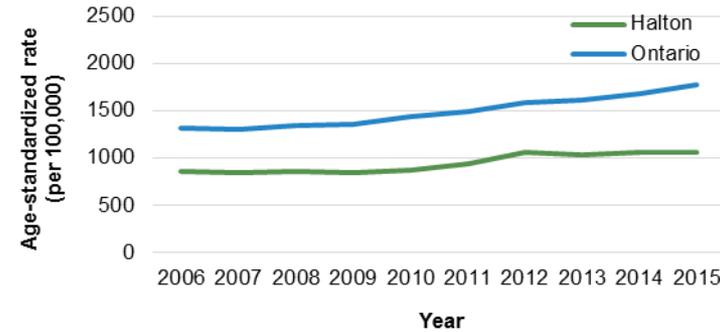


Figure 2: Age-standardized rate of ED visits for mental illness, Halton Region and Ontario, 2006-2015.

Differences by age and sex

From 2013-15, the rate of ED visits for mental illness was highest among 15-19 year-olds for females. Rates generally decreased with age after this peak until older adulthood, when the rates then began to increase with age. Among Halton males, rates were highest in the 20-24 year old age group, and then followed the same general pattern with age as females.

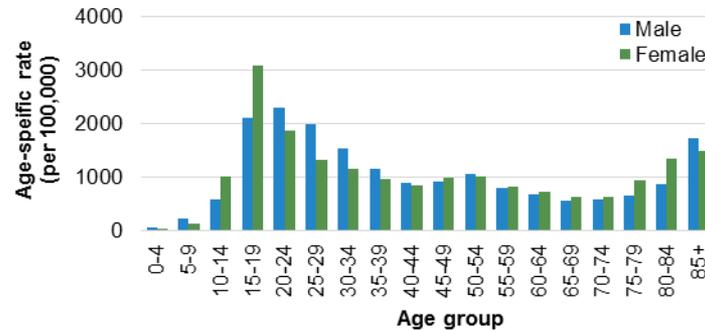


Figure 3: Age-specific rate of ED visits for mental illness, by sex, Halton Region, 2013-2015 combined.

Data source: National Ambulatory Care Reporting System [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted June 2017
Population Estimates [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted August 2016

Hospitalizations for mental illness

Most common mental illness hospitalizations

From 2013-15 there were an average of 785 hospitalizations among males and 816 hospitalizations among females for mental illness in Halton per year. The most common mental health illnesses resulting in hospitalization were:

- 1. Schizophrenic and psychotic disorders (212 hospitalizations per year)
- 2. Depression (172 hospitalizations per year)
- 3. Substance-related disorders (212 hospitalizations per year)

- 1. Depression (265 hospitalizations per year)
- 2. Schizophrenic and psychotic disorders (140 hospitalizations per year)
- 3. Organic disorders[†] (91 hospitalizations per year)

[†]See [Appendix C](#) for definition of organic disorders and other mental illness categories

Differences by neighbourhood income

In Halton from 2013-15, the rate of hospitalizations for mental illness decreased as neighbourhood income group increased.



Figure 4: Age-standardized rate of hospitalizations for mental illness, Halton Region, by neighbourhood income group, 2013-2015 combined.

Trends over time

Over the past ten years, there has been a significant increase in the rate of hospitalizations for mental illness in Halton and Ontario. Rates of hospitalizations were consistently lower in Halton compared to Ontario.

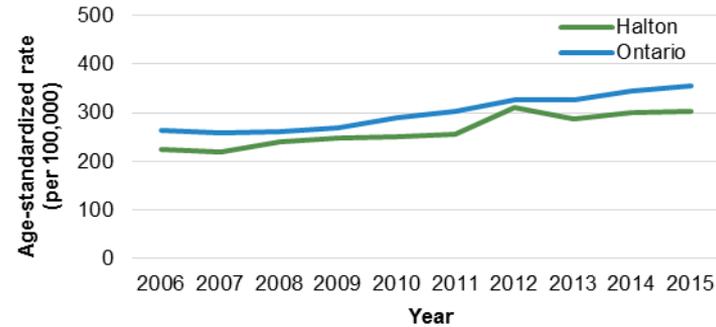


Figure 5: Age-standardized rate of hospitalizations for mental illness, Halton Region and Ontario, 2006-2015.

Differences by age and sex

From 2013-15, for Halton females the rate of hospitalizations for mental illness was highest among the 15-19 year-old age group. Rates then decreased with age until older adulthood, when rates began to increase. Among males, rates increased with age until ages 20-24, and then generally decreased with age until older adulthood, where rates peaked in the 85 and older age group.

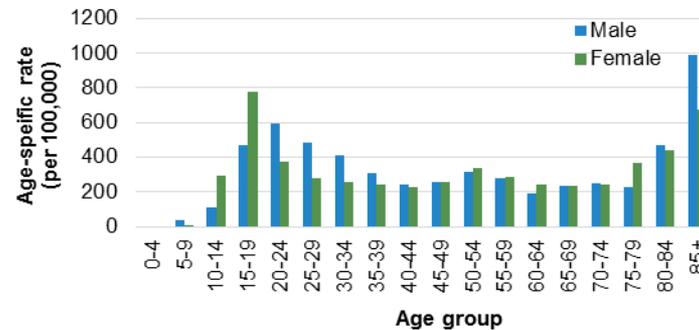


Figure 6: Age-standardized rate of hospitalizations for mental illness, by sex, Halton Region and Ontario, 2006-2015.

Data source: National Ambulatory Care Reporting System [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted June 2017
Population Estimates [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted August 2016



Child and youth mental health

This section of the report provides an overview of indicators of the mental health and wellbeing of Halton students in grades 4-6 and 9-12 based on data from the Tell Them From Me/OurSCHOOL survey. Also included is an overview of trends in emergency department visits and hospitalizations for mental illness among Halton youth aged 10-17.

This section starts with Zara's story. Her story illustrates how social and economic factors can negatively impact mental health, and how access to community resources and other social supports can improve mental health.

Zara is a grade 12 student who attends high school in Oakville. She came to Canada a year ago with her mother and younger brother, and together they live in a small apartment a few kilometers from school. Zara recently began a part-time job working three nights per week to help her mother with expenses.

Although Zara feels comfortable in her new school, she hasn't made many friends and often spends time alone at lunch and between classes. She has been unable to join any clubs or teams because of the hours of her job, and the fact that she cares for her little brother after school. Child care is too expensive for her family to afford. Although Zara feels grateful for her new life in Canada, she often feels that she doesn't really belong in her neighbourhood or at her school.

At Zara's school, staff understand that feeling connected to school is an important factor in school success and positive mental health. Together with a Public Health Nurse from the Halton Region Health Department, the school created a

committee of students, staff, and parents to explore strategies to help all students feel a sense of belonging and connection. In order to ensure all students had the opportunity to participate the committee organized meetings over the lunch hour, which gave Zara a chance to join.

At the meetings, Zara was able to make new friends, and shared some of her experiences trying to adjust to her new life in Canada. The school also invited a local settlement worker to join the committee, which was a great connection for Zara and her family as well as other newcomer families in the school.

The school social worker was also able to share some important community resources with Zara's mother, including childcare and housing subsidy supports. These resources have helped relieve some of the financial stress Zara and her family have experienced, and given them more opportunities to get involved in school and community life, and for the first time since they came to Canada, Zara feels a sense of belonging and connection.

The facts

- ▶ Most Halton high school students report having a positive sense of belonging (68%) and having positive relationships with their peers (77%).
- ▶ However, high school students who were newcomers were less likely to report having a positive sense of belonging compared to students born in Canada and students who immigrated five or more years ago.
- ▶ Students from single-parent households or other family arrangements were less likely to report having a positive sense of belonging and having positive relationships compared to students from two-parent households.



Background

Adolescence is an important time of change. Youth face many challenges during the transition to adulthood, including pressures to succeed at home, at school and in social groups.²⁰ The onset of many mental illnesses also occur during this period.²¹

In recent years, there has been an increase in rates of emergency department visits (ED) and inpatient hospitalizations among children and youth across Canada for mental illness.²² Between 2006-07 and 2013-14, the rate of ED visits for mental illness among Canadian children and youth increased by 45%, while the rate of hospitalizations increased by 37%.²² The greatest increase in rates during this time period occurred among youth aged 10 to 17.²² Several possible explanations for this trend include increases in the prevalence of

mental illness among Canadian children and youth, a reduction in stigma resulting in more youth seeking help, and/or greater reliance on hospital care in the face of limited access to community services.²²

In addition to increased rates of ED visits and hospitalizations for mental illness, there has been a parallel increase in the rate of hospitalizations for intentional self-harm among Canadian youth, particularly among females.²³ From 2009-10 to 2013-14, the rate of hospitalizations for self-harm increased by 110% for Canadian females aged 10-17.²³ As with mental illness, the reasons behind the increase in hospitalizations for self-harm are complex and not well understood. For more information on self-harm, see the [Halton Self-Harm](#) and [Suicide Report](#).

Schools and mental health

Schools are important avenues for promoting positive mental health among children and youth. Schools are an optimal setting to:

- identify students in need;
- build pathways to care;
- develop student social-emotional skills and resilience;
- prevent mental health problems in high risk groups;
- promote positive mental health and wellbeing for all students; and
- reduce stigma.²⁴

The Halton Region Health Department works together with the local school boards and community partners to help build healthy school communities and promote positive mental health among Halton's children and youth.



General mental health and wellbeing in children and youth

The Tell Them From Me/OurSCHOOL survey asks elementary and secondary students a series of questions related to friendships, sense of belonging, and experiences with self-esteem, anxiety and depression. See [Appendix B](#) for a description of each measure.

Elementary school students

Overall findings for students in grades 4-6



had a positive sense of belonging



had positive relationships with their peers at school



reported being bullied* at all in the past four weeks



had moderate to high levels of anxiety[†]

Secondary school students

Overall findings for students in grades 9-12



had a positive sense of belonging



had positive relationships with their peers at school



had positive self-esteem



reported being bullied* at least once per week in the past four weeks



had moderate to high levels of anxiety[†]



had moderate to high levels of depression[†]

Notes

*The bullying measure includes students who report being the victim of any one or more of the following types of bullying: physical, social, verbal, or cyber bullying.

† For anxiety and depression, the criteria used are NOT equivalent to those used in clinical diagnoses. The Tell Them From Me/OurSCHOOL survey assigns students to the categories of moderate and severe anxiety or depression based on their self-reported responses to a series of questions related to sadness and worry. High rates of anxiety and depression as rated by these items should not be confused with high rates of clinical anxiety and depression in the students.

Differences in mental health and wellness among Halton students

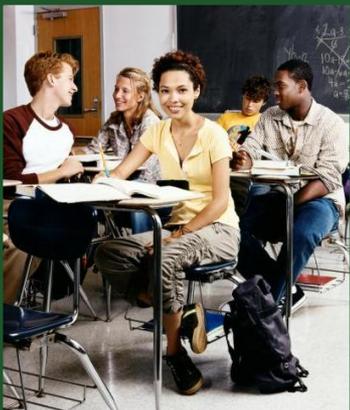
Analysis of the Tell Them From Me/Our School data also showed that differences in indicators of mental health and wellness exist in Halton's student population.



Elementary school students

Among students in grades 4-6,

- Bullying decreased as grade increased.
- Males had a higher sense of belonging and less anxiety than females, while females reported higher positive relationships and less bullying than males.
- Having positive relationships was highest among Canadian-born students followed by students who immigrated five or more years ago. Newcomers who immigrated less than five years ago were the least likely to report having positive relationships.
- Students from two-parent households had less anxiety and bullying, and a greater sense of belonging and positive relationships compared to those from single parent or other arrangement households.



Secondary school students

Among students in grades 9-12,

- Grade 9 students had higher self-esteem, sense of belonging and positive relationships, and lower depression compared to grade 12 students.
- Males had lower anxiety and depression compared to females, and higher self-esteem and sense of belonging. Females, however, reported higher positive relationships.
- Having positive relationships was highest among Canadian-born students followed by students who immigrated five or more years ago. Newcomers who immigrated less than five years ago were the least likely to report having positive relationships. Sense of belonging was similar between students born in Canada and those who immigrated five or more years ago, but lower among newcomers.
- Anxiety, depression and bullying were lower among students from two-parent households, while sense of belonging, self-esteem and positive relationships were higher.

Emergency department visits for mental illness in children and youth

Differences by sex

From 2013-15, females aged 10-17 in Halton had nearly double the rate of ED visits for mental illness compared to males.



Most common mental health illness ED visits

From 2013-15 there were an average of 303 ED visits per year among males and 537 ED visits per year among females aged 10-17 in Halton for mental illness. The most common mental illnesses resulting in ED visits were:

- 
1. Depression (66 ED visits per year)
 2. Substance disorders (60 ED visits per year)
 3. Anxiety (56 ED visits per year)

- 
1. Depression (265 ED visits per year)
 2. Anxiety (112 ED visits per year)
 3. Substance disorders (69 ED visits per year)

Trends over time

The rate of ED visits for mental health illness among Halton females aged 10-17 increased significantly over the last 10 years, from 1,083 per 100,000 females aged 10-17 in 2006 to 1,801 per 100,000 in 2015, with the greatest increase occurring between 2010 and 2013. Ontario females experienced a similar increase during this time period. The rate of ED visits for mental illness has generally been lower among Halton females aged 10-17 compared to Ontario.

Males aged 10-17 in Halton and Ontario also experienced a significant increase in the rate of ED visits for mental illness over the past 10 years, although this increase was not as large as it was for females. The rate of ED visits for mental illness in Halton and Ontario for males aged 10-17 were fairly similar in past years, but in more recent years (2013-15) Halton's rate has been significantly lower than Ontario for males.

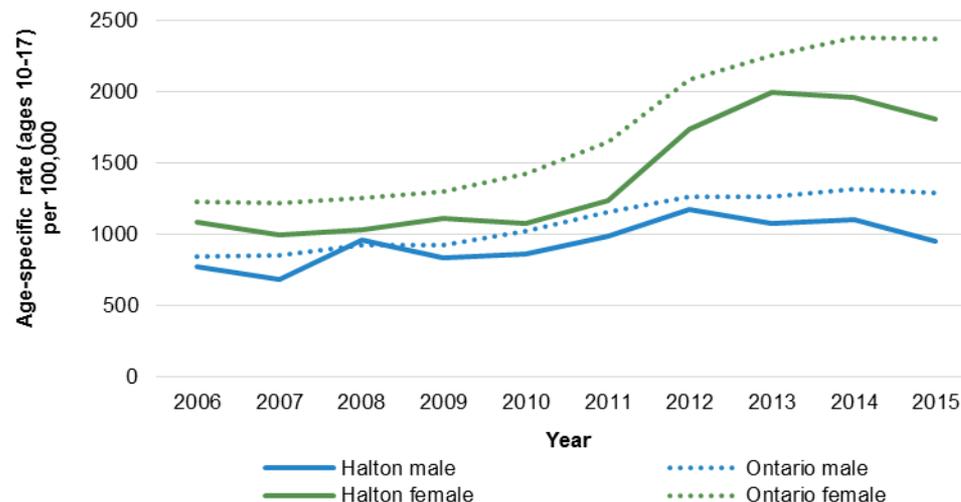


Figure 7: Age-specific rate of ED visits for mental illness, ages 10-17, by sex, Halton Region and Ontario, 2006-2015.

Data source: National Ambulatory Care Reporting System [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted June 2017
Population Estimates [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted August 2016

Hospitalizations for mental illness in children and youth

Differences by sex

From 2013-15, females aged 10-17 in Halton had 2.5 times the rate of hospitalizations for mental illness compared to males.



Most common mental illness hospitalizations

Each year in Halton from 2013-15 there were an average of 66 hospitalizations for mental illness among males and 154 hospitalizations for mental illness among females aged 10-17. The most common mental illnesses resulting in hospitalization were:

- 1. Depression (22 hospitalizations per year)
- 2. Schizophrenic and psychotic disorders (9 hospitalizations per year)
- 3. Acute stress (8 hospitalizations per year)

- 1. Depression (73 hospitalizations per year)
- 2. Anxiety (55 hospitalizations per year)
- 3. Eating disorders (14 hospitalizations per year)

Trends over time

The rate of hospitalizations for mental health illness among Halton females aged 10-17 nearly tripled over the last 10 years, from 188 per 100,000 females aged 10-17 in 2006 to 529 per 100,000 in 2015, with the greatest increase occurring between 2011 and 2014. Ontario females experienced a similar increase during this time period. In general, the rate of hospitalizations for mental illness has been higher among Halton females compared to Ontario females, however these differences were not statistically significant.

Males in Ontario aged 10-17 also experienced an increase in the rate of hospitalizations for mental illness from 2006 to 2015. There were no significant trends among Halton males aged 10-17 during this time period. In 2008, 2009 and 2012, Halton males aged 10-17 had a significantly higher rate of hospitalizations compared to Ontario males.



Figure 8: Age-specific rate of hospitalizations for mental illness, ages 10-17, by sex, Halton Region and Ontario, 2006-2015.

Data source: National Ambulatory Care Reporting System [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted June 2017
Population Estimates [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted August 2016



Mental health in pregnancy and parenthood

This section of the report summarizes the incidence of mental health concerns during pregnancy using data from the Better Outcomes Registry and Network (BORN) Information System. Also presented in this section of the report are several indicators of the mental wellbeing of Halton parents using data from Halton's Kindergarten Parent Survey (KPS).

This section starts with Candace's story. Her story illustrates the impact of social isolation on mental health, and how building a strong social support network can reduce stress and improve mental health.

Candace is a new parent of a three month old girl. Candace and her partner live in a small bungalow in Halton Hills around the corner from her parents. Although Candace's family has always lived in Halton Hills, her parents recently retired and now spend six months per year in Florida. Her parents were around for the birth of their granddaughter, but left for Florida two months ago once the winter weather arrived.

Candace noticed that since her parents left town, she has felt more stressed being at home with the baby. Candace's partner commutes to Toronto for work and spends long hours away from home on weekdays. The winter weather has made it difficult to walk in the neighbourhood like she was able to do in the first couple months of her maternity leave. Candace realized that since her parents left, she spends a great deal of time alone with the baby, and doesn't feel like she has any one to talk to. She was the first of her friends to start a family, and feels that she has lost some connection with them since the baby was born.

Candace subscribed to the HaltonParents emails and found information about

community resources available to support new parents. Candace reached out and joined a parenting group and was able to meet other new parents. She found that spending time with other parents helped her to feel less isolated, and helped to reduce her stress. A health care professional at the group also helped to answer her parenting questions, and this support helped Candace to relax and enjoy her time with her baby much more. She found that her baby was less fussy and that the interactions between them were more positive. Candace made arrangements with some of the other mothers in the group to get together once per week for coffee, and they plan to start walking together once the weather improves.

Maternal mental health has a direct impact on the social-emotional development of children. Having a strong social support network is essential to reducing parenting stress. By reaching out and connecting with other parents, Candace was able to start building a network of other parents and professionals to support her with her parenting journey.

The facts

- ▶ 13.9% of women who give birth in Halton experience one or more mental health concerns during pregnancy
- ▶ Among women who give birth in Halton each year,
 - ▶ 8.6% have anxiety during pregnancy
 - ▶ 6.6% have depression during pregnancy
 - ▶ 3.0% have a history of post-partum depression (among those who have previously given birth)

Candace's story



Background

Pregnancy and parenthood can be an exciting time in one's life. However, the transition to parenthood and coping with the demands of raising a family can be stressful at times. While parenting can be both rewarding and challenging for anyone, it can pose particular challenges for those with a mental health condition.

Maternal mental health concerns are common, with as many as one in five women developing a mental health issue while pregnant or during the first year after childbirth.²⁵ Maternal mental health is an important public health issue, as it can impact the health of both a mother and her baby, including an increased risk for pregnancy complications and difficulty caring for herself and her baby.^{25,26} For more information on mental health during pregnancy, see The [Reproductive Health in Halton Report](#).

Fathers can also experience stress and other mental health concerns. Research suggests that as many as 5-10% of fathers experience depression in the year after their baby is born.²⁷

Promoting positive mental health is important for both parents and their children. When parents look after themselves and feel supported, they are better able to accept and manage difficulties, be responsive to their children's needs, and make good decisions for their children.²⁸

Through [HaltonParents](#), Halton Region offers a variety of free parenting programs and resources that promote positive mental health, help people manage the transition to parenthood, build confidence to parent their child in a positive way, and support the healthy growth and development of their children.



Mental health concerns during pregnancy

From 2013-15, an average of 778 women per year (13.9% of women who gave birth) in Halton reported experiencing one or more mental health concerns during pregnancy.

For 2013-15 (combined), Halton women were slightly less likely than Ontario women to report experiencing one or more mental health concerns during pregnancy, experiencing depression during pregnancy, or having a history of post-partum depression. However, Halton women were slightly more likely than Ontario women to have experienced anxiety during pregnancy (Figure 9).

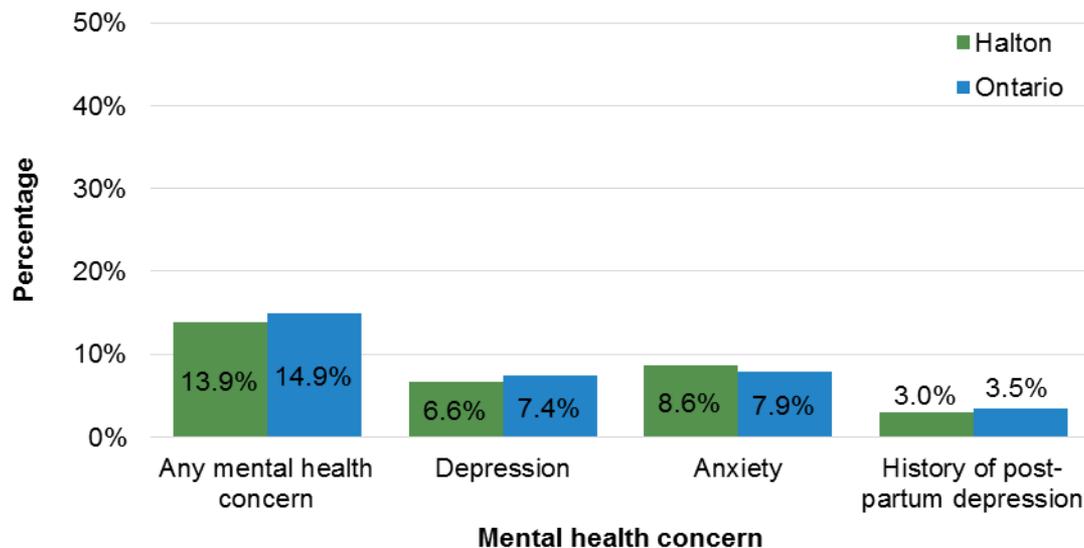


Figure 9: Percentage of females who gave birth who experienced any mental health concern, depression, anxiety during pregnancy, or who had a history of post-partum depression, Halton and Ontario, 2013-15 (combined).

Data source: BORN Information System [2013-2015], extracted January 2017 (history of post-partum depression data) and October 2016 (all other maternal mental health data)

Mental health and parenting

Halton's Kindergarten Parent Survey asked parents of kindergarten children a series of questions related to parenting stress, as well as factors associated with positive mental health like social connectedness.

In 2015, 15% of parents of kindergarten students in Halton reported feeling very or extremely stressed out in the last two weeks (Figure 10). Mothers were more likely to report feeling stressed compared to fathers, and parents who were born in Canada were more likely to report feeling stressed compared to parents who were immigrants. There were no significant differences in reported stress by education or household income.

The majority of Halton parents of kindergarten parents reported feeling close to other parents (82%), taking time for their own wellbeing (73%), and feeling supported in parenting by the people in their life (93%) .

Halton parents who felt close to other parents, took time for their own wellbeing, and felt supported in parenting were less likely to report feeling very or extremely stressed.

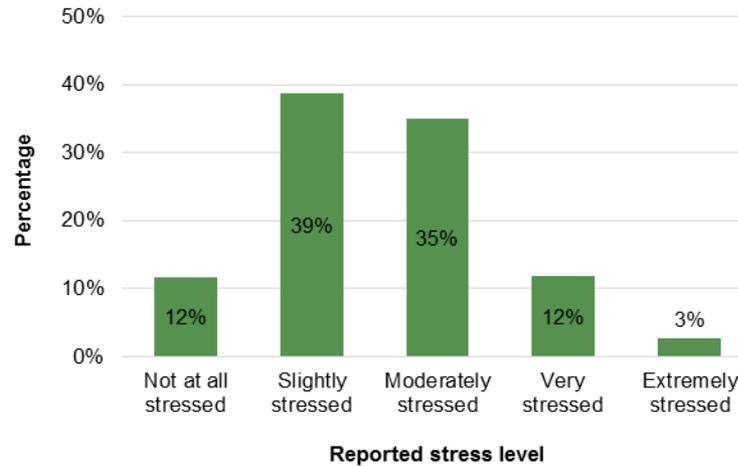


Figure 10: Reported level of stress within the last two weeks, parents of kindergarten students, Halton Region, 2015



of parents agreed or strongly agreed that they felt close to other parents with children the same age



of parents agreed or strongly agreed that they take time to care for their own health and wellbeing



of parents agreed or strongly agreed that they feel supported in parenting by the people in their life

Data source: Kindergarten Parent Survey, Our Kids Network, 2015.



Adult mental health

This section of the report provides a high level overview of several indicators of the mental health of Halton residents aged 18-64 using data from the Canadian Community Health Survey. Also included is an overview of trends in emergency department visits and hospitalizations for mental illness for adults aged 18-64.

This section starts with Dimitri's story. His story illustrates how social and economic factors influence the ability to manage mental illness and how access to quality and timely health care, social supports, and good working conditions can improve mental health.

Dimitri is a 23 year old man who lives in Milton. Dimitri was diagnosed with anxiety and depression a few years ago, but usually manages his symptoms well with the support of his doctor, family, and other community resources. After losing his job recently, Dimitri experienced significant stress and anxiety about his living expenses. His family doctor prescribed a new medication to help with his symptoms, but Dimitri was unable to fill the prescription as it was too expensive. Too embarrassed to go back to his doctor, Dimitri tried to manage without the medication.

After several days of not seeing Dimitri leave his apartment, a concerned neighbour checked in, realized he needed some help, and called an ambulance. Dimitri was transported to the local hospital emergency department. He was briefly hospitalized in order to stabilize his mental health condition. While in the hospital, a discharge planner met with Dimitri to talk about plans for going home. She referred Dimitri to an employment program in the community, designed to support residents experiencing barriers to finding and keeping a job.

Within a few weeks of being discharged from the hospital, Dimitri was successful in getting a new job. His new employer offered a benefits program which helped Dimitri to afford his new medication. His new employer also understood the benefits of promoting positive mental health for all employees in the workplace, and offered a variety of health and wellness activities. This positive workplace environment helped Dimitri to feel comfortable, connected, and well supported.

Although access to timely, quality mental health care had a significant positive impact on Dimitri's mental health, many of the factors that influence mental wellbeing fall outside of the health care system. Living with limited income can be a significant risk factor for poor physical and mental health. In order to influence health and mental health in a meaningful way at an individual and community level, investments need to strengthen social supports like employment, affordable housing and education. Additionally, mental wellbeing is influenced by environments that offer opportunities for social connectedness.

The facts

- ▶ 9% of Halton adults (18-64) report having been diagnosed with a mood and/or anxiety disorder
- ▶ 13% of Halton adults (18-64) reported consulting with a professional about their mental health in the past year
- ▶ Having a higher income and being employed is associated with more positive self-reported mental health
- ▶ Each year an average of 4,178 Halton adults (18-64) visit the emergency department for a mental illness, and an average of 1,101 are hospitalized

Dimitri's story



Background

Promoting positive mental health throughout the lifespan is important as throughout our lives we encounter challenges, stress and periods of transition which can have an impact on mental health. The loss of a loved one, unemployment, illness, struggles with finances, unstable housing conditions, isolation from the community and experiencing bullying or discrimination are just a few examples of challenging life circumstances that can negatively impact mental health.²⁹

In contrast, factors such as healthy family relationships, good working conditions, positive educational experience, involvement in the community, healthy and active lifestyles, safe and well-maintained housing, and access to supportive services like counselling can help improve mental health.²⁹

Actions to improve the conditions of every day life and foster resiliency when dealing with life's challenges can help increase the proportion of the population experiencing positive mental health.^{29,30}

The Halton Region Health Department is involved in many initiatives that seek to improve the conditions of every day life and support the mental health of Halton adults and residents of all ages, including:

- Halton's Community Safety and Well-Being Plan – an initiative led by Halton Region and the Halton Regional Police Services that aims to identify and address emerging issues and trends that impact safety and wellbeing together with a wide range of community partners.
- Supporting workplaces to promote the physical and mental health of employees and their families
- Reducing social isolation of individuals and families by connecting them with community groups (e.g. Early Years Program Neighbourhood Groups)
- Conducting health equity impact assessments to identify and address potential unintended impacts of Health Department programs, initiatives, and activities on different population groups (e.g. newcomers, low income families).

Workplace mental health

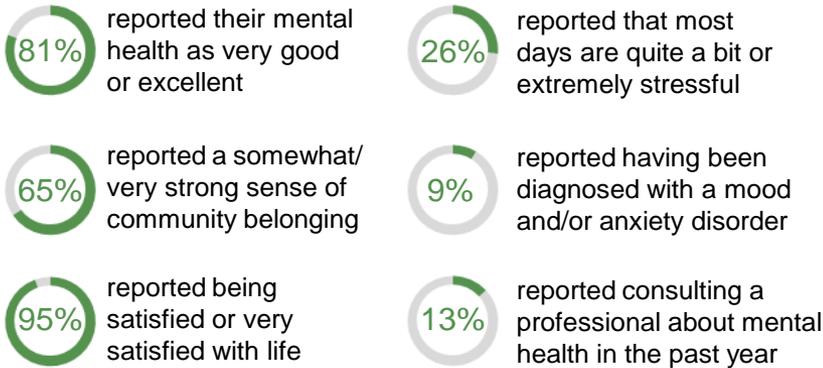
Workplaces can play an important role in promoting positive mental health, as they can provide opportunities for individuals to feel productive and engaged. However, workplaces can also be stressful environments, which at times can negatively impact both physical and mental health.³¹

The Halton Region Health Department offers a variety of resources to both employers and employees on reducing stress and promoting positive mental health in the workplace at halton.ca.

Mental health promotion in the workplace benefits both employees and employers. Psychologically safe, supportive and healthy environments help to promote productivity, performance, job satisfaction, and reduce employee turnover.³² It can also help to support employees with a mental illness on their journey towards recovery.³²

General mental health and wellbeing in adults

Among Halton adults aged 18-64 for 2009-2014 combined,



Mental health and physical health are often linked

For 2009-14 combined, Halton adults (18-64) who rated their physical health as very good/excellent were more likely to experience favourable mental health than those who rated their physical health as good/fair/poor.

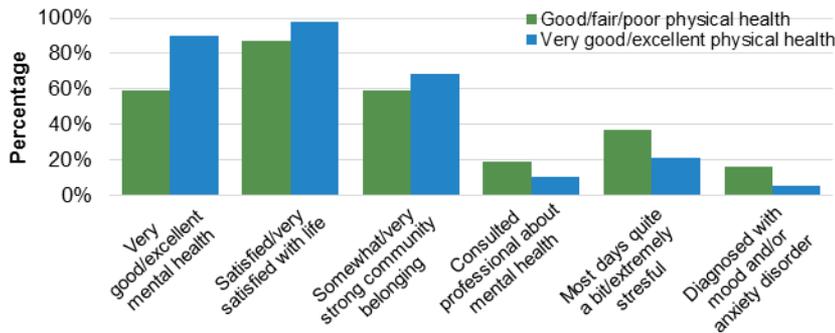


Figure 11: Indicators of mental health, adults aged 18-64, Halton Region, 2009-14 (combined)

Being employed and having a higher household income is associated with better self-rated mental health in Halton.



For 2009-14, Halton adults aged 18-64 who had a job in the last week had higher self-reported mental health than those who did not have a job or were permanently unable to work.

For 2009-14, self-reported mental health increased as household income increased among Halton adults aged 18-64.



Some Halton adults find work to be stressful

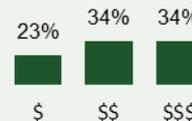
For 2009-14 combined,

1 in 3



Halton adults aged 18-64 reported that most days at work were quite a bit or extremely stressful.

There were no statistically significant differences by sex or education in workplace stress among Halton adults aged 18-64.



Halton adults (18-64) in the middle and high income groups were more likely than those in the low income group to report that most days at work were quite a bit or extremely stressful.

Data source: CCHS [2009-2014], Statistics Canada, Share File, Ontario MOHLTC

Emergency department visits for mental illness in adults

Differences by sex

From 2013-15, Halton males aged 18-64 had a slightly higher rate of ED visits for mental illness than females.

1,289
ED visits per
100,000 males
aged 18-64



1,122
ED visits per
100,000 females
aged 18-64

Most common mental illness ED visits

From 2013-15 there were an average of 2,203 ED visits per year among males and 1,975 ED visits per year among females aged 18-64 in Halton for mental illness. The most common mental illnesses resulting in ED visits were:



1. Substance disorders (788 ED visits per year)
2. Anxiety (422 ED visits per year)
3. Depression (332 ED visits per year)



1. Anxiety (494 ED visits per year)
2. Substance disorders (472 ED visits per year)
3. Depression (404 ED visits per year)

Trends over time

The rate of ED visits for mental illness among Halton males aged 18-64 increased over the past 10 years, from 987 per 100,000 males aged 18-64 in 2006 to 1,328 per 100,000 in 2015. The rate of ED visits for mental illness increased for Ontario males from 2007 to 2015. Over the past 10 years, Halton males aged 18-64 have consistently had a lower rate of ED visits for mental illness compared to Ontario males.

The rate of ED visits for mental illness among Halton females increased slightly over the last several years, from 1,034 per 100,000 females aged 18-64 in 2010 to 1,120 per 100,000 in 2015. Among Ontario females, the rate has been increasing since 2009. Halton females aged 18-64 have consistently had a lower rate of ED visits for mental illness compared to Ontario.

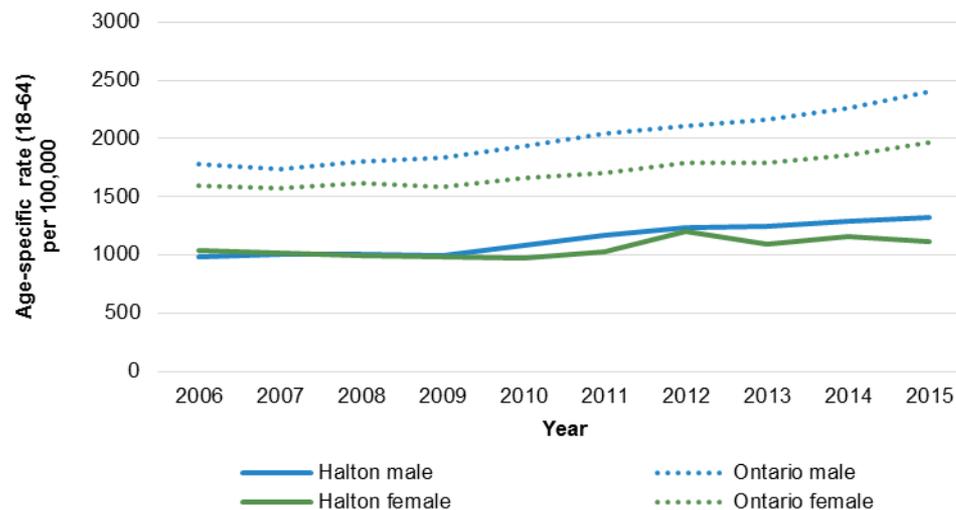


Figure 12: Age-specific rate of ED visits for mental illness, ages 18-64, by sex, Halton Region and Ontario, 2006-2015.

Data source: National Ambulatory Care Reporting System [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted June 2017
Population Estimates [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted August 2016

Hospitalizations for mental illness in adults

Differences by sex

From 2013-15, males aged 18-64 in Halton had a higher rate of hospitalizations for mental illness compared to females.



Most common mental illness hospitalizations

Each year in Halton from 2013-15 there were an average of 596 hospitalizations for mental illness among males and 505 hospitalizations among females aged 18-64. The most common mental illnesses resulting in hospitalization were:

- 1. Schizophrenic and psychotic disorders (199 hospitalizations per year)
- 2. Depression (133 hospitalizations per year)
- 3. Substance disorders (120 hospitalizations per year)

- 1. Depression (165 hospitalizations per year)
- 2. Schizophrenic and psychotic disorders (113 hospitalizations per year)
- 3. Substance disorders (65 hospitalizations per year)

Trends over time

The rate of hospitalizations for mental illness among Halton males aged 18-64 increased from 250 per 100,000 males aged 18-64 in 2006 to 368 per 100,000 in 2015. Ontario males aged 18-64 also experienced an increased rate over this same time period. The rate of hospitalizations for mental illness was generally lower among Halton males aged 18-64 compared to Ontario males.

While the rate of hospitalizations for mental health illness increased for Ontario females aged 18-64 over the past 10 years, the rate in Halton has been more variable. In general, Halton females aged 18-64 have had a lower rate of hospitalizations for mental illness compared to Ontario females.

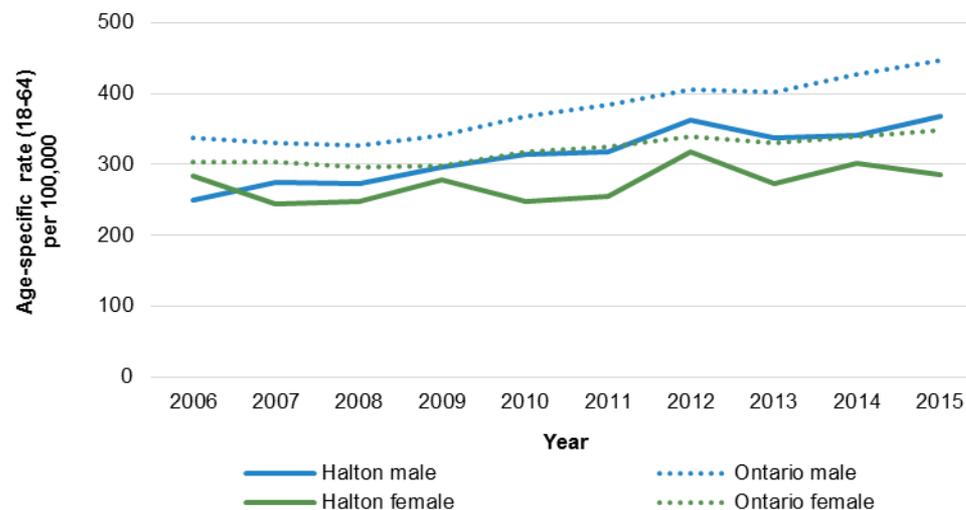


Figure 13: Age-specific rate of hospitalizations for mental illness, ages 18-64, by sex, Halton Region and Ontario, 2006-2015.

Data source: National Ambulatory Care Reporting System [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted June 2017
Population Estimates [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted August 2016



Older adult mental health

This section of the report provides a high level overview of several indicators of the mental health of older adults in Halton (ages 65+) using data from the Canadian Community Health Survey. Also included is an overview of trends in emergency department visits and hospitalizations for mental illness for adults aged 65 and over.

This section begins with Mei and Chen's story. Their story illustrates how income and social isolation can influence caregiver mental health, and how low cost community respite and opportunities for social connectedness can lower stress and improve mental health.

Mei is a 78 year old woman who lives with her 80 year old husband Chen in their bungalow in Burlington – the home where they raised their family. Their children are now grown up and live in other cities.

Chen had a career working for a small company, which offered stable employment and enough income to raise his family. However, the company did not offer a pension plan or benefits. Since Mei did not participate in the labour market, the couple now lives on a small fixed income.

Chen has dementia, which has become progressively worse over the last five years. Aside from the support of publicly funded home care to help him bathe, Mei is Chen's only caregiver. Chen can no longer be left at home, and as a result Mei has been spending less time with friends. Mei herself suffers from chronic pain caused by osteoarthritis, which limits her mobility.

Although she is not ready to consider long term care for Chen, Mei has

noticed that the stress of caring for Chen, combined with her chronic arthritis pain and limited income has taken a toll on her mental health.

Recently, Mei heard about a day program offered through Halton Region for older adults to give her some desperately needed respite. Mei was able to find money in their budget for Chen to attend once per week since the program cost was low. This respite time provided Mei with an important opportunity to get out and reconnect with friends, which helped her to cope with being a caregiver to her husband and still care for herself.

For full-time caregivers such as Mei, stress can affect mental health. Limited income means limited options for support. Full-time caregiving can lead to greater isolation as the caregiver has little social time. Caregivers may also neglect the self-care that their own chronic health conditions require. All of these factors can contribute to declining wellbeing.

The facts

- ▶ 15% of older adults (65+) in Halton reported that most days are quite a bit or extremely stressful
- ▶ Older adults with a strong sense of community belonging have better self-rated mental health
- ▶ Each year in Halton there are an average of 640 ED visits and 270 hospitalizations for mental illness among older adults
- ▶ The most common type of mental health concern resulting in an ED visit or hospitalization for older adults are organic disorders (e.g. dementia and Alzheimer's disease)

Mei & Chen's story



Background

As at any time in one's life, positive mental health is important in older adulthood. Older adults can be at risk of developing mental health and substance use issues, as well as other chronic diseases and physical health problems.³³ Older adults are also more likely to suffer multiple health issues at the same time.³³ Note that for the purposes of this report, mental illness includes Alzheimer's disease and dementia.

Some risk factors for poor mental health among older adults include encountering stressful life experiences, such as the loss of a loved one, experiencing physical health problems, chronic pain and disability, the loss of the ability to live independently, and a drop in socio-economic status associated with retirement.³³ Such factors can result in feelings of loneliness, isolation, loss of independence and lead to poor mental health and an increased risk of mental illness.³³

For older adults living with a mental or physical health problem, caregivers are essential for recovery.³⁴ However, caregiving for a friend, spouse or other

family member can at time be stressful and make caregivers vulnerable to poor mental health.³⁴

In 2015, Halton Region released the [Halton Region Older Adult Plan](#) (HOAP), which outlines how the Region will enhance policies, programs, services and environments to respond to the growing aging population in Halton. The goal of the plan is to support the health and wellbeing of older adults in Halton. It strives to ensure equitable access to Regional programs, services, and information for older adults in Halton.³⁵ HOAP also identifies strategies to build partnerships that will enhance innovation, service coordination and integrated service delivery with community partners.³⁵

Many of the priorities, objectives and actions outlined in HOAP provide opportunities for improving the mental health of Halton's older adults, including:

- promoting safe and supportive housing for older adults;
- connecting older adults and their caregivers to resources and services;

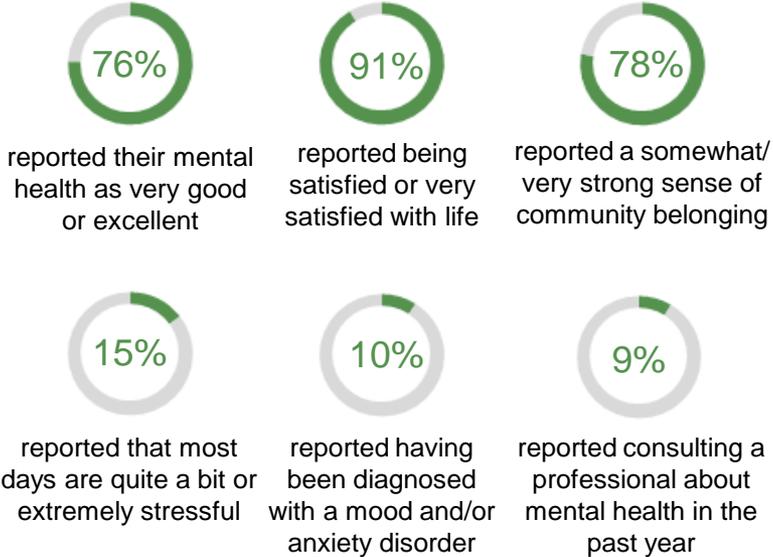
- integrating strategies to respond to dementia, mental illness and addictions in Regional program planning and service delivery;
- supporting older adults in the workforce; and,
- ensuring that the social determinants of health are addressed in how Regional programs are planned and delivered.³⁵

Halton's Older Adult Advisory Committee has also published a number of resources for caregivers, including [tips for caregivers](#) on how to reduce stress and take time to care for their own health and wellbeing.³⁶



General mental health and wellbeing in older adults

For 2009-2014, among older adults (65+) in Halton,



In Halton for 2009-2014, life satisfaction decreased as age increased. However, older adults were more likely to report a somewhat/very strong sense of community belonging and less likely to report that most days in life are somewhat/very stressful compared to adults aged 18-64.

There were no significant differences by age in self-rated mental health, presence of a mood and/or anxiety disorder or consultation with a professional about mental health.

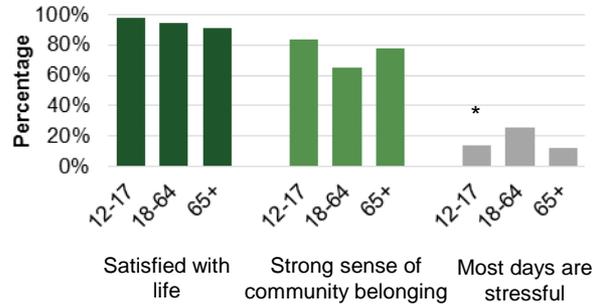


Figure 14: reported life satisfaction, sense of community belonging, and life stress, adults aged 65+, Halton Region, 2009-14 (combined).

*interpret with caution

It is important to note that the Canadian Community Health Survey does not reach people who are living in institutions such as long-term care homes. Therefore the population of older adults captured in CCHS may be healthier than Halton's older adult population as a whole.

Data source: CCHS [2009-2014], Statistics Canada, Share File, Ontario MOHLTC

Emergency department visits for mental illness in older adults

Differences by sex

From 2013-15, Halton females aged 65 and over had a higher rate of ED visits for mental illness than males.



Most common mental illness ED visits

From 2013-15 there were an average of 248 ED visits per year among males and 392 ED visits per year among females aged 65 and over in Halton for mental illness. The most common mental illnesses resulting in ED visits were:

- 1. Organic disorders (97 ED visits per year)
- 2. Substance disorders (67 ED visits per year)
- 3. Anxiety (30 ED visits per year)

- 1. Organic disorders (134 ED visits per year)
- 2. Anxiety (116 ED visits per year)
- 3. Depression (48 ED visits per year)

Trends over time

There were no statistically significant trends in ED visits for mental illness for Halton males aged 65+ over the past ten years. In Ontario, however, the rate increased significantly from 2006 to 2015. Halton males aged 65+ consistently had a lower rate of ED visits for mental health illness than Ontario over this time period

Similarly, for Halton females aged 65+ there were no statistically significant trends in ED visits for mental illness from 2006 to 2015, while the rate increased significantly for Ontario females over this time period. In general from 2006 to 2015 Halton females aged 65+ had a lower rate of ED visits for mental illness compared to Ontario.

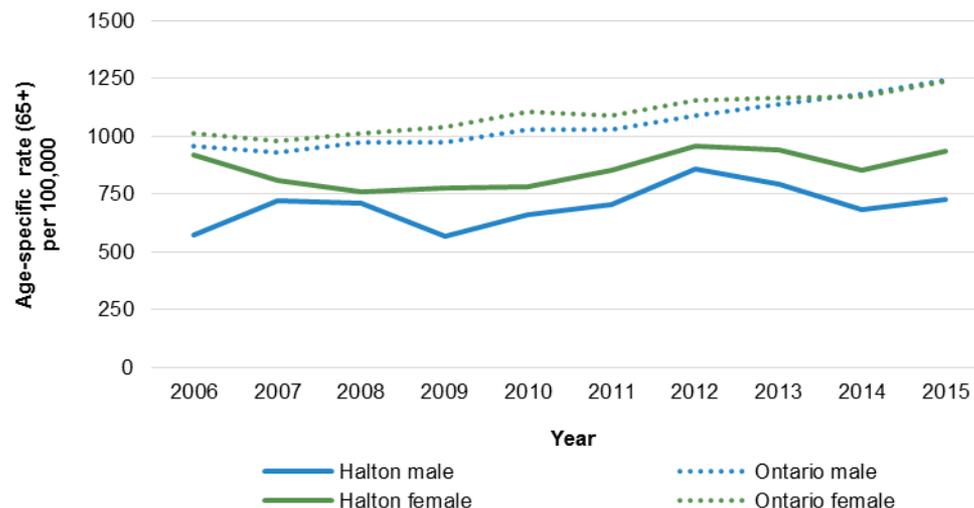


Figure 16: Age-specific rate of ED visits for mental illness, ages 65+, by sex, Halton Region and Ontario, 2006-2015.

Data source: National Ambulatory Care Reporting System [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted June 2017
Population Estimates [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted August 2016

Hospitalizations for mental illness in older adults

Differences by sex

From 2013-15, there was no statistically significant difference by sex in the rate of hospitalizations for mental health illness among Halton adults aged 65 and over.



Most common mental illness hospitalizations

Each year in Halton from 2013-15 there were an average of 116 hospitalizations for mental illness among males and 154 hospitalizations among females aged 65 and over for mental illness. The most common mental illnesses resulting in hospitalization were:

- 1. Organic disorders (67 hospitalizations per year)
- 2. Substance disorders (19 hospitalizations per year)
- 3. Depression (16 hospitalizations per year)

- 1. Organic disorders (82 hospitalizations per year)
- 2. Depression (26 hospitalizations per year)
- 3. Schizophrenic and psychotic disorders (20 hospitalizations per year)

Trends over time

Over the past ten years, the rate of hospitalizations for mental illness increased in both Halton and Ontario. Among Halton males, the rate of hospitalizations for mental illness increased from 214 per 100,000 males aged 65+ in 2006 to 343 per 100,000 in 2015. Among females, the rate increased from 286 per 100,000 females aged 65+ to 379 per 100,000 over the same time period.

Halton males aged 65 and over have typically had lower rates of hospitalization for mental illness compared to Ontario males. Among females, rates were fairly similar in Halton and Ontario from 2006 to 2012. In more recent years, Halton females aged 65 and over have had a slightly lower rate of hospitalizations for mental illness compared to Ontario.



Figure 17: Age-specific rate of hospitalizations for mental illness, ages 65+, by sex, Halton Region and Ontario, 2006-2015.

Data source: National Ambulatory Care Reporting System [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted June 2017
Population Estimates [2006-2015], Ontario MOHLTC: IntelliHEALTH Ontario, extracted August 2016

Conclusion

This report provided a snapshot into the mental health of Halton Region's population. The communities where we live, learn, work and play can have an important impact on mental health and overall wellbeing. Evidence shows that creating supportive environments, increasing resiliency, improving mental health literacy, and reducing stigma can help improve mental health at all ages and stages of life.⁷

The data presented in this report can be used to help inform programs, services and policies that promote positive mental health in our community. Information in this report on populations who may be at a greater risk for poor mental health may also be used to help target programs and services to those who need them the most, and help Halton residents to reach their full mental health potential.

It is important to keep in mind that this report only provides a very high level look at select indicators of mental health in Halton's population, and that there are many limitations and gaps in the data to consider.

One important gap is related to early years mental health. The early years provide an important foundation for mental health, as a young child's developing brain is greatly influenced by their

environment and experiences. However, limited data exist related to early years mental health, particularly at a local level. Future work to better understand the mental wellbeing of Halton's youngest residents may include analysis of the results of the 2018 Early Development Instrument and the results of the 2018 Halton Kindergarten Parent Survey.

As stated in the social determinants of mental health section of this report, some groups within the population lack access to the conditions and resources needed to be healthier, and this can lead to differences in mental health in the population. For instance, research shows that LGBTQ populations may be at greater risk for poor mental health due to the effects of discrimination and other social determinants of health.³⁷ Another example of those who might be at a greater risk for poor mental health include people who have experienced traumatic situations, such as an injury, violence, or death of a loved one.³⁸ Due to limitations in the availability of local data, it was not possible to report on some of these relationships in this report.

Additional limitations associated with the different data sources presented in this report are presented in [Appendix A](#).

Additional information and resources

Halton Region resources

For more data and reports on mental health and other health topics in Halton, visit halton.ca.

For more information on programs and services offered by Halton Region, contact Access Halton at accesshalton@halton.ca

Care in an emergency

If you are experiencing a mental health crisis and require immediate attention, please visit your closest hospital emergency room or dial 911.

If you are in crisis but do not require emergency care, you may contact the following services 24/7:

Community Outreach Support Team (COAST) for ages 16 and over at 1-877-825-9011.

Reach Out Centre for Kids Crisis Line at 905-878-9785.

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Appendix A: Data sources & limitations

Five main data sources were used for this report: The Tell Them From Me/OurSCHOOL Survey, the Halton Kindergarten Parent Survey, The Canadian Community Health Survey, and the National Ambulatory Care Reporting System. Two additional data sources used in this report are also described in this section of the report: population estimates for the denominator of rates, and the National Household Survey for the neighbourhood income indicator.

Tell Them From Me/OurSCHOOL Survey

General description

- The Tell Them From Me/OurSCHOOL survey is a voluntary, online survey asked of elementary and high school students in Halton public schools.
- The survey explores topics such as student engagement, emotional and physical health, school safety and risky behaviours.
- Tell Them From Me/OurSCHOOL is owned by The Learning Bar, and administered by the Halton District School Board and Halton Catholic District School Board

Years presented

- 2015-16 school year

Strengths

- Large sample size: approximately 18,000 Grade 4-6 students and 17,500 grade 9-12 students
- The Learning Bar has created various measures (e.g. sense of belonging, anxiety), which are based on research, developed in consultation with subject matter experts, and rigorously tested³⁹
- Survey is anonymous

Limitations

- Results are self-reported and may not be recalled accurately
- Elementary and secondary school students are asked separate surveys with different question wording and are therefore not comparable to one another
- Grades 7 and 8 students were asked different surveys in the Halton District School Board and the Halton Catholic District School Board, therefore the responses for the two school boards for these grades cannot be combined and were excluded from this report
- Students who are not in the public school system are not captured in this survey
- Survey responses from high schools for continuing adult education were excluded
- The survey questions are owned by The Learning Bar and cannot be published in this report
- The criteria used for The Learning Bar's measures of anxiety and depression are not equivalent to those used in clinical diagnoses, and high rates of anxiety and depression as rated by these items in the Our School/Tell Them from Me survey should not be confused with high rates of clinical anxiety and depression in the students.

Better Outcomes Registry and Network (BORN)

General description

- The BORN Information System is an internet-based database that provides access to population-based perinatal data
- Includes data from a number of sources including fertility clinics, prenatal screening laboratories, specialized antenatal clinics, hospitals, midwifery screening laboratories and prenatal screening and newborn screening follow-up clinics
- Access to the BORN Information System is through BORN Ontario via Public Health Reports of the Public Health Data Cube

Years presented

- 2013-15 (combined)

Strengths

- Captures births occurring both inside and outside hospitals
- Provides extensive information about newborn characteristics including maternal health history and behaviours
- Completed data generally available within six months of the infants birth

Limitations

- Historic data prior to April 2012 is not available, so it is not possible to examine long-term trends over time
- Some variables have missing data, which could limit data accuracy
- Births which occur to mothers with a residential postal code where the majority of the population lives on an Aboriginal reserve or community are not included. This is unlikely to have an impact on Halton data, but may impact other health units with a large Aboriginal population.⁴⁰
- Although data in the public health cube is refreshed daily, there is a lag time of six months before data are over 90% complete, and up to 15 months before the data can be considered 99% complete in Ontario. Large variations in timeliness exist between public health units.⁴⁰

Halton Kindergarten Parent Survey

General description

- The KPS is a voluntary online survey developed and administered by the Our Kids Network
- The KPS is distributed to parents of kindergarten children in the Halton District School Board and Halton Catholic District School Board that explores topics related to the health and wellbeing of kindergarten children and their parents
- For more information, see the Our Kids Network [Research and Resources](#) webpage.

Years presented

- 2015

Strengths

- Fairly large sample size (2,257)

Limitations

- Results are self-reported and may not be recalled accurately
- Does not capture parents of kindergarten children outside of the public school system
- A much larger proportion of mothers than fathers completed the survey

Canadian Community Health Survey

General description

- The CCHS is a voluntary survey conducted in-person or by phone by Statistics Canada, designed to provide health information at the regional and provincial levels
- CCHS collects data related to health status, healthcare, and health determinants across Canada.

Years presented

- 2009-2014 (combined)

Strengths

- Standard survey asked across Canada → provincial comparison data available

Limitations

- Results are self-reported and may not be recalled accurately
- Small sample size for Halton (about 600 per year) resulted in a need to combine several years of data for analysis
- Individuals living on Indian Reserves and Crown lands; residents of institutions; full-time members of the Canadian Armed Forces; and residents of certain remote areas are not captured
- Only captures population aged 12 and over

National Ambulatory Care Reporting System

General description

- NACRS contains data for all hospital-based and community-based ambulatory care in Ontario
- This report includes NACRS data on unscheduled emergency department visits and hospital admissions where the patient's main problem or diagnosis as determined by the ED is a mental illness (ICD-10-CA: F00-F99, G30, O993)

Years presented

- 2006-2015

Strengths

- Administrative data source that should capture all ED visits and hospital admissions occurring in Ontario
- NACRS can be used to provide more timely data on hospitalization rates compared discharges, because it is based on admissions to an inpatient bed from the ED. NACRS also allows reporting of hospitalizations for patients that are admitted to an acute care psychiatric bed.

Limitations

- Individuals may visit an ED several times for the same mental illness, or may visit or be transferred to more than one hospital for the same issue
- Ontario counts and rates exclude individuals from out of province or with unknown residence
- Individuals who visit an ED or are hospitalized for a mental illness outside of Ontario are not captured
- Individuals who visit an ED or are hospitalized may have more than one mental illness (all visits have one main problem and up to nine other problems). Only the "Main Problem" – the patient's main problem or diagnosis as determined during the ED visit – is included in this report. People who visit the ED and have a mental illness, but whose main problem diagnosis is not mental health related would not be captured in this report.

Population Estimates

General description

- Population estimates are used as denominators for all population-based indicators (expressed as rates per 100,000)
- The population estimates used to calculate rates are produced by the Demography Division, Statistics Canada, and are based on the 1986, 1991, 1996, 2001, 2006 and 2011 census counts adjusted for net under-coverage.
- Statistics Canada estimates what the population is on July 1st each year
- Estimates consider data on births, deaths, and migration

Years presented

- 2006-2015

Strengths

- Estimates by sex and single year allow for calculation of rates over time

Limitations

- Population estimates do not take into account transient populations, such as post-secondary students or the homeless
-

National Household Survey

General description

- The 2011 National Household Survey which was a supplementary (voluntary) survey to the 2011 Census which replaced the long-form Census
- The NHS collects data on Aboriginal Peoples, immigration and ethno-cultural diversity, education and labour, mobility and migration, income and housing
- In this report, the 2011 NHS was used to calculate the neighbourhood income indicator used to examine differences in ED visit and hospitalization rates for mental illness by neighbourhood income. See [Appendix B](#) for the neighbourhood income indicator definition.

Years presented

- 2011

Strengths

- Large sample size

Limitations

- The NHS was not mandatory and had a higher non-response rate (23% in Halton in 2011) compared to the 2006 Census (5%). Because voluntary surveys are more prone to non-response bias than mandatory surveys, the NHS data may not reflect a representative sample of Halton's population.
 - Statistics Canada has warned that people with low incomes and very high incomes, Aboriginals, and recent immigrants were less likely to respond to the NHS. See the [NHS User Guide](#) for more information.
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Appendix B: Definitions

Tell Them From Me/OurSCHOOL survey definitions

The following indicators were developed by The Learning Bar for the Tell Them From Me/OurSCHOOL survey. Due to the proprietary nature of The Learning Bar's indicators, the exact question wording or indicator methodology cannot be reported.

CONCEPT	INDICATOR DESCRIPTION FOR ELEMENTARY SURVEY	INDICATOR DESCRIPTION FOR SECONDARY SURVEY
Sense of belonging	Students with a positive sense of belonging are those who feel accepted and valued by their peers and by others at their school.	Students with a positive sense of belonging are those who feel accepted and valued by their peers and by others at their school.
Positive relationships	Students with positive relationships are those who have friends at school they can trust and who encourage them to make positive choices.	Students with positive relationships are those who have friends at school they can trust and who encourage them to make positive choices.
Bullying	Students who were bullied are those who were subjected to physical, social, verbal, and/or cyber bullying at any point in the last four weeks.	Students who were bullied are those who were subjected to physical, social, verbal, and/or cyber bullying at least once per week in the last four weeks.
Anxiety	Students with moderate or high levels of anxiety are those who have feelings of fear, intense anxiety, or worry about particular events or social situations. The Learning Bar's measure of anxiety was developed with the assistance of Dr. Alexa Bagnell, Child and Adolescent Psychiatrist at the IWK Health Centre in Halifax, Nova Scotia.	Students with moderate or high levels of anxiety are those who have feelings of fear, intense anxiety, or worry about particular events or social situations. The Learning Bar's measure of anxiety was developed with the assistance of Dr. Alexa Bagnell, Child and Adolescent Psychiatrist at the IWK Health Centre in Halifax, Nova Scotia.
Depression	Not applicable	Students with moderate to high levels of depression are those who have prolonged periods when they feel sad, discouraged, and inadequate. The Learning Bar's measure of depression was developed with the assistance of Dr. Alexa Bagnell, Child and Adolescent Psychiatrist at the IWK Health Centre in Halifax, Nova Scotia.
Self-esteem	Not applicable	Students with a positive self-esteem are those who like and accept themselves, and are proud of their accomplishments. The Learning Bar's measure of self-esteem is based on the Self Description Questionnaire (SDC II) developed by Herbert Marsh.

Canadian Community Health survey definitions

CONCEPT	DESCRIPTION
Self-reported mental health	The proportion of residents who self-reported having very good or excellent mental health
Life satisfaction	The proportion of residents who self-reported being satisfied or very satisfied with life in general
Sense of community belonging	The proportion of residents who self-reported as having a somewhat strong or very strong sense of community belonging
Happiness	The proportion of residents who self-reported feeling happy every day or almost every day in the past month
Life stress	The proportion of residents who self-reported that most days in life are quite a bit or extremely stressful
Work stress	The proportion of residents who were employed in the past 12 months who self-reported that most days at work are quite a bit or extremely stressful
Consulted a professional about mental health	The proportion of residents who self-reported having seen or talked to a health professional about their emotional or mental health in the past 12 months
Diagnosed with a mood or anxiety disorder	The proportion of residents who self-reported having been diagnosed by a health professional with: <ul style="list-style-type: none"> • a mood disorder such as depression, bipolar disorder, mania, or dysthymia, and/or • An anxiety disorder such as a phobia, obsessive-compulsive disorder, or a panic disorder that is expected to last or has already lasted six months or more
Household income	Income groups were determined by first adjusting for household size (household income variable "INC_3" divided by the square root of the household size variable "dhhhdhsez"). Adjusted income reflects the fact that a household's needs increase as the number of members increases. The adjusted household income for all Halton respondents are then organized into 10 equal deciles and placed into low (decile 1-3), middle (decile 4-7) and high (decile 8-10) income groups.
Immigrant status	The proportion of residents who self-reported being born in Canada, or in another country
Education	The proportion of residents aged 25 and over whose highest level of education was a post-secondary diploma, certificate or degree, or the proportion of residents aged 25 and over who have not completed post-secondary education.

ED and hospital admission data definitions

CONCEPT	DESCRIPTION
Emergency Department (ED) visit	Includes only unscheduled visits to the emergency department
Hospitalization	Patient admission to a hospital following an unscheduled visit to the emergency department
Most responsible diagnosis	The one diagnosis or condition most responsible for a patient's stay in a facility

Neighbourhood income group definitions

CONCEPT	DESCRIPTION
Dissemination area	Small geographic units with a population of 400 to 700 persons. Dissemination areas (DAs) are the smallest standard geographic area for which all census data are released. All of Canada is divided into DAs. In 2011, Halton had 734 DAs.
Neighbourhood income groups	The National Household Survey (NHS) indicator “in the bottom half of the Canadian distribution” was used as a basis for the neighbourhood income groups presented in this report. This indicator provides the percent of households per DA that were in the bottom half of the Canadian income distribution based on household income (adjusted to take into account family size). Using this value, all DAs in Canada were ranked into ten equal groups (deciles), and categorized as low (deciles 1-3), middle (deciles 4-7), and high (deciles 8-10) income groups. When looking at Halton alone, this resulted in an unequal number of DAs in each income group since the deciles are based on the national ranking. Each ED and hospital admission record extracted from IntelliHEALTH was assigned to the appropriate DA using the provided postal code and the Postal Code Conversion File (PCCF). Since the actual income of individuals is not known, and may vary from their neighbourhood income, misclassification of individuals based on their neighbourhood income instead of household income may impact the association between income and mental health related ED visits and hospitalizations. Approximately 4% of ED and hospital records were not included in the income analysis due to no postal code being provided, incomplete postal codes, postal codes not matching the PCCF file, or DAs being suppressed due to low response to the NHS.

Rate definitions

CONCEPT	DESCRIPTION
Age-standardized rate	Age-standardized incidence rates are used to compare the different populations of Halton and Ontario, as well as neighbourhood income groups. The rates are standardized to the 2011 Canadian population. This ensures that any differences in rate between populations are not due to differences in the age distributions between populations. Age-standardized rates provide an overall rate for all ages combined.
Age-specific rate	Age-specific rates are used to make comparisons between age groups. Age-specific rates allow for comparisons by age-group and sex to determine if certain age groups have higher rates of mental illness or different trends over time.

Appendix C: ICD-10-CA codes

Mental illnesses are classified using the Canadian edition of the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10-CA).¹ The categories and codes included in this report are listed below, and were based on the Canadian Institute for Health Information's Mental Illness Diagnosis Categories and Subcategories.⁴¹

CATEGORY	ICD-10-CA CODE
Organic disorders	F00 – Dementia in Alzheimer disease; F01 – Vascular dementia; F02 – Dementia in other diseases classified elsewhere; F03 – Unspecified dementia; F04 – Organic amnesic syndrome, not induced by alcohol and other psychoactive substances; F05 – Delirium, not induced by alcohol and other psychoactive substances; F06 – Other mental disorders due to brain damage and dysfunction and to physical disease; F07 – Personality and behavioural disorders due to brain disease, damage and dysfunction; F09 – Unspecified organic or symptomatic mental disorder; F531 – Severe mental and behavioural disorders associated with the puerperium, not elsewhere classified; G30 – Alzheimer disease
Substance-related disorders	F10 – Mental and behavioural disorders due to use of alcohol; F11 – Mental and behavioural disorders due to use of opioids; F12 – Mental and behavioural disorders due to use of cannabinoids; F13 – Mental and behavioural disorders due to use of sedatives or hypnotics; F14 – Mental and behavioural disorders due to use of cocaine; F15 – Mental and behavioural disorders due to use of other stimulants, including caffeine; F16 – Mental and behavioural disorders due to use of hallucinogens; F17 – Mental and behavioural disorders due to use of tobacco; F18 – Mental and behavioural disorders due to use of volatile solvents; F19 – Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances; F55 – Abuse of non-dependence-producing substances
Schizophrenic and psychotic disorders	F20 – Schizophrenia; F21 – Schizotypal disorder; F22 – Persistent delusional disorders; F23 – Acute and transient psychotic disorders; F24 – Induced delusional disorder; F25 – Schizoaffective disorders; F28 – Other nonorganic psychotic disorders; F29 – Unspecified nonorganic psychosis
Mood disorders	
Bipolar	F30 – Manic episode, F31 – Bipolar affective disorder
Depression	F32 – Depressive episode; F33 – Recurrent depressive disorder, F341 – Dysthymia, F530 – Mild mental or behavioural disorders associated with the puerperium, not elsewhere classified
Other	F34.0 – Cyclothymia; F34.8 – Other persistent mood (affective) disorders; F34.9 – Persistent mood (affective) disorder, unspecified; F38 – Other mood (affective) disorder; F39 – Unspecified mood (affective) disorder
Anxiety disorders	
Anxiety	F40 – Phobic anxiety disorders; F41 – Other anxiety disorders; F42 – Obsessive-compulsive disorder; F93.0 – Separation anxiety disorder of childhood; F93.1 – Phobic anxiety disorder of childhood; F93.2 – Social anxiety disorder of childhood
Acute stress	F43.0 – Acute stress reaction; F43.1 – Post-traumatic stress disorder, F43.8 – Other reactions to severe stress; F43.9 – Reaction to severe stress, unspecified

ICD-10-CA codes continued

CATEGORY	ICD-10-CA CODE
Personality disorders	F60 – Specific personality disorders; F61 – Mixed and other personality disorders; F62 – Enduring personality changes, not attributable to brain damage and disease; F68 – Other disorders of adult personality and behaviour; F69 – Unspecified disorder of adult personality and behaviour
Adjustment disorders	F43.2 – Adjustment disorders; F99 – Mental disorder, not otherwise specified
Physiological malfunctioning arising from mental factors	F59 – Unspecified behavioural syndromes associated with physiological disturbances and physical factors
Sexual disorders	F52 – Sexual dysfunction, not caused by organic disorder or disease; F64 – Gender identity disorders; F65 – Disorders of sexual preference; F66 – Psychological and behavioural disorders associated with sexual development and orientation
Dissociative and factitious disorders	F44 – Dissociative (conversion) disorders; F48.1 – Depersonalization-derealization syndrome
Somatoform disorders	F45 – Somatoform disorders
Eating disorders	F50 – Eating disorders
Disorders of infancy, childhood, adolescence and developmental disorders	F70 – Mild mental retardation; F71 – Moderate mental retardation; F72 – Severe mental retardation; F73 – Profound mental Retardation; F78 – Other mental retardation; F79 – Unspecified mental retardation; F80 – Specific developmental disorders of speech and language; F81 – Specific developmental disorders of scholastic skills; F82 – Specific developmental disorder of motor function; F83 – Mixed specific developmental disorders; F84 – Pervasive developmental disorders; F88 – other disorders of psychological development; F89 – Unspecified disorder of psychological development; F90 – Hyperkinetic disorders; F91 – Conduct disorders; F92 – Mixed disorders of conduct and emotions; F93.3 – Sibling rivalry disorder; F93.8 – Other childhood emotional disorders; F93.9 – Childhood emotional disorder, unspecified; F94 – Disorders of social functioning with onset specific to childhood and adolescence; F95 – Tic disorders; F98 – Other behavioural and emotional disorders with onset usually occurring in childhood and adolescence
Sleep disorders	F51 – Nonorganic sleep disorders
Impulse control disorders	F63 – Habit and impulse disorders
Mental disorders due to a general medical condition not elsewhere classified	F54 – Psychological and behavioural factors associated with disorders or diseases classified elsewhere
All other psychiatric disorders	F48.0 – Neurasthenia; F48.8 – Other specified neurotic disorders; F48.9 – Neurotic disorder, unspecified; F53.8 – other mental and behavioural disorders associated with the puerperium, not elsewhere classified; F53.9 – Puerperal mental disorder, unspecified; O99.3 – mental disorders and diseases of the nervous system complicating pregnancy, childbirth and the puerperium

