MEDIA RELEASE: Friday, May 20, 2011, 4:30 p.m.

REGIONAL MUNICIPALITY OF WATERLOO
COMMUNITY SERVICES COMMITTEE
AGENDA

Tuesday, May 24, 2011
1:00 p.m.
Regional Council Chamber
150 Frederick Street, Kitchener, Ontario

1. DECLARATIONS OF PECUNIARY INTEREST UNDER THE MUNICIPAL CONFLICT OF INTEREST ACT

2. DELEGATIONS
   a) Mark Eys and Monica Morrison, Healthy Communities Partnership Advisory Committee Re: PH-11-023, Waterloo Region Healthy Communities Partnership

3. PRESENTATIONS
   a) Carol Simpson, Workforce Planning Board, Re: 2010 Labour Market Survey

4. REPORTS – Public Health
   a) PH-11-023, Waterloo Region Healthy Communities Partnership
   b) PH-11-024, Suicide in Waterloo Region: A Health Status Report
      (Full Report Distributed Separately to Councillors and Commissioners)
   c) PH-11-025, Healthy Smiles Ontario – Update

5. REPORTS – Social Services
   d) SS-11-021, Update on Best Start Child and Family Centres
   e) SS-11-022, Aboriginal Service Plan and Funding Allocation
      Attachment A
      Attachment B
   f) SS-11-023, Resiliency Initiative Funding for Children’s Services
   g) SS-11-024, Enhanced Employment Services Initiative for Vulnerable Persons

6. INFORMATION/CORRESPONDENCE
   a) Memo: Voice Mail Service Through the Regional Employment Resource Centres
   b) Ministry of Community and Social Services Re: Launch of Licensing Inspection Findings on the Licensed Child Care Website
   c) Region of Waterloo Social Services Annual Report 2010: Highlights
d) Memo: Ontario Works Postal Strike Contingency Plan (To be Distributed at the Meeting)

6. OTHER BUSINESS

a) Council Enquiries and Requests for Information Tracking List

7. NEXT MEETING – June 7, 2011

8. ADJOURN
TO: Chair Sean Strickland and Members of the Community Services Committee

DATE: May 24, 2011 FILE CODE: P02-80

SUBJECT: WATERLOO REGION HEALTHY COMMUNITIES PARTNERSHIP

RECOMMENDATION:

For information.

SUMMARY:

This report summarizes the local process to date to establish recommended actions for the Waterloo Region Healthy Communities Partnership. A copy of the Community Picture will be made available publicly upon final approval by the Ministry of Health Promotion and Sport.

REPORT:

In May 2009, the Ministry of Health Promotion and Sport (Ministry) launched the Healthy Communities Framework, outlining an integrated approach to improving the health of Ontarians. The Framework has three streams: Grants Project Stream; Partnership Stream; and Resource Stream.

For the Partnership Stream, the Ministry mandated the creation of Healthy Communities Partnerships. Locally, Region of Waterloo Public Health (Public Health) was asked to establish and coordinate a Waterloo Region Healthy Communities Partnership to work towards improving health outcomes through the development of local healthy public policies in six program areas – Physical Activity, Sport and Recreation; Injury Prevention; Healthy Eating; Tobacco Use/Exposure; Substance and Alcohol Misuse; and Mental Health Promotion. The goals of the Partnership Stream are to: create shared vision among partnerships, identify key priorities (within the six Ministry program areas), develop additional partnerships and networks, and activate communities to create and implement policy. The Healthy Communities Partnership will also have an opportunity to link local priorities to programs funded under the Grants Project stream. The Healthy Communities Partnership will be officially launched in the near future pending Provincial approval of the project plans.

An interim advisory group, representing 12 community partners, formed to provide input and support Public Health on key decisions during the formation of the Healthy Communities Partnership. The interim advisory group developed a twofold vision: the Healthy Communities Partnership should act as a strong voice for health promotion in Waterloo Region; and it should reflect the diversity of our community in decision making.

While working to develop the local partnership, Public Health was also mandated to develop a comprehensive profile of the community – called a Community Picture – to inform the future work of the Healthy Communities Partnership. As part of the Community Picture, Public Health compiled a detailed assessment of the Waterloo Region community, including the makeup of the community, its health and the most prevalent determinants of health that affect residents. On recommendation from the interim advisory group, data on low income and its effect in each of the six Ministry program areas was investigated.
A consultant was retained to facilitate a community consultation and engagement process around the development of the Community Picture and recommended actions for the Healthy Communities Partnership. Consultation methods included: consultation with 20 Public Health staff, surveys of 19 key informants, two community consultation meetings with 58 attendees, an online survey completed by 105 community stakeholders, and a priority setting meeting with 20 participants. The priority setting meeting resulted in the following three priority actions for the Healthy Communities Partnership:

1. Implement the Healthy Community Food System Plan for Waterloo Region which includes food skills and food access. Ensure that the plan addresses issues which contribute to the viability of local farms and to ensure access to healthy eating options through the implementation of regional and municipal planning, human services, and zoning support.
2. Improve the affordability and availability of physical activity, sports and recreation opportunities, including active transportation, at the neighbourhood level and region wide (including formal and informal).
3. Use social determinants of health approach to address the underlying contributing factors associated with mental health and to advocate for stakeholders to adopt and fund such an approach.

Increasing access to healthy, local foods and physical activity opportunities, and mental health promotion were widely chosen as priorities across the province. The Waterloo Region Food System Roundtable has agreed to act as the lead for the food system priority and the Waterloo Region Active Living Network has agreed, in principle, to take the lead on the physical activity priority.

The Ministry is currently reviewing the Community Profile, the three priority actions listed above and draft work plans and budgets that list next steps to bring these actions to life. These work plans are to be completed and the budget is to be disbursed between June 1, 2011 and March 31, 2012 (subject to approval). The activities outlined in the workplans seek to dovetail Public Health’s existing mandate under the Ontario Public Health Standards to work with community partners to prevent chronic disease.

The timeframe for the development of the Community Picture was very constrained which limited the number of community partners who could be involved in its development. While efforts were made to reach out to a wide variety of organizations and networks, particular sub-groups of the population may not have been well-represented in the consultation process. Consequently, next steps for the Healthy Communities Partnership include determining opportunities for meaningful inclusion of priority populations and the public at large in the planning and implementation of the recommended actions across the six Ministry program areas. For example, Public Health is currently working with Alliance des Réseaux Ontariens de Santé to inform Francophone stakeholders of the process to date and map out strategies for their involvement in the implementation of the priority action work plans.

The Healthy Communities Partnership provides an opportunity for Public Health to work with community partners to create policies that make it easier for Waterloo Region residents to be healthier. Ongoing partnership and meaningful inclusion of priority populations will be required to mobilize community-based action in the three priority areas of healthy eating, physical activity and mental health promotion.

CORPORATE STRATEGIC PLAN:

Strategic Focus Area 3: Healthy and Safe Communities
Support safe and caring communities that enhance all aspects of health
FINANCIAL IMPLICATIONS:
NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:
NIL

ATTACHMENTS
NIL

PREPARED BY:  Jenn Toews, Public Health Planner

APPROVED BY:  Dr. Liana Nolan, Commissioner/Medical Officer of Health
TO: Chair Sean Strickland and Members of the Community Services Committee

DATE: May 24, 2011

FILE CODE: P20-80

SUBJECT: SUICIDE IN WATERLOO REGION: A HEALTH STATUS REPORT

RECOMMENDATION:

THAT the Regional Municipality of Waterloo sends a copy of report PH-11-024 and correspondence to the Chief Coroner of Ontario, the Chief Medical Officer of Health of Ontario, and the Minister of Health of Ontario, recommending that at least one emergency department per regional hub be equipped with a completely safe physical environment for patients at risk of suicide and mental health professionals with the expertise to appropriately assess and manage such high-risk individuals, pursuant to Report PH-11-024, dated May 24, 2011;

AND THAT the Regional Municipality of Waterloo forward a copy of report PH-11-024 to the Association of Local Public Health Agencies (alPHA).

SUMMARY:

Region of Waterloo Public Health has developed Suicide in Waterloo Region: a Health Status Report in accordance with its mandate under the Ontario Public Health Standards, to assess current health status and conduct epidemiological analysis of data on areas of public health importance for the prevention of injuries, such as suicide.

Key findings of the report include the identification of a trend where some Waterloo Region residents visited emergency departments repeatedly in a short time frame for mental health issues associated with increased suicide risk. Given that many patients go to emergency departments at a time of mental health crisis, it is imperative that at least one emergency department in a regional hub be equipped with a completely safe physical environment for patients at risk of suicide, as well as mental health professionals with the expertise to appropriately assess and manage such high-risk individuals.

It is hoped that Suicide in Waterloo Region: a Health Status Report will inform the planning and development of mental health and suicide prevention community services, including supporting the on-going efforts of the Waterloo Region Suicide Prevention Council, who will be releasing a report later this year on the results of their 2006 Waterloo Region Community Strategic Plan.

REPORT:

Suicide is a serious issue in Waterloo Region, as it is in Canada and worldwide. The impact of suicide and suicidal behaviour is broad, including the health care resources required to treat suicidal individuals, the mental stress of precipitating factors on suicidal individuals, and the social and emotional impact on loved ones left behind after a suicide death.

Suicide in Waterloo Region is the first health status report that focuses on suicide and suicidal behaviour in our region. It updates and expands upon local suicide statistics previously reported by
Region of Waterloo Public Health in 2005, and provides background information and context to give readers a richer perspective on the issue of suicide.

An overview of risk factors and populations who are at an increased risk for suicide and suicidal behaviours are first presented, as well as national figures to give Canadian context. Next, statistics for Waterloo Region and Ontario are provided, including the prevalence of certain mental health disorders and suicidal ideation; the incidence of emergency department visits and hospitalizations for suicide; as well as suicide mortality, methods of suicide and potential years of life lost. Two special sections are included; the first highlights the issue of repeat visits to emergency departments for mental health issues and suicide attempts, and the second describes local trends in suicide and suicidal behavior in youth and young adults. The most recent available data are used in all cases, to provide the most up-to-date picture of suicide possible.

Suicidal behaviour has many underlying causes. Some of the most common contributing factors include mental health disorders, particularly mood disorders; social and economic factors such as social isolation or unemployment; genetic predispositions for mental health disorders; and stressful life events. Epidemiological evidence has shown certain groups in society are at greater risk for suicide, including adolescents, middle-aged and elderly persons, and Aboriginals. In addition, there are important differences in suicide by sex, where men attempt suicide less often, but are more likely to complete suicide than women. In Canada, the suicide mortality rate in 2007 was 10.2 deaths per 100,000 Canadians, a rate that has remained relatively unchanged since 2000.

KEY FINDINGS:

A significant portion of suicidal individuals seeks help from health professionals before attempting suicide. Individuals experiencing mental health crises frequently visit emergency departments, and sometimes visit repeatedly within a short time frame for similar mental health issues. These repeat mental health visits suggest that the patients’ mental health issues are not being resolved. In 2009, 590 Waterloo Region residents presented at emergency departments more than once within a 30-day period with mental health issues associated with an increased risk of suicide. Men aged 50 to 59 years in Waterloo Region had particularly high rates of repeat mental health visits.

Other key findings include:

- In 2007, 42 Waterloo Region residents died by suicide.
- About half of suicides in Waterloo Region and forty per cent of those in Ontario were done by hanging, strangulation or suffocation. The second most common method locally and provincially was poisoning by drugs or alcohol.
- In 2009, there were about 600 emergency department visits and about 250 hospitalizations for suicide attempts for Waterloo Region residents.
- Both emergency department visit rates and hospitalization rates for suicide attempts were higher in Waterloo Region than for the entire province, although these rates are decreasing.
- Females aged 10 to 29 years had the highest rates of emergency department visits and females aged 10 to 49 years had the highest hospitalization rates for attempted suicide.
- Suicidal ideation and attempted suicide are reported more frequently in Ontario youth aged 15 to 19 years, compared to the overall provincial population aged 15 and older.
- In Waterloo Region, seven to ten individuals aged 10 to 29 took their own lives, annually from 2000 to 2007.
- Rates of emergency department visits and hospitalizations for suicide attempts in youth and young adults aged 10 to 29 years were higher than those of the whole local and provincial populations.
CORPORATE STRATEGIC PLAN:

Focus Area 3: Support safe and caring communities that enhance all aspects of health.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Printed and bound copy of *Suicide in Waterloo Region: a Health Status Report*

Note that the full report *Suicide in Waterloo Region: a Health Status Report* will also be accessible effective May 24, 2011 at:

http://www.region.waterloo.on.ca/ph

Region of Waterloo Public Health homepage
   Go to: Resources > Health Status and Research Studies > Mental Health

PREPARED BY:  Jessica Deming, Epidemiologist
                Dr. Hsiu-Li Wang, Associate Medical Officer of Health

APPROVED BY:  Dr. Liana Nolan, Commissioner/Medical Officer of Health
Acknowledgements

Authors
Jessica Deming, Amanda Tavares, Stephen Drew

Contributors
Mary Denomme, RN, Gayle Jessop, Sharlene Sedgwick Walsh, Dr. Hsiu-Li Wang

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For more information, please contact:
Epidemiology and Health Analytics
Region of Waterloo Public Health
99 Regina Street South, 3rd floor
Waterloo, Ontario N2J 4V3

Phone: 519-883-2004 x5413
Email: eha@regionofwaterloo.ca
http://www.region.waterloo.on.ca/ph

Internal access to report: DOCS# 939303

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Message from the Medical Officer of Health

The Ontario Public Health Standards (OPHS) establish requirements for the fundamental public health programs and services carried out by boards of health. As part of its mandate, Region of Waterloo Public Health assesses current health status and conducts epidemiological analysis of data on areas of public health importance for the prevention of injuries, such as suicide.

I would like to introduce *Suicide in Waterloo Region: a Health Status Report*, the first health status report in our region with a focus on suicide. This report updates and expands upon local suicide statistics previously reported by Region of Waterloo Public Health, and provides background information and context to give readers a richer perspective on the issue of suicide.

The report first presents an overview of risk factors and groups who are at an increased risk for suicide and suicidal behaviours, as well as national figures that give Canadian context. Next, statistics for Waterloo Region and Ontario are provided, including the prevalence of certain mental health disorders and suicidal ideation; the incidence of emergency department visits and hospitalizations for suicides; as well as suicide mortality, methods of suicide and potential years of life lost. A special section highlighting local trends in suicide and suicidal behaviour in youth and young adults is also included. The most recent available data are used in all cases, to provide the most up-to-date picture of suicide possible.

I hope that you find the information in this report both useful and meaningful. As always, Region of Waterloo Public Health is continually working to keep the body of knowledge on local population health issues current, an important foundational step in our efforts to build healthy and supportive communities in partnership.

Dr. Liana Nolan
Commissioner/Medical Officer of Health,
Region of Waterloo Public Health
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<tr>
<td>APA</td>
<td>American Psychiatric Association</td>
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<tr>
<td>AUDIT</td>
<td>Alcohol Use Disorder Identification Test</td>
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<tr>
<td>CAMH</td>
<td>Centre for Addiction and Mental Health</td>
</tr>
<tr>
<td>CCHS</td>
<td>Canadian Community Health Survey</td>
</tr>
<tr>
<td>CI</td>
<td>Confidence interval</td>
</tr>
<tr>
<td>CIHI</td>
<td>Canadian Institute for Health Information</td>
</tr>
<tr>
<td>CRAFFT</td>
<td>Car, Relax, Alone, Forget, Family/Friends, Trouble (substance abuse screening test)</td>
</tr>
<tr>
<td>CTAS</td>
<td>Canadian (Emergency Department) Trauma and Acuity Scale</td>
</tr>
<tr>
<td>DAD</td>
<td>Discharge Abstract Database</td>
</tr>
<tr>
<td>Hosp’n’s</td>
<td>Hospitalizations</td>
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<tr>
<td>ICD</td>
<td>International Classification of Diseases</td>
</tr>
<tr>
<td>MOHLTC</td>
<td>(Ontario) Ministry of Health and Long Term Care</td>
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<tr>
<td>NACRS</td>
<td>National Ambulatory Care Reporting System</td>
</tr>
<tr>
<td>NR</td>
<td>Not reportable</td>
</tr>
<tr>
<td>OCC</td>
<td>Office of the Chief Coroner (of Ontario)</td>
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<tr>
<td>OSDUHS</td>
<td>Ontario Student Drug Use and Health Survey</td>
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<tr>
<td>US</td>
<td>United States of America</td>
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<td>WHO</td>
<td>World Health Organization</td>
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**Executive Summary**

Suicide is a serious issue in Waterloo Region, as it is in Canada and worldwide. The impact of suicide and suicidal behaviour is broad, including the health care resources required to treat suicidal individuals, the mental stress of precipitating factors on suicidal individuals, and the social and emotional impact on loved ones left behind after a suicide death.

Suicidal behaviour has many underlying causes. Some of the most common contributing factors include mental health disorders, particularly mood disorders, social and economic factors such as social isolation or unemployment, genetic predispositions for mental health disorders, and stressful life events. Epidemiological evidence has shown certain groups in society are at greater risk for suicide, including adolescents, middle-aged and elderly persons, and Aboriginals. In addition, there are important differences in suicide by sex, where men attempt suicide less often, but are more likely to complete suicide than women.

In Canada, the suicide mortality rate in 2007 was 10.2 deaths per 100,000 Canadians, a rate that has remained relatively unchanged since 2000. Men accounted for many of these suicide deaths, though male suicide rates have slowly declined over time. Female adolescents had the greatest proportion of hospitalizations occurring due to an attempted suicide. Almost four per cent of Canadians reported seriously contemplating suicide within the past year.

**Waterloo Region Key Findings**

The prevalence of mood disorders and anxiety disorders are similar in Waterloo Region and Ontario. Females reported both types of mental health disorders more frequently than males, although this may have been due to differences in self-reporting between the sexes. Suicidal ideation was less prevalent in Ontario and Waterloo Region than in Canada, with less than two per cent of local and provincial residents contemplating suicide in the past year. Less than one per cent of Waterloo Region and Ontario residents reported ever attempting suicide.

Individuals who attempt suicide are often treated in an emergency department, or in cases that are more serious, they may be admitted into hospital. In 2009, about 600 Waterloo Region residents were treated in an emergency department and about 250 were admitted into hospital for a suicide attempt. Both emergency department visit rates and hospitalization rates for suicide attempts were higher in Waterloo Region than all of Ontario. Females aged 10 to 19 and 20 to 29 years had the highest rates of emergency department visits for attempted suicide in both Waterloo Region and Ontario. Hospitalization rates were highest in Waterloo Region females from ages 10 to 49 years. In general, emergency department visit and hospitalization rates declined over the lifespan.

In 2009, 590 individuals in Waterloo Region presented at emergency departments more than once within a 30-day period, with mental health issues associated with increased risk of suicide. Rates of repeat mental health visits were particularly high in males aged 50 to 59 years in Waterloo Region. Most of the repeat mental health visits in Waterloo Region occurred because
of substance use-related issues, neurotic disorders, mood disorders or suicidal ideation. The majority of the repeat visits were triaged as either emergent or urgent issues. Over half of the repeat visits resulted in the patient being discharged home, and 14.7 per cent of the visits ended with the patient leaving before receiving complete treatment. Individuals who present repeatedly at emergency departments with mental health issues may be at increased suicide risk, and formal suicide risk assessment is warranted in all such cases (APA, 2003).

In 2007, 42 individuals died of suicide in Waterloo Region. The suicide mortality rate in Waterloo Region in 2007 was 7.8 per 100,000 population. Similar to national trends, men accounted for most of the suicide mortalities in Waterloo Region and Ontario; the suicide mortality rate in Waterloo Region men in 2009 was 12.4 deaths per 100,000 males. There was a peak in suicide mortality rates in 40 to 49 year olds in Ontario and Waterloo Region males. Overall, 1,326 years of potential life were lost in Waterloo Region in 2007 from suicide deaths.

About half of suicides in Waterloo Region and forty per cent of those in Ontario were done by hanging, strangulation or suffocation. The second most common method both locally and provincially was poisoning by drugs or alcohol. Use of different suicide methods varied by sex in Ontario, with men being more likely to die by suicide using hanging, strangulation, or suffocation as well as firearms. This finding coincides with evidence that men tend to use more immediately lethal methods than women, which concurs with higher suicide attempt rates in females and higher suicide death rates in men.

Adolescents and young adults are a high-risk group for suicidal behaviour. In youth, suicidal behaviour has been linked with drug and alcohol use. In Waterloo Region in 2009, 27.7 per cent of students in grades 7 to 12 exhibited potential hazardous drinking and 18.7 per cent had a potential drug use problem. Suicidal ideation and attempted suicide are reported more frequently in Ontario youth ages 15 to 19 years, compared to the overall provincial population. Rates of emergency department visits and hospitalizations for suicide attempts in young adults aged 10 to 29 years were higher than the overall rates.

From 2000 to 2007 in Waterloo Region, between 7 to 10 youth and young adults aged 10 to 29 years took their own lives each year. In Canada there was a small peak in suicide deaths in 20 to 29 year old males, however this trend was not seen in Waterloo Region or Ontario. In 10 to 19 year old Ontarians, over seventy per cent of suicides were done using hanging, strangulation or suffocation, whereas 52.5 per cent of suicides in 20 to 29 year olds used those methods. Adolescents continue to be an important target group for suicide prevention strategies.

Certain strategies, such as public education campaigns, means restriction, control of substances such as tobacco and alcohol, toning down dramatic media reports on suicide deaths, and school-based programs have all been demonstrated to be effective in suicide prevention. It is hoped that this report will serve to raise awareness of the importance of suicide in our local community, as well as to inform the activities of the Waterloo Region Suicide Prevention Council, its member organizations, and other community groups who aim to reduce the incidence of suicide in Waterloo Region.
1 Introduction

Suicide, the “human act of self-inflicting one’s own life cessation,” (World Health Organization, 2002) is a serious issue with a global impact. The World Health Organization (WHO) estimates that almost one million people die from suicide every year, the equivalent of one death every forty seconds (2011).

The problem of suicide is broader than just the core issue of intentional self-inflicted deaths. Many people survive suicide attempts, require medical care to tend to physical and mental health issues, and are often at risk for subsequent attempts. Suicidal ideation, also known as suicidal thoughts, and the stress of precipitating factors can cause significant anguish to sufferers. There are profound impacts on loved ones left behind after a suicide death, including emotional, financial and social effects. Suicide also has a significant economic impact on society; the annual economic cost of suicide worldwide has been estimated in the billions of United States (US) dollars (WHO, 2002). A Canadian study conducted in New Brunswick estimated the average cost per suicide death in 1996 at $849,878 (Clayton & Barcelo, 1999).

This first chapter provides an overview of the important issue of suicide. Risk factors and populations who are at an increased risk for suicide are discussed, as well as Canadian national trends in attempted suicide and suicide mortality.

1.1 Risk Factors and Populations at Risk for Suicide

Suicidal behaviour has many underlying causes. No single factor has been proven to be necessary or sufficient to cause suicidal behaviour (Health Canada, 1994). Rather, suicidal behaviour is a multi-faceted issue, the result of complex interactions between individual, relationship, social, cultural and environmental factors (Leenaars, 2005). Suicide rarely occurs suddenly and without warning; in most cases, a combination of precipitating factors increase one’s risk over a longer period of time, then a stressful life event (e.g., sudden loss of a loved one) initiates a critical, acute period of heightened risk for suicidal behaviour.

Generally speaking, there are six broad categories of precipitating factors for suicide and suicidal behaviour: 1) sociological, economic and cultural factors; 2) mental health disorders; 3) neurobiological factors; 4) genetics and family background; 5) life events; and 6) personality and psychological influences. Extensive research corroborates that these are important contributing factors to increased risk for suicide, both internationally and in Canada (Ajdacic-Gross et al., 2006; Borges et al., 2010; Burrows, Auger, Roy, & Alix, 2010; Currie et al., 2005; Goldstein & Levitt, 2006; McGirr et al., 2009; Newman & Bland, 2007; Sakinofsky & Webster, 2010; WHO, 2002).

Table 1.1 summarizes these major factors associated with an increased risk of suicide and suicidal behaviour, as described in Suicide in Canada: Update of the Report of the Task Force on Suicide in Canada (Health Canada, 1994).
Table 1.1. Factors contributing to suicide and suicidal behaviour

<table>
<thead>
<tr>
<th>Type of factor</th>
<th>Examples of factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociological, economic and cultural factors</td>
<td>• Demoralization or fragmentation of society</td>
</tr>
<tr>
<td></td>
<td>• Permissive social attitudes towards suicide</td>
</tr>
<tr>
<td></td>
<td>• Media attention to celebrity suicides</td>
</tr>
<tr>
<td></td>
<td>• Social isolation</td>
</tr>
<tr>
<td></td>
<td>• Suicide of role models or peers</td>
</tr>
<tr>
<td></td>
<td>• Unemployment</td>
</tr>
<tr>
<td></td>
<td>• Environmental factors that increase access to means (e.g., readily available firearms)</td>
</tr>
<tr>
<td>Mental health disorders</td>
<td>• Mood disorders (e.g., depression)</td>
</tr>
<tr>
<td></td>
<td>• Abuse of alcohol and other substances</td>
</tr>
<tr>
<td></td>
<td>• Schizophrenia</td>
</tr>
<tr>
<td></td>
<td>• Anxiety disorders</td>
</tr>
<tr>
<td></td>
<td>• Personality disorders</td>
</tr>
<tr>
<td></td>
<td>• Other mental health disorders</td>
</tr>
<tr>
<td>Neurobiological findings</td>
<td>• Brain serotonin neurotransmission deficiency</td>
</tr>
<tr>
<td>Genetic and family background</td>
<td>• Genetic predispositions to particular mental health disorders</td>
</tr>
<tr>
<td></td>
<td>• Family history of suicide</td>
</tr>
<tr>
<td></td>
<td>• Poor relationship with parent</td>
</tr>
<tr>
<td></td>
<td>• Death of parent</td>
</tr>
<tr>
<td>Life events</td>
<td>• Stressful life event, e.g., losses or interpersonal conflicts</td>
</tr>
<tr>
<td></td>
<td>• AIDS or other terminal illness</td>
</tr>
<tr>
<td>Personality and psychological influences</td>
<td>• High levels of anxiety</td>
</tr>
<tr>
<td></td>
<td>• Not feeling in control of one’s life (external locus of control)</td>
</tr>
<tr>
<td></td>
<td>• Irrational thinking</td>
</tr>
<tr>
<td></td>
<td>• Neuroticism</td>
</tr>
<tr>
<td></td>
<td>• Low self-esteem or sense of mastery</td>
</tr>
<tr>
<td></td>
<td>• Poor problem-solving or coping skills</td>
</tr>
</tbody>
</table>


Epidemiological evidence has demonstrated that certain groups in society experience higher rates of suicide and suicidal behaviour compared to the general population. These higher rates occur as a result of higher prevalence of characteristics or exposures that elevate suicide risk, such as those mentioned above (Corna, Cairney, & Streiner, 2010; Health Canada, 1994; Sakinofsky & Webster, 2010; WHO, 2002).

Table 1.2 summarizes populations that have high rates of suicide and suicidal behaviour, as well as common precipitating factors identified for those groups. The six key populations that experience elevated suicide rates are: 1) adolescents and young adults; 2) late middle-aged and elderly persons; 3) Aboriginals; 4) sexual minorities; 5) persons in custody (i.e., prison inmates); and 6) persons with history of parasuicide.
Table 1.2. Common precipitating factors and populations with high rates of suicide

<table>
<thead>
<tr>
<th>Population</th>
<th>Common precipitating factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescents and young adults</td>
<td>• Conduct or emotional disorder</td>
</tr>
<tr>
<td></td>
<td>• Family dysfunction</td>
</tr>
<tr>
<td></td>
<td>• Previous history of abuse</td>
</tr>
<tr>
<td></td>
<td>• Impulsivity</td>
</tr>
<tr>
<td></td>
<td>• Availability of firearms</td>
</tr>
<tr>
<td></td>
<td>• Media attention on celebrity suicide</td>
</tr>
<tr>
<td></td>
<td>• Suicide among peers</td>
</tr>
<tr>
<td>Late middle-aged and elderly persons</td>
<td>• Unemployment</td>
</tr>
<tr>
<td></td>
<td>• Social isolation</td>
</tr>
<tr>
<td></td>
<td>• Depression</td>
</tr>
<tr>
<td></td>
<td>• Poor health or terminal illness</td>
</tr>
<tr>
<td></td>
<td>• Alcohol or other substance abuse</td>
</tr>
<tr>
<td>Aboriginal communities</td>
<td>• Alcohol abuse</td>
</tr>
<tr>
<td></td>
<td>• Depression</td>
</tr>
<tr>
<td></td>
<td>• Loss of dignity and changing lifestyles</td>
</tr>
<tr>
<td></td>
<td>• Economic changes</td>
</tr>
<tr>
<td></td>
<td>• Availability of firearms</td>
</tr>
<tr>
<td></td>
<td>• Social isolation and feelings of rejection</td>
</tr>
<tr>
<td>Sexual minorities</td>
<td>• Stress associated with acknowledging sexual orientation to families, communities and self</td>
</tr>
<tr>
<td></td>
<td>• Loss of important relationships</td>
</tr>
<tr>
<td>Persons in custody</td>
<td>• Offence committed against another person or guilt about offence</td>
</tr>
<tr>
<td></td>
<td>• Inability to face the length of sentence</td>
</tr>
<tr>
<td></td>
<td>• Actual or perceived victimization by other inmates</td>
</tr>
<tr>
<td></td>
<td>• Feelings of hopelessness</td>
</tr>
<tr>
<td></td>
<td>• Isolation from family</td>
</tr>
<tr>
<td></td>
<td>• Mental health disorders</td>
</tr>
<tr>
<td></td>
<td>• Alcohol and other substance abuse</td>
</tr>
<tr>
<td>Persons with history of repeated parasuicide (e.g., females)</td>
<td>• Depression or other affective disorders</td>
</tr>
<tr>
<td></td>
<td>• Personality disorders</td>
</tr>
<tr>
<td></td>
<td>• Social isolation</td>
</tr>
<tr>
<td></td>
<td>• Low self-esteem</td>
</tr>
<tr>
<td></td>
<td>• Unemployment</td>
</tr>
<tr>
<td></td>
<td>• Family dysfunction</td>
</tr>
<tr>
<td></td>
<td>• Extreme distress</td>
</tr>
</tbody>
</table>


Of note, there are extremely high rates of suicide mortality in aboriginals in Canada. It has been said that Canadian aboriginals are experiencing an ‘epidemic’ of suicide (WHO, 2002). Indeed, Canadian aboriginal youth have the highest rate of suicide than any other identified culture in the world (MacNeil, 2008; WHO, 2002). The highest suicide mortality rate in Canadian aboriginal youth is at the Pikangikum reserve in Northwestern Ontario, where the rate is 36
times the national average (MacNeil, 2008). Suicide prevention strategies in Canada continue to target Aboriginal communities to try to reduce these elevated suicide rates.

In addition to the key high-risk groups listed in Table 1.2, several other populations have demonstrated increased risk for suicide. Pathological gamblers are three times more likely to attempt suicide than non-pathological gamblers. (Newman & Thompson, 2007). Homeless and marginally housed people are more than twice as likely to die by suicide compared to the general Canadian population (Hwang, Wilkins, Tjepkema, O’Campo, & Dunn, 2009). Evidence also suggests that people with chronic diseases such as Type 1 diabetes, obesity, arthritis and other chronic pain conditions are at an elevated risk for suicidal behaviour (Fuller-Thomson & Sawyer, 2009; Fuller-Thomson & Shaked, 2009; Mather, Cox, Enns, & Sareen, 2009; Ratcliffe, Enns, Belik, & Sareen, 2008). Conversely, immigrants are at a decreased risk for suicide, with suicide mortality rates half that of the Canadian-born population (Malenfant, 2004).

### 1.2 Canadian Context

The impact of suicides on a community can be measured through the prevalence of suicidal thoughts, the rate of hospitalizations due to attempted suicide, and suicide mortality rates. This section provides an epidemiological overview of suicide at the national level; later in the report, suicide and suicidal behaviour will be examined at both the local and provincial levels.

In 2002, the Canadian Community Health Survey (CCHS) placed an emphasis on mental health and well-being. When individuals aged 15 years and over were asked if they had considered suicide in the 12 months prior to the interview, 919,795 Canadians, or 3.7 per cent of the Canadian population said they had. The proportion of those stating they had suicidal thoughts was largest among 15 to 24 year olds at 6.0 per cent. In this age group, females were more likely than males to have had suicidal thoughts in the past 12 months (7.3 per cent versus 4.7 per cent). For all other age groups there were no significant differences by sex (Statistics Canada, 2007). Since the data are self-reported or reported via proxy, results may be under-reported due to social desirability bias, recall bias, and or errors from proxy reporting.

Hospitalizations represent some but not all suicide attempts, as they include only those attempters whose medical condition was recognized as resulting from a suicide attempt and serious enough to warrant admittance into hospital. Figure 1.1 shows proportions of hospitalizations in Canada that occurred because of attempted suicide. The data exclude individuals who may have visited an emergency department or other medical facility, but were not admitted to hospital. In 2008, there were 12,543 hospitalizations because of an attempted suicide in Canada, excluding the province of Quebec. At the time of publication, Quebec data were not available. In Canada, the majority (61.1 per cent) of hospitalizations were for female patients (Canadian Institute for Health Information (CIHI), 2008). This finding is consistent with results from other studies that indicate in Canada and worldwide, women are more likely than men to be hospitalized from a suicide attempt, while men are more likely than women to die from a suicide (Sakinofsky & Webster, 2010; SmartRisk, 2009; WHO, 2002). In both males and females, the most commonly reported method for a suicide attempt in Canada was poisoning.
In 2008, 86.1 per cent of hospitalizations occurred due to poisoning-related suicide attempts (CIHI, 2008).

Figure 1.1. Proportion of hospitalizations for attempted suicide, by sex and age group, Canada, 2008

In Canada, between 2000 and 2007, suicide deaths represented an average of 1.6 per cent of all deaths, an average of 3,649 deaths a year, or 10 deaths per day (Statistics Canada, 2010a). Figure 1.2 displays the age-standardized mortality rates due to suicides over this eight-year period. Suicide rates remained steady between 2000 and 2005 and began to decrease in 2006 and 2007. Males have consistently higher rates of suicide than females over these years.
In 2007, males aged 45 to 49 years old had the highest suicide mortality rate with a rate of 27.0 deaths per 100,000 males (Figure 1.3). The age-specific mortality rate due to suicide for males also had peaks at the 25 to 29 year, and 80 to 84 year age groups. Females did not appear to have a third peak later in life, but did have peaks that were more gradual in the 20 to 24 year and 45 to 49 year age groups.

Suicide is a leading cause of death in individuals aged 15 to 24 years, second only to unintentional (also known as accidental) injuries. In Canada, individuals aged 15-24 years represent approximately 13 per cent of all suicide deaths. In 2007, suicides represented 21.1 per cent of all deaths among individuals aged 15 to 24 years (22.0 per cent in males and 18.9 per cent in females; Statistics Canada, 2010a). Since so many young people lose their lives to suicide, suicide represents a large proportion of potential years of life lost. Potential years of life lost are the number of years of potential life not lived when a person dies before age 75. In 2007, suicide resulted in 351.4 potential years of life lost per 100,000 population in Canada.
Males had more potential years of life lost per 100,000 population than females (527.8 versus 173.1; Statistics Canada, 2011), as males are more likely to complete suicide.

Figure 1.3. Age-specific suicide mortality rates, by sex, Canada, 2007

![Graph showing age-specific suicide mortality rates by sex, Canada, 2007](image)


Suicide mortality rates are not distributed evenly across the country. In 2007, the Northwest Territories and Nunavut had the highest suicide mortality rates in the country, while the Yukon had the lowest rate (Table 1.1). The Yukon, however, had similar rates to the other territories between 2000 and 2004, (Sakinofsky & Webster, 2010; Statistics Canada, 2010b) and Yukon suicide rates are subject to greater variability because of its small population. The factors leading to the high suicide rates in Aboriginal communities are complex and have been the focus of multiple studies (Laliberte & Tousignant, 2009; Tjepkema, Wilkins, Senecal, Guimond, & Penney, 2009). The highest suicide mortality rate in 2007 among the provinces was in Quebec. Ontario had the lowest rate, although evidence suggests Ontario has a high rate of underreporting (Health Canada, 1994). Despite its high mortality rate, Quebec has one of the lowest rates of hospitalizations due to suicide attempts (Burrows et al., 2010; Sakinofsky & Webster, 2010). This trend may be due to differences in treatment of attempted suicides in Quebec compared to the rest of Canada.
Table 1.3. Standardized suicide mortality rates by sex and province/territory, Canada, 2007*

<table>
<thead>
<tr>
<th>Province/Territory</th>
<th>Rate per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
</tr>
<tr>
<td>Alberta</td>
<td>17.5</td>
</tr>
<tr>
<td>British Columbia</td>
<td>13.6</td>
</tr>
<tr>
<td>Manitoba</td>
<td>15.4</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>15.0</td>
</tr>
<tr>
<td>Newfoundland and Labrador</td>
<td>19.3</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>31.3</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>13.2</td>
</tr>
<tr>
<td>Nunavut</td>
<td>82.1</td>
</tr>
<tr>
<td>Ontario</td>
<td>12.3</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>17.6</td>
</tr>
<tr>
<td>Quebec</td>
<td>20.7</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>18.0</td>
</tr>
<tr>
<td>Yukon</td>
<td>14.2</td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td><strong>15.7</strong></td>
</tr>
</tbody>
</table>

*Rates are age-standardized to the 1991 (adjusted) Canadian population.


It was estimated that in 2004, indirect and direct costs associated with suicide deaths and hospitalizations totalled 2.4 billion dollars in all of Canada and 842 million dollars in Ontario. Direct costs included the value of resources or health care costs used to treat individuals, and the indirect costs were the value lost to society because of a suicide or suicide attempt. The calculation did not attempt to calculate the economic costs of the pain and suffering experienced by injured Canadians and their families. Overall, suicides represented 12 per cent of all injury related costs (SmartRisk, 2009).

In Chapter 2, figures on suicide and suicidal behaviour for both Ontario and Waterloo Region will be examined. Caution must be used when comparing hospitalization and death statistics from the provincial and local levels to the national level, as there are provincial differences in how the ICD-9 and ICD-10 codes are used to classify deaths and hospitalization data.
2  Suicide in Waterloo Region and Ontario

Suicide and suicidal behaviour in Waterloo Region are described in this chapter using the following indicators:

- Self-reported prevalence of certain mental health disorders that are associated with suicidal behaviour
- Self-reported incidence of suicide ideation and attempted suicide
- Incidence of emergency department visits for suicide attempts
- Incidence of in-patient hospitalizations for suicide attempts
- Suicide mortality rates
- Proportion of suicide deaths by method
- Potential years of life lost due to suicide

In addition, two special sections are included which highlight special populations who may be at increased risk for suicide and suicidal behaviour: 1) individuals with repeat visits to emergency departments for mental health issues; and 2) youth and young adults.

Rates and proportions for both Waterloo Region and Ontario are provided where possible, to allow comparisons between regional and provincial trends. The most recent available data were used to provide an up-to-date picture of suicide in Waterloo Region.

2.1  Mental Health Disorders

Mental health disorders, such as major depressive disorder, mood disorders and anxiety disorders, are strongly associated with suicidal behaviour (Health Canada, 1994; WHO, 2002). Research suggests that almost 30 per cent of Canadians with depression also experience suicidal ideation or have attempted suicide (Rhodes, Bethell, & Bondy, 2006). Chronic major depression has also been shown to be associated with increased risk for suicidal ideation and attempts over a lifetime (Satyanarayana, Enns, Cox, & Sareen, 2009). The lifetime prevalence of major depressive episodes in Canada is 12.2 per cent (Patten et al., 2006).

Table 2.1 shows the proportion of the population aged 12 years and older who report having been diagnosed as having a mood or anxiety disorder that lasted for at least 6 months. Rates of anxiety disorder diagnoses are similar in Waterloo Region and Ontario (4.6 versus 5.9 per cent), as are rates of mood disorder diagnoses (7.8 versus 7.2 per cent). There were no statistically significant differences by age or sex in rates of anxiety or mood disorder diagnoses in Waterloo Region; however, high sampling variability due to small numbers may have prevented true differences from being detected.
Table 2.1. Proportion of population aged 12 years and older with an anxiety† or mood‡ disorder, by sex and age group, Waterloo Region and Ontario, 2007-2008

<table>
<thead>
<tr>
<th>Sub-group</th>
<th>Anxiety Disorder</th>
<th>Mood Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Waterloo Region</td>
<td>Ontario</td>
</tr>
<tr>
<td>Females</td>
<td>6.3 (CI: 4.1-8.6)</td>
<td>7.8 (CI: 7.2-8.4)</td>
</tr>
<tr>
<td>Males</td>
<td>2.8 (CI: 1.3-4.4)</td>
<td>3.9 (CI: 3.5-4.3)</td>
</tr>
<tr>
<td>12 to 19 years</td>
<td>6.5 (CI: 3.0-10.0)</td>
<td>4.8 (CI: 4.0-5.6)</td>
</tr>
<tr>
<td>20 to 34 years</td>
<td>5.2 (CI: 2.7-7.7)</td>
<td>6.9 (CI: 6.1-7.7)</td>
</tr>
<tr>
<td>35 to 49 years</td>
<td>NR</td>
<td>6.4 (CI: 5.6-7.2)</td>
</tr>
<tr>
<td>50 to 64 years</td>
<td>7.4 (CI: 3.3-11.4)</td>
<td>6.3 (CI: 5.5-7.1)</td>
</tr>
<tr>
<td>65 years and older</td>
<td>NR</td>
<td>3.7 (CI: 3.2-4.2)</td>
</tr>
<tr>
<td>Overall</td>
<td>4.6 (CI: 3.2-5.9)</td>
<td>5.9 (CI: 5.5-6.3)</td>
</tr>
</tbody>
</table>

E = high sampling variability; estimates must be interpreted with caution.

b = statistically significant difference from the overall Ontario estimate.

NR = not reportable due to high sampling variability.

‘CI’ refers to the 95% confidence interval of the estimate.

† Anxiety disorder includes phobias, obsessive-compulsive disorder or a panic disorder and must have lasted for at least 6 months and must have been diagnosed by a health professional.

‡ Mood disorder includes depression, bipolar disorder, mania or dysthymia and must have lasted for at least 6 months and must have been diagnosed by a health professional.


In Ontario, there were some statistically significant differences by age and sex. Females were more likely to report both anxiety and mood disorders (7.8 and 9.4 per cent) as compared to the overall provincial rate; conversely, males were less likely to report either disorder (3.9 and 5.0 per cent, respectively). Adults aged 65 and older were significantly less likely to report an anxiety disorder (3.7 per cent) compared to the average for Ontario. Youth aged 12 to 19 years were significantly less likely to report a mood disorder (3.7 per cent) compared to the Ontario average. Ontario adults aged 50 to 64 years were significantly more likely to report a mood disorder diagnosis (9.2 per cent) than the Ontario average.

2.2 Suicidal Ideation

Suicidal ideation, a medical term referring to thoughts and considerations about taking one’s life, is often but not always associated with suicide attempts (Peter, Roberts, & Buzdugan, 2008). As Table 2.2 shows, 7.9 per cent of Ontarians and 7.6 per cent of Waterloo Region residents reported ever seriously considering suicide in their lifetime. Males and adults aged 65 and older in Ontario were significantly less likely to report ever considering suicide compared to the provincial average. There were no significant differences by age or sex for Waterloo Region residents.
Suicidal thoughts in the past year were infrequent in the local and provincial populations (1.3 per cent in Waterloo Region and 1.7 per cent in Ontario). People aged 15 to 19 years in Ontario were significantly more likely to report considering suicide in the past year compared to the Ontario average, whereas people aged 65 and older were significantly less likely than the overall Ontario population to report such thoughts. There were no significant differences by age or sex for Waterloo Region residents.

Table 2.2. Proportion of the population aged 15 years and older who seriously considered suicide, in the past 12 months or in their lifetime, by sex and age group, Waterloo Region and Ontario, 2005 and 2007-2008

<table>
<thead>
<tr>
<th>Sub-group</th>
<th>In their lifetime</th>
<th></th>
<th>In the past 12 months</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Waterloo Region</td>
<td>Ontario</td>
<td></td>
<td>Waterloo Region</td>
</tr>
<tr>
<td>Females</td>
<td>7.7 (CI: 5.9-9.5)</td>
<td>9.0 (CI: 8.6-9.5)</td>
<td>1.3 (CI: 0.6-2.0)</td>
<td>1.9 (CI: 1.7-2.1)</td>
</tr>
<tr>
<td>Males</td>
<td>7.4 (CI: 5.8-9.1)</td>
<td>6.7 (CI: 6.3-7.1)</td>
<td>1.4 (CI: 0.6-2.2)</td>
<td>1.6 (CI: 1.4-1.8)</td>
</tr>
<tr>
<td>15 to 19 years</td>
<td>9.1 (CI: 4.9-13.3)</td>
<td>7.8 (CI: 6.8-8.7)</td>
<td>NR</td>
<td>3.5 (CI: 2.9-4.1)b</td>
</tr>
<tr>
<td>20 to 34 years</td>
<td>9.3 (CI: 6.7-12.0)</td>
<td>9.2 (CI: 8.5-9.8)</td>
<td>NR</td>
<td>1.9 (CI: 1.6-2.2)</td>
</tr>
<tr>
<td>35 to 49 years</td>
<td>6.9 (CI: 4.8-9.1)</td>
<td>8.4 (CI: 7.9-9.0)</td>
<td>NR</td>
<td>1.7 (CI: 1.4-1.9)</td>
</tr>
<tr>
<td>50 to 64 years</td>
<td>7.1 (CI: 4.7-9.5)</td>
<td>8.2 (CI: 7.5-8.8)</td>
<td>NR</td>
<td>1.7 (CI: 1.3-2.0)</td>
</tr>
<tr>
<td>65 years and older</td>
<td>4.9 (CI: 2.8-7.1)</td>
<td>4.3 (CI: 3.8-4.7)</td>
<td>NR</td>
<td>0.6 (CI: 0.5-0.8)b</td>
</tr>
<tr>
<td>Overall</td>
<td>7.6 (CI: 6.3-8.8)</td>
<td>7.9 (CI: 7.6-8.2)</td>
<td>1.3 (CI: 0.8-1.8)</td>
<td>1.7 (CI: 1.6-1.9)</td>
</tr>
</tbody>
</table>

E = high sampling variability; estimates must be interpreted with caution.

b = statistically significant difference from the overall Ontario estimate.

NR = not reportable due to high sampling variability.

‘CI’ refers to the 95% confidence interval of the estimate.


These figures were based on self-reported data, so these figures may underestimate the true prevalence of suicidal ideation in Waterloo Region and Ontario due to social desirability bias or other sources of error. There may also be differences in the willingness to report serious consideration of suicide for respondents of different ages.

2.3 Suicide Attempts

The proportion of individuals who self-reported suicide attempts locally and provincially was quite low. In Waterloo Region, 0.7 (CI: 0.3-1.0) per cent of the population aged 15 years and older reported ever attempting suicide in their lifetime (data not shown).1 Table 2.3 shows the proportion of the Ontario population aged 15 and older who reported attempting suicide in the past 12 months and in their lifetime.

---

1 With the exception of the overall proportion for reported lifetime suicide attempts, data for Waterloo Region on self-reported suicide attempts were not reportable due to small numbers (i.e., counts less than 5) and/or due to high sampling variability. E = high sampling variability; estimates must be interpreted with caution.
Overall, less than one per cent of the Ontario population reported ever attempting suicide in their lifetime. Adults aged 65 and older were significantly less likely to report having ever attempted suicide compared to the overall population (0.1<sup>E</sup> versus 0.6 per cent), whereas youth aged 15 to 19 were significantly more likely to report ever attempting suicide (1.6 versus 0.6 per cent).

Table 2.3. Proportion of the population aged 15 years and older who reported ever attempting suicide in the past 12 months or in their lifetime, by sex and age group, Ontario, 2005 and 2007-2008

<table>
<thead>
<tr>
<th>Sub-group</th>
<th>Lifetime</th>
<th>In past 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>0.7 (CI: 0.6-0.8)</td>
<td>0.4 (CI: 0.3-0.5)</td>
</tr>
<tr>
<td>Males</td>
<td>0.4 (CI: 0.3-0.5)</td>
<td>0.2&lt;sup&gt;E&lt;/sup&gt; (CI: 0.2-0.3)</td>
</tr>
<tr>
<td>15 to 19 years</td>
<td>1.6 (CI: 1.2-2.0)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.2 (CI: 0.9-1.6)&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>20 to 34 years</td>
<td>0.5 (CI: 0.4-0.7)</td>
<td>0.3&lt;sup&gt;E&lt;/sup&gt; (CI: 0.2-0.4)</td>
</tr>
<tr>
<td>35 to 49 years</td>
<td>0.6 (CI: 0.4-0.7)</td>
<td>0.3&lt;sup&gt;E&lt;/sup&gt; (CI: 0.2-0.4)</td>
</tr>
<tr>
<td>50 to 64 years</td>
<td>0.4&lt;sup&gt;E&lt;/sup&gt; (CI: 0.3-0.6)</td>
<td>0.2&lt;sup&gt;E&lt;/sup&gt; (CI: 0.1-0.3)</td>
</tr>
<tr>
<td>65 years and older</td>
<td>0.1&lt;sup&gt;E&lt;/sup&gt; (CI: 0.0-0.1)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>NR</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td><strong>0.6 (CI: 0.5-0.6)</strong></td>
<td><strong>0.3 (CI: 0.3-0.4)</strong></td>
</tr>
</tbody>
</table>

<sup>E</sup> = high sampling variability; estimates must be interpreted with caution.
<sup>b</sup> = statistically significant difference from the overall Ontario estimate
NR = not reportable due to high sampling variability.
‘CI’ refers to the 95% confidence interval of the estimate.


Youth aged 15 to 19 years were also significantly more likely than the overall Ontario population to report attempting suicide within the past year (1.2 versus 0.3 per cent). These figures suggest that youth are more likely to attempt suicide. These figures are based on self-reported data, and so they may underestimate the true prevalence of suicide attempts in Ontario due to social desirability bias or other sources of error. There may also be differences in reporting suicide attempts for respondents of different ages.

It is worth noting that of those in Ontario aged 15 and older who reported ever attempting suicide, about one third (35.9 (CI: 29.0-42.8) per cent) indicated that they consulted with a health professional afterward (data not shown).<sup>2</sup> There were no significant differences by age or sex in the proportion who consulted with a health professional after a suicide attempt.

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<sup>2</sup> Data for Waterloo Region on self-reported suicide attempts were not reportable due to small numbers (i.e., counts less than 5).
2.4 Repeat Mental Health Visits to Emergency Departments

Research shows that a significant portion of suicidal individuals seeks help from health professionals before attempting suicide. In one study, over 45 per cent of suicide victims had contact with primary care providers within one month of the suicide, and one-third had contact with mental health services (Luoma, Martin, & Pearson, 2002). Another study looked at children aged 5 to 19 presenting at an emergency department with suicidal behaviours, and found that six months after the initial visit, one third had a repeat visit to an emergency department for suicidal behaviours, and a quarter had a documented suicide attempt (Stewart, Manion, Davidson, & Cloutier, 2001). Other research has similarly shown that some individuals seek professional help but still go on to attempt or complete suicide (Farand, Renaud, & Chagnon, 2004; Pagura, Fotti, Katz & the Swampy Cree Suicide Prevention Team, 2009).

Emergency departments are often the first point of contact to the health care system. Individuals experiencing mental health crises frequently visit emergency departments, and sometimes visit repeatedly within a short time frame for similar mental health issues. These repeat mental health emergency visits are neither the most appropriate nor efficient use of health care resources in Ontario; it has been acknowledged previously that these visits contribute to emergency department wait times (Addictions Ontario et al., 2008).

These repeat visits also suggest that the patients’ mental health issues are not being resolved. As mental health disorders are one of the major precipitating factors for suicide and suicidal behaviour, individuals who present repeatedly at emergency departments with mental health issues may be at an increased risk for suicide. Their repeated contacts with health care professionals present multiple opportunities for assessment for suicide risk and referral to appropriate mental health services for treatment. Indeed, the American Psychiatric Association (APA) has stated that virtually all individuals who present to an emergency department with psychiatric concerns or symptoms are at an increased risk of suicide, and therefore would benefit from a formal assessment of suicide risk (2003).

As such, it is useful to examine emergency department data to identify the extent to which repeat mental health visits to emergency departments occur in Waterloo Region and Ontario. For the purposes of these analyses, ‘mental health visits’ are defined as those emergency department visits where the patient’s main problem diagnosis was either suicidal ideation or certain mental health issues associated with increased suicide risk. ‘Repeat mental health visits’ are defined as those mental health visits where a patient visited an emergency department more than once within a 30-day period.

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3 Mental health issues included alcohol and other substance misuse-related disorders, schizophrenia and related disorders, mood disorders, neurotic and stress disorders, personality disorders, and others. Organic disorders, mental retardation and disorders of psychological development were excluded due to lack of strong association with suicidal behaviour. See Appendix B for a detailed list of mental health issues included in these analyses.
In 2009, 4,413 Waterloo Region residents had at least one mental health visit to an emergency department, for a total of 6,170 mental health visits. Of those, 590 Waterloo Region residents had more than one repeat mental health visit to an emergency department within a 30 day time period, for a total of 1,079 repeat mental health visits. The number of repeat visits per patient ranged from 1 to 47 visits, with an average of 1.8 visits. By comparison, in Ontario the number of repeat visits per patient ranged from 1 to 246 visits, with an average of 2.2 repeat visits. Table 2.4 summarizes the rates of all mental health visits and repeat mental health visits to emergency departments in Waterloo Region and Ontario in 2009.

Table 2.4. Standardized rates of all mental health emergency department visits and repeat mental health emergency department visits, Waterloo Region and Ontario, 2009*

<table>
<thead>
<tr>
<th>Type of emergency department visit</th>
<th>Rate per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Waterloo Region</td>
</tr>
<tr>
<td>All mental health visits</td>
<td>1,185.8</td>
</tr>
<tr>
<td>Repeat mental health visits†</td>
<td>203.3</td>
</tr>
</tbody>
</table>

*Rates are age-standardized to the 1991 (adjusted) Canadian population.


†Repeat mental health visits were defined as instances where a patient visited an emergency department more than once within a 30 day time period for either suicidal ideation or certain mental health issues.

Overall, Ontario had significantly higher rates of all mental health visits and repeat mental health visits compared to Waterloo Region. Ontario had 1,278.2 mental health visits per 100,000 population in 2009, compared to 1,185.8 visits per 100,000 population in Waterloo Region. These mental health visits represented 4.2 per cent of all emergency department visits in Waterloo Region, compared to Ontario where mental health visits represented 3.4 per cent of all emergency department visits. Ontario had 264.3 repeat mental health visits per 100,000 population, compared with 203.3 repeat visits in Waterloo Region.

The rate of all mental health visits in 2009 varied by sex and age (Figure 2.1). Males were slightly more likely to have any mental health visit compared to females in both Waterloo Region and Ontario. There were also some age differences in all mental health visits in both Waterloo Region and Ontario. Those aged 0 to 9 years had very low rates of mental health visits. Rates peaked in males and females aged 20 to 29 years both locally and provincially. In general, after age 29, all mental health visit rates declined across the lifespan.
Figure 2.1. Age-specific rates of all mental health visits to emergency departments, by sex, Waterloo Region and Ontario, 2009

<table>
<thead>
<tr>
<th>Age Group (years)</th>
<th>Waterloo Females</th>
<th>Waterloo Males</th>
<th>Ontario Females</th>
<th>Ontario Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>39.4</td>
<td>97.6</td>
<td>51.6</td>
<td>101.7</td>
</tr>
<tr>
<td>10-19</td>
<td>1744.7</td>
<td>1296.8</td>
<td>1587.1</td>
<td>1212.7</td>
</tr>
<tr>
<td>20-29</td>
<td>1718.6</td>
<td>2095.4</td>
<td>1866.0</td>
<td>2095.0</td>
</tr>
<tr>
<td>30-39</td>
<td>1419.0</td>
<td>1547.7</td>
<td>1535.9</td>
<td>1762.5</td>
</tr>
<tr>
<td>40-49</td>
<td>1229.6</td>
<td>1590.2</td>
<td>1523.9</td>
<td>1523.9</td>
</tr>
<tr>
<td>50-59</td>
<td>996.8</td>
<td>1480.2</td>
<td>1195.3</td>
<td>1195.3</td>
</tr>
<tr>
<td>60-69</td>
<td>536.3</td>
<td>606.1</td>
<td>830.7</td>
<td>870.3</td>
</tr>
<tr>
<td>70-79</td>
<td>588.4</td>
<td>602.3</td>
<td>707.9</td>
<td>612.2</td>
</tr>
<tr>
<td>80+</td>
<td>477.0</td>
<td>407.2</td>
<td>622.9</td>
<td>484.8</td>
</tr>
</tbody>
</table>

NR = not reportable due to small numbers (less than 5).

There were also age and sex differences in rates of repeat mental health visits, as illustrated in Figure 2.2. Rates in repeat mental health visits showed different trends by age and sex compared to all mental health visit rates. While all mental health visit rates peaked in those aged 20 to 29 years in both sexes, the repeat mental health visit rate in males peaked around mid-life. In Ontario, repeat mental health visit rates peaked in 40 to 49 year old males, with a rate of 507.4 visits per 100,000 males. In Waterloo Region, repeat mental health visit rates peaked in 50 to 59 year old males, with a rate of 528.0 visits per 100,000 males. The mid-life peak in Waterloo Region males is particularly noteworthy, since rates in local males are similar to rates in local females in other age categories but are dramatically different in those aged 50 to 59 years (528.0 visits per 100,000 males versus 129.9 visits per 100,000 females).

This finding suggests that local men aged 50 to 59 years are most likely to experience repeat mental health visits compared to other age and sex groups in Waterloo Region.
Certain mental health issues represented a greater proportion of repeat mental health visits than others. Table 2.5 summarizes the proportions of repeat mental health visits by the type of mental health issue.

The proportions of mental health visits represented by the different types of mental health issues were similar in Waterloo Region and Ontario. Mental health issues related to drug and alcohol use represented about one third of repeat visits to emergency departments in 2009 both locally and provincially.
Table 2.5. Proportion of repeat mental health visits by type of mental health issue, Waterloo Region and Ontario, 2009

<table>
<thead>
<tr>
<th>Type of mental health issue</th>
<th>Waterloo Region</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental and behavioural disorders due to psychoactive substance use (e.g., alcohol and drugs)</td>
<td>32.6</td>
<td>34.0</td>
</tr>
<tr>
<td>Neurotic, stress-related and somatoform disorders</td>
<td>26.2</td>
<td>23.6</td>
</tr>
<tr>
<td>Mood [affective] disorders</td>
<td>19.5</td>
<td>17.2</td>
</tr>
<tr>
<td>Suicidal ideation (tendencies)</td>
<td>11.9</td>
<td>8.2</td>
</tr>
<tr>
<td>Schizophrenia, schizotypal and delusional disorders</td>
<td>7.0</td>
<td>12.8</td>
</tr>
<tr>
<td>Disorders of adult personality and behaviour</td>
<td>1.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Behavioural and emotional disorders with onset usually occurring in childhood and adolescence</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Behavioural syndromes associated with physiological disturbances and physical factors</td>
<td>NR</td>
<td>0.5</td>
</tr>
<tr>
<td>Unspecified mental disorder</td>
<td>NR</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

NR = not reportable due to small numbers (less than 5).


Neurotic and stress-related disorders represented about a quarter of repeat visits in both Waterloo Region and Ontario. Mood disorders represented 19.5 per cent of repeat visits in Waterloo Region and 17.2 per cent in Ontario. Suicidal ideation was the main problem diagnosis in 11.9 per cent of repeat visits in Waterloo Region and 8.2 per cent in Ontario. Schizophrenia and related disorders represented a smaller proportion of local repeat visits compared to the province (7.0 versus 12.8 per cent). The types of mental health issues that are represented most in repeat emergency department emergency department patients are also those that are known to have strong associations with risk for suicide, particularly substance use-related issues, mood disorders, and suicidal ideation (Health Canada, 1994; WHO, 2002).

It may be useful to consider how patients are discharged from emergency departments in an attempt to understand why these patients are experiencing repeat mental health visits. Table 2.6 shows the proportion of repeat mental health visits by discharge disposition status.

The majority of repeat mental health visits in both Waterloo Region and Ontario ended with the patient being discharged home (58.8 and 67.8 per cent, respectively). The next most common discharge disposition was admission as an in-patient into other units in the hospital (16.8 per cent in Waterloo Region and 12.7 per cent in Ontario). The third most common discharge disposition was triaged, but patient left without being seen by a physician (8.8 per cent in Waterloo Region and 6.0 per cent in Ontario). Another 5.9 per cent of patients in Waterloo Region and 2.8 per cent of Ontario patients were triaged and assessed, but left without any treatment or before treatment could be completed, for a total of 14.7 per cent of Waterloo Region repeat mental health visits ended with the patients leaving without being seen or
without receiving complete treatment. The reasons and circumstances for the patients leaving without seeing a physician or without receiving complete treatment are unknown.

Table 2.6. Proportion of repeat mental health visits by discharge disposition status, Waterloo Region and Ontario, 2009

<table>
<thead>
<tr>
<th>Discharge disposition status</th>
<th>Waterloo Region</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharged home (private dwelling only)</td>
<td>58.8</td>
<td>67.8</td>
</tr>
<tr>
<td>Admitted as in-patient to other units in hospital</td>
<td>16.8</td>
<td>12.7</td>
</tr>
<tr>
<td>Triaged and left without being seen†</td>
<td>8.8</td>
<td>6.0</td>
</tr>
<tr>
<td>Transferred to another non-acute care facility directly from emergency department</td>
<td>5.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Triaged, and assessed but left before treatment completed</td>
<td>3.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Transferred to another acute care facility directly from emergency department</td>
<td>2.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Discharged to place of residence/institution (nursing home; chronic care; private dwelling with home care services; prison)</td>
<td>2.2</td>
<td>3.1</td>
</tr>
<tr>
<td>Intra facility transfer to clinic</td>
<td>1.7</td>
<td>1.9</td>
</tr>
<tr>
<td>Other discharge disposition</td>
<td>0.5</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>


†In cases where a physician did not see a patient, diagnoses are based on a brief assessment and triage, not a formal diagnosis.

One final point to consider when examining the repeat mental health visits in Waterloo Region and Ontario is the seriousness of the cases presented in emergency departments, as measured by the Canadian Emergency Department Trauma and Acuity Scale (CTAS) (Bullard et al., 2008). Briefly, there are five CTAS levels:

- 1 – Resuscitation (e.g., cardiac arrest, near drowning)
- 2 – Emergent (e.g., anaphylactic reaction, severe head trauma)
- 3 – Urgent (e.g., dislocated shoulder, dialysis problems)
- 4 – Less urgent (e.g., headache, minor chest pain)
- 5 – Non-urgent (e.g., superficial laceration, sore throat)

The proportions of repeat mental health visits by CTAS score in 2009 are summarized in Table 2.7. The majority of repeat mental health visits were triaged as being either emergent or urgent issues (82.6 per cent in Waterloo Region and 73.9 per cent in Ontario), on par with physical health issues such as anaphylactic reactions, severe head trauma, dislocated shoulders or dialysis problems.
Table 2.7. Proportion of repeat mental health visits by Canadian Emergency Department Trauma and Acuity Scale (CTAS) score, Waterloo Region and Ontario, 2009

<table>
<thead>
<tr>
<th>CTAS Score</th>
<th>Waterloo Region</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Resuscitation</td>
<td>NR</td>
<td>0.5</td>
</tr>
<tr>
<td>2 – Emergent</td>
<td>28.8</td>
<td>22.7</td>
</tr>
<tr>
<td>3 – Urgent</td>
<td>53.8</td>
<td>51.2</td>
</tr>
<tr>
<td>4 – Less urgent</td>
<td>15.6</td>
<td>20.7</td>
</tr>
<tr>
<td>5 – Non-urgent</td>
<td>1.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Unknown</td>
<td>NR</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

NR = not reportable due to small numbers (less than 5).


When CTAS scores were analyzed by discharge disposition status (data not shown), it was found that fewer emergent repeat mental health visits ended with the patient leaving before being seen by a physician or before receiving complete treatment compared to urgent and less urgent visits. In Waterloo Region, 9.3 per cent of emergent repeat mental health visits ended without the patient being seen by a physician or receiving complete treatment, compared to 16.7 per cent of urgent and 18.5 per cent of less urgent cases. Another one third (33.8 per cent) of those emergent repeat mental health visits ended with the patient being admitted into other units in the hospital, compared to only 11.5 per cent of urgent and 6.0 per cent of less urgent visits. The majority of non-urgent repeat mental health visits in Waterloo Region in Ontario were discharged home (88.2 per cent; data not shown). Proportions of CTAS scores by discharge disposition status were similar in Waterloo Region and Ontario.

2.5  Emergency Department Visits for Suicide Attempts

Suicide attempts are much more frequent than completed suicides; it has been estimated that for every suicide death, there are anywhere between 10 to 220 attempts (Stewart, Manion, Davidson, & Cloutier, 2001). Emergency department visit data are insightful into the issue of suicide attempts, as these data include many of the less serious attempts that do not require hospitalization. Figure 2.3 shows the number and rate of emergency department visits for attempted suicide in Waterloo Region and Ontario. From 2005 to 2009, Waterloo Region had an average of 616 suicide attempt-related emergency department visits per year. As illustrated in Figure 2.3, rates of emergency department visits for suicide attempts were slightly higher in Waterloo Region than in Ontario.
In 2009, the rate in Waterloo Region was 114.1 emergency department visits per 100,000 population, while the 2009 provincial rate was 87.8 emergency department visits per 100,000. While the provincial rate has consistently decreased over time from 108.8 visits per 100,000 in 2005 to 87.8 visits per 100,000 in 2009, the Waterloo Region rate has experienced minor fluctuations, but has not greatly changed over five years (126.6 visits per 100,000 in 2005 versus 114.1 visits per 100,000 in 2009).

*Rates are age-standardized to the 1991 (adjusted) Canadian population.

Figure 2.4 shows the difference by sex in the rate of suicide attempt-related emergency department visits in Waterloo Region and Ontario. Overall, females had a higher rate of emergency department visits for attempted suicide than males, both locally and provincially. In 2009, female Waterloo Region residents had a suicide attempt emergency department visit rate of 140.8 per 100,000 population, compared to 88.5 per 100,000 in males. In Ontario in 2009, females had a rate of 103.9 visits per 100,000, compared to 72.1 per 100,000 in males. Waterloo Region rates for both sexes were consistently higher than the provincial rates. The rate for Waterloo Region males showed some variation over five years, with a rate in 2006 comparable to the Ontario rate in males, then briefly surpassing the provincial rate in females in 2007, before declining again in 2008 and 2009. Overall, the difference in rates by sex both provincially and locally coincide with extensive literature that indicates that women are more likely to attempt suicide than men (Sakinofsky & Webster, 2010; WHO, 2002).
The rate of emergency department visits for suicide attempts also varies over the lifespan, with younger people being more likely to have had an emergency department visit for attempted suicide compared to older people. Figure 2.5 shows five-year average emergency department visit rates, by sex and age group for Waterloo Region and Ontario.

Rates of emergency department visits for suicide attempts were higher in teens and young adults than in older adults, particularly in females, and rates generally declined over the lifespan. Waterloo Region rates peaked in females aged 10 to 19 years (253.3 visits per 100,000 population) and in females aged 20 to 29 (248.8 visits per 100,000), which was similar but still higher than the provincial peaks in young females.

Locally, males had the highest rates of emergency department visits for suicide attempts at 20 to 29 years (189.9 visits per 100,000) and at 40 to 49 years (146.8 visits per 100,000). This modest middle-age peak in Waterloo Region males was not evident in rates for males in all of Ontario. In general, rates in Waterloo Region remained higher than Ontario rates, although the trend across the lifespan was similar. Note that the data used to report on emergency department visits for suicide attempts describe all those cases that included a diagnosis code.

NR = not reportable due to small numbers (less than 5).

for ‘intentional self-harm’. It is assumed that all emergency department visits with intentional self-harm had suicidal intent, which may not be the case.

Caution should be used when interpreting rates of suicide-related emergency department visits. One study demonstrated that for every two emergency department visits coded for deliberate self-harm in the National Ambulatory Care Reporting System (NACRS) data, there was one visit coded as ‘undetermined’ that met criteria for deliberate self-harm. Cutting and piercing injuries and poisonings were most likely to be coded as undetermined rather than deliberate self-harm, compared to other methods of injury. This study showed an increased incidence over 12 months of deliberate self-harm emergency department visits by 60 per cent when cases coded ‘undetermined’ were added to the total (Bethell & Rhodes, 2009).

### 2.6 Hospitalizations for Suicide Attempts

Hospitalization data are useful to identify those suicide attempts that were more serious, requiring significant medical care and at least 24 hours stay in a hospital. From 2002 to 2009, Waterloo Region had an average of 281 suicide attempt-related in-patient hospitalizations per year. Waterloo Region had consistently higher rates of hospitalizations for suicide attempts than Ontario. Figure 2.6 shows the number and rate of hospitalizations for attempted suicide in Waterloo Region and Ontario.

Provincial rates of suicide attempt-related hospitalizations declined steadily over time from a rate of 69.3 per 100,000 population in 2002, levelling off at 35.3 hospitalizations per 100,000 in 2007 to 2009. Waterloo Region rates followed a similar trend as Ontario, although local rates remained higher over time than provincial rates, with a rate of 84.7 hospitalizations per 100,000 in 2002, declining to 48.1 hospitalizations per 100,000 population in 2009. Reasons for the steady decline in attempted suicide hospitalizations are not known.
Differences by sex in suicide attempt-related hospitalizations are illustrated in Figure 2.7. Provincial rates in females were higher than for males, although the gap narrowed over time (in 2002, 85.9 hospitalizations per 100,000 females and 53.1 per 100,000 males, versus 39.6 hospitalizations per 100,000 females and 30.7 per 100,000 males in 2009).

The rates in Waterloo Region in both sexes varied considerably over time, although they still reflected an overall decline in suicide attempt-related hospitalizations. The difference between males and females was wider in 2002 and 2003 (in 2003, 115.5 hospitalizations per 100,000 females and 50.3 per 100,000 males), although that gap had narrowed considerably by 2009 (53.7 hospitalizations per 100,000 females versus 43.1 per 100,000 males). Overall, females had higher rates of suicide attempt-related hospitalizations than males, both locally and provincially.
Figure 2.7. Standardized attempted suicide hospitalization rates, by sex, Waterloo Region and Ontario, 2002-2009*

*Rates are age-standardized to the 1991 (adjusted) Canadian population.


Figure 2.8 shows the five-year average age-specific hospitalization rates by sex. Provincially, hospitalization rates peaked for both sexes in the 40 to 49 year age category (73.0 hospitalizations per 100,000 females and 55.9 per 100,000 males). In Waterloo Region, females aged 10 to 49 had particularly high hospitalization rates, ranging from 90.4 hospitalizations per 100,000 10-19 year old females, to 88.0 hospitalizations per 100,000 40-49 year old females. Rates for Waterloo Region females began to drop beginning at age 50, similar to the provincial trend. In general, suicide attempt-related hospitalizations were less common in those aged 60 and over, compared to youth and younger adults. Suicide attempt-related hospitalizations were so rare in children under age 10 that most of the rates were not releasable. While attempted suicide hospitalizations were common in adolescents and young adults, particularly in young females, overall the peak over the lifespan in Waterloo Region and Ontario for suicide attempt-related hospitalizations occurred in the middle-aged population. Note that these data describe all those cases that included a diagnosis code for ‘intentional self-harm’. It is assumed that all hospitalizations of intentional self-harm had suicidal intent, which may not be the case.
Figure 2.8. Age-specific attempted suicide hospitalization rates, by sex, Waterloo Region and Ontario, 2005-2009 (5-year average)

NR = not reportable due to small numbers (less than 5).

2.7 Suicide Mortality

Mortality rates of suicide in Waterloo Region and Ontario have been lower than national rates in the past (Region of Waterloo Public Health, 2006). Figure 2.9 shows the number and rate of suicide deaths in Waterloo Region and Ontario.

The provincial suicide mortality rate remained stable from 2000 to 2007, varying between 7.0 to 7.9 per 100,000 population. Over the same timeframe, the Waterloo Region rate fluctuated somewhat. The Waterloo Region rate peaked at 8.4 deaths per 100,000 population in 2001 and plateaued near this level until about 2003. The local mortality rate then dipped in 2004 and reached a low in 2005 of 5.5 deaths per 100,000 population, before rising again to 7.8 deaths per 100,000 population in 2007. This variance was likely due to the small numbers of deaths and was likely not significantly different from the provincial rate.
Differences in suicide mortality rates by sex are illustrated in Figure 2.10. Males experienced a consistently higher rate of suicide mortality than females, accounting for three-quarters of all suicide deaths both in Waterloo Region and Ontario. Rates in Waterloo Region for both sexes varied somewhat over time. This variance over time in Waterloo Region rates are again likely due to small numbers; the Waterloo Region and Ontario suicide mortality rates were generally similar over time.

In 2007, the mortality rates were 3.4 deaths per 100,000 females locally and 3.7 deaths per 100,000 females provincially, while the rates were 12.4 and 11.8 deaths per 100,000 males for Waterloo Region and Ontario, respectively. The gender gap in suicide mortality that persists in Canada and other countries remains evident in recent years in Ontario and in Waterloo Region. Indeed, suicide mortality continues to be an important local health issue, since as of 2005 suicide was the tenth leading cause of death in Waterloo Region men (MOHLTC, 2005a).
Figure 2.10. Standardized suicide mortality rates, by sex, Waterloo Region and Ontario, 2000-2007*

<table>
<thead>
<tr>
<th>Year</th>
<th>Waterloo Females</th>
<th>Ontario Females</th>
<th>Waterloo Males</th>
<th>Ontario Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2.2</td>
<td>3.5</td>
<td>8.7</td>
<td>11.9</td>
</tr>
<tr>
<td>2001</td>
<td>3.9</td>
<td>3.7</td>
<td>13.0</td>
<td>11.4</td>
</tr>
<tr>
<td>2002</td>
<td>4.9</td>
<td>3.1</td>
<td>11.8</td>
<td>11.1</td>
</tr>
<tr>
<td>2003</td>
<td>4.4</td>
<td>3.6</td>
<td>11.9</td>
<td>11.9</td>
</tr>
<tr>
<td>2004</td>
<td>3.2</td>
<td>3.6</td>
<td>8.8</td>
<td>8.7</td>
</tr>
<tr>
<td>2005</td>
<td>2.5</td>
<td>3.9</td>
<td>8.7</td>
<td>10.9</td>
</tr>
<tr>
<td>2006</td>
<td>3.7</td>
<td>3.6</td>
<td>10.9</td>
<td>12.4</td>
</tr>
<tr>
<td>2007</td>
<td>3.4</td>
<td>3.4</td>
<td>12.4</td>
<td>11.8</td>
</tr>
</tbody>
</table>

*Rates are age-standardized to the 1991 (adjusted) Canadian population.


Figure 2.11 shows five-year average age-specific suicide mortality rates, by sex for Waterloo Region and Ontario. Some local rates, particularly for females, were not releasable due to small numbers. Note that there were no reportable suicide mortality rates for children under age 10, since in the province of Ontario, deaths of children under age 10 cannot be classified as a suicide (Office of the Chief Coroner of Ontario (OCC), 2010).

Suicide mortality rates peaked in middle age and later in life for Ontario males. The Ontario suicide mortality rate was 18.0 deaths per 100,000 males aged 40 to 49 years and 17.5 deaths per 100,000 in males aged 50 to 59 years. The highest peak of suicide mortality in Ontario males was in those aged 80 or older (21.6 deaths per 100,000). Local rates, where available, mirrored the provincial trends over the lifespan for males. For females, provincially the suicide mortality rate peaks in women aged 50 to 59 years (6.4 deaths per 100,000). Local suicide mortality rates for females appeared to peak around mid-life as well (5.6 deaths per 100,000 females aged 40 to 49 years).
Some methods of suicide are more common than others, and the prevalence of method can vary based on factors such as sex, age, culture, and the existence of policies and legislation (Health Canada, 1994; Leenaars, 2005; WHO, 2002). Of note is the association of suicide mortality with the availability of firearms. In the US, a country where guns are widely prevalent, firearms are the most common method of suicide mortality, representing up to half of male and a quarter of female suicide deaths (Wagner, 2009). Research indicates that with the systematic reduction in the availability of firearms, firearm suicide mortality rates decline, although sometimes these deaths are replaced with suicides by other methods such as hanging or suffocation (Ajdacic-Gross et al., 2006).

Table 2.8 shows the proportion of suicide deaths by method in Waterloo Region and Ontario over the five-year period of 2003 to 2007.
Table 2.8. Proportion of suicide deaths by method, Waterloo Region and Ontario, 2003-2007

<table>
<thead>
<tr>
<th>Method</th>
<th>Waterloo Region</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Hanging, strangulation or suffocation</td>
<td>50.8</td>
<td>40.4</td>
</tr>
<tr>
<td>2 Poisoning by and exposure to drugs or alcohol</td>
<td>16.4</td>
<td>19.0</td>
</tr>
<tr>
<td>3 Firearm or handgun discharge</td>
<td>9.0</td>
<td>13.3</td>
</tr>
<tr>
<td>4 Jumping from a high place</td>
<td>6.8</td>
<td>8.4</td>
</tr>
<tr>
<td>5 Poisoning by and exposure to chemicals and/or vapours</td>
<td>9.0</td>
<td>7.2</td>
</tr>
<tr>
<td>6 Jumping or lying before a moving object</td>
<td>3.4</td>
<td>3.7</td>
</tr>
<tr>
<td>7 Self-harm by sharp object</td>
<td>2.8</td>
<td>3.2</td>
</tr>
<tr>
<td>8 Drowning and submersion</td>
<td>NR</td>
<td>2.8</td>
</tr>
<tr>
<td>9 Other or unspecified means</td>
<td>NR</td>
<td>0.9</td>
</tr>
<tr>
<td>10 Smoke, fire and flames</td>
<td>NR</td>
<td>0.6</td>
</tr>
<tr>
<td>11 Crashing of motor vehicle</td>
<td>NR</td>
<td>0.6</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

NR = not reportable due to small numbers (less than 5).


Hanging, strangulation or suffocation was the most common method of suicide death, accounting for over half (50.8 per cent) of deaths in Waterloo Region and 40.4 per cent of those in Ontario. Poisoning by drugs or alcohol was the second most common method in both jurisdictions, at 16.4 and 19.0 per cent in Waterloo Region and Ontario, respectively. Suicide using firearms or handguns was slightly less common in Waterloo Region (9.0 per cent) compared to the rest of the province (13.3 per cent).

There is ample evidence which shows certain methods of suicide are more commonly used by one sex over the other. Men are more likely to use decisively lethal methods, such as hanging or firearms, while women are more likely to use methods such as overdosing on drugs or self-cutting that are not immediately fatal (Health Canada, 1994; Sakinofsky & Webster, 2010; WHO, 2002).

Table 2.9 shows the proportion of suicide deaths in Ontario from 2003 to 2007 by method for males and females. Hanging, strangulation or suffocation was the most common method of suicide in Ontario males (43.4 per cent), followed by firearms (17.2 per cent) and poisoning by drugs or alcohol (12.3 per cent). For females, the most common method was poisoning by drugs or alcohol (39.4 per cent), then hanging, strangulation or suffocation (31.3 per cent) and jumping from a high place (10.4 per cent).
Table 2.9. Proportion of suicide deaths by method and sex, Ontario, 2003-2007

<table>
<thead>
<tr>
<th>Method</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Hanging, strangulation or suffocation</td>
<td>31.3</td>
<td>43.4</td>
</tr>
<tr>
<td>2 Firearm or handgun discharge</td>
<td>1.5</td>
<td>17.2</td>
</tr>
<tr>
<td>3 Poisoning by and exposure to drugs or alcohol</td>
<td>39.4</td>
<td>12.3</td>
</tr>
<tr>
<td>4 Poisoning by and exposure to chemicals and/or vapours</td>
<td>4.7</td>
<td>8.0</td>
</tr>
<tr>
<td>5 Jumping from a high place</td>
<td>10.4</td>
<td>7.7</td>
</tr>
<tr>
<td>6 Jumping or lying before a moving object</td>
<td>4.1</td>
<td>3.6</td>
</tr>
<tr>
<td>7 Self-harm by sharp object</td>
<td>2.3</td>
<td>3.6</td>
</tr>
<tr>
<td>8 Drowning and submersion</td>
<td>4.0</td>
<td>2.4</td>
</tr>
<tr>
<td>9 Other or unspecified means</td>
<td>1.0</td>
<td>0.8</td>
</tr>
<tr>
<td>10 Crashing of motor vehicle</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>11 Smoke, fire and flames</td>
<td>0.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

NR = not reportable due to small numbers (less than 5).


Some of the differences between males and females could also be ascertained at the local level (data not shown). Over half (55.6 per cent) of suicides in Waterloo Region males in 2003 to 2007 were done by hanging, strangulation and suffocation, compared to about one-third (36.4 per cent) of suicides in females. Poisoning by drugs or alcohol was reported in another third of female suicides (36.4 per cent) but was less common in Waterloo Region males (9.8 per cent). About one in nine Waterloo Region females (11.4 per cent) died by suicide by jumping from a high place, compared to 5.3 per cent in males.

Waterloo Region males were equally likely to die by suicide using firearms or by poisoning with chemicals or vapours (11.3 per cent), whereas these two methods were too infrequent to be reported in females. Other methods of suicide were too infrequent in Waterloo Region to be reported by sex. In general, Ontario and Waterloo Region data coincide with previous research that documents the differences in suicide methods used by men and women.

It is extremely difficult, if not impossible, to accurately estimate true suicide mortality rates in a given population. One of the main issues with suicide mortality reporting is the likelihood of attributing a true suicide death to a different classification such as accidental death or death due to undetermined causes. Coroners or medical examiners may be reluctant to certify a death as a suicide unless intention is clear. In many jurisdictions, Ontario included, coroners or medical examiners tend to misclassify suicides as accidental deaths or due to an undetermined cause (Edwards et al., 2008; Health Canada, 1994; Parai, Kreiger, Tomlinson, & Adlaf, 2006).

Furthermore, this misclassification tends to occur more often for certain methods of suicide; in one study, a sample of Ontario coroners were more likely to assign deaths from hanging and carbon monoxide gas exposure as suicides, whereas deaths from poisoning and drowning were
more frequently classified as accidents. Deaths from over-the-counter medication overdose were more frequently certified as a suicide than death from heroin overdose (41.6 per cent versus 12.4 per cent). Cases with prior suicide attempts were more likely to be classified as a suicide than those without any documented past attempts (Parai, Kreiger, Tomlinson, & Adlaf, 2006).

Another potential source of misclassification for true suicide mortalities lies with how cause of death in children is defined. There has been some research and discussion about whether young children are capable of suicidal behaviour. In Ontario, like in many other jurisdictions, an apparent suicide in a child under the age of 10 cannot be classified as such; rather, it must be classified as death due to undetermined cause (OCC, 2010). There is a prominent argument based on developmental theory that proposes that children do not understand the finality of death until approximately 10 years of age (Pfeffer, 1986). An OCC report states that a suicide is defined as a death resulting from “an intentional act of a person knowing the probable consequence of what he/she is about to do – that is his/her own death” (2010). According to the earlier argument, a child under age 10 would not understand the probable consequence of suicidal actions.

However, other researchers assert that children under age 10 are capable of suicidal behaviour. Pfeffer argued that “it is not the child’s knowledge about the finality of death that is important in defining childhood suicidal behaviour but rather, it is essential that the child have some type of concept of death” (1986). Others have made similar assertions (Dervic, Brent, & Oquendo, 2008; Rosenthal & Rosenthal, 1984; Wagner 2009), although research does indicate that child suicides under age 10 are rare (Pfeffer, 1986; Shaw, Fernandes, & Rao, 2005). This research implies that child deaths should be evaluated for suicidal intent in the same manner as the population aged 10 and over.

Since death classification criteria explicitly exclude them, children aged 9 years or younger are largely absent from suicide mortality statistics in Canada and other countries. Only one child aged 5 to 9 years in Canada died between 2000 and 2007 with the cause classified as a suicide (Statistics Canada, 2010c).

### 2.9 Potential Years of Life Lost due to Suicide

The estimated impact of premature mortality on society is often quantified in terms of the number of potential years of life lost. Potential years of life lost represent the total number of years that might have otherwise been lived by individuals who died prematurely in a given population. While any age cut-off may be used, age 75 years is used here as a common cut-off approximating life expectancy in Canada.

Table 2.10 shows the number and rate of potential years of life lost in Waterloo Region and Ontario in 2007 due to suicide. In 2007, there were over 1,300 potential years of life lost due to suicide in Waterloo Region, and in Ontario, the number reached nearly 32,000. Local and provincial rates of potential years of life lost were similar, although the rate in males was
slightly higher in Waterloo Region than in the province (408.3 versus 363.2 potential years of life lost per 100,000 population). The impact of the high rates of male suicide deaths in Waterloo Region and Ontario are evident, with about three-quarters of the accumulated potential years of life lost because of deaths in males.

Table 2.10. Number and rate of potential years of life lost due to suicide, Waterloo Region and Ontario, 2007

<table>
<thead>
<tr>
<th>Place of residence</th>
<th>Sex</th>
<th>Number of potential years of life lost</th>
<th>Rate per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterloo Region</td>
<td>Female</td>
<td>298</td>
<td>117.8</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>1,028</td>
<td>408.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,326</td>
<td>262.7</td>
</tr>
<tr>
<td>Ontario</td>
<td>Female</td>
<td>8,091</td>
<td>120.2</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>23,845</td>
<td>363.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>31,936</td>
<td>240.1</td>
</tr>
</tbody>
</table>


2.10 Suicide in Youth and Young Adults

Youth and young adults are a high-risk population for suicide and suicidal behaviour. In recent years, suicide has been a leading cause of death in adolescents, particularly males, in the US and Canada (Health Canada, 1994; Pritchard & Hansen, 2005; Wagner, 2009). About 500 Canadian teenagers die of suicide every year, making it the second most common cause of death in teens, second only to motor vehicle collisions (Cheung & Dewa, 2007; Szumilas & Kutcher, 2008).

Research indicates that certain risk factors are more common in suicidal youth and young adults, compared to the rest of the adult population. Psychiatric disorders, family history of suicide, family dysfunction, sexual identity struggles, media influence, peer suicides, substance abuse and availability of firearms have been shown to be important risk factors for adolescent suicide and suicidal behaviour (Afifi, Cox, & Katz, 2007; Dupéré, Leventhal, & Lacourse, 2009; Fotti, Katz, Afifi, & Cox, 2006; Health Canada 1994; Kutcher, 2008; Peter et al., 2008; Szumilas & Kutcher, 2008; Wagner, 2009). In Canada, Aboriginal youth have very high rates of suicide (MacNeil, 2008). Canadian youth living on the street also have elevated mortality rates due to suicide, as well as accidental drug overdose (Boivin, Roy, Haley, & du Fort, 2005). Canadian adolescent immigrants, like adult immigrants, have lower suicide rates than non-immigrants, possibly due to lower rates of reported drug use (Greenfield et al., 2006).

Substance Misuse

Substance use has been implicated as a risk factor for adolescent suicidal behaviour (Greenfield et al., 2006; Health Canada, 1994; MacNeil, 2008; Wagner, 2009). Table 2.11 summarizes results from the Ontario Student Drug Use and Health Survey (ODSUHS) from the Centre for
Addiction and Mental Health (CAMH), which describes the prevalence of substance use in Waterloo Region youth in grades 7 to 12 (or approximately ages 12 to 18) in the past year.

Table 2.11. Proportion of grade 7 to 12 students with past year substance use, Waterloo Region, 2005, 2007 and 2009

<table>
<thead>
<tr>
<th>Substance use</th>
<th>2005</th>
<th>2007</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>63.5 (CI: 43.8-79.5)</td>
<td>55.3 (CI: 42.9-67.0)</td>
<td>52.1 (CI: 33.8-69.9)</td>
</tr>
<tr>
<td>Binge drinking†</td>
<td>22.5 (CI: 14.6-33.0)</td>
<td>20.9 (CI: 11.1-36.0)</td>
<td>23.3 (CI: 12.8-38.6)</td>
</tr>
<tr>
<td>Cannabis</td>
<td>29.6 (CI: 15.8-48.5)</td>
<td>21.8 (CI: 11.4-37.4)</td>
<td>25.1 (CI: 14.9-39.1)</td>
</tr>
<tr>
<td>Cigarette smoking</td>
<td>14.8 (CI: 8.6-24.5)</td>
<td>11.4 (CI: 6.1-20.4)</td>
<td>12.3 (CI: 7.5-19.5)</td>
</tr>
<tr>
<td>Potential hazardous drinkingβ</td>
<td>13.6 (CI: 7.0-25.0)</td>
<td>18.0 (CI: 8.4-34.4)</td>
<td>27.7 (CI: 15.5-44.4)</td>
</tr>
<tr>
<td>Potential drug use problem‡</td>
<td>16.5 (CI: 8.7-29.1)</td>
<td>14.8 (CI: 9.3-22.6)</td>
<td>18.7 (CI: 11.1-29.6)</td>
</tr>
</tbody>
</table>

‘CI’ refers to the 95% confidence interval of the estimate.
† Binge drinking is defined as having five or more drinks on at least one occasion in the past 4 weeks.
§ Potential hazardous drinking as identified by the AUDIT screening tool.
‡ Potential drug use problem as identified by the CRAFFT substance abuse screening test.

Overall, rates of substance use in Waterloo Region youth have not changed significantly from 2005 to 2009. Local rates shown in Table 2.11 are all similar to provincial rates (provincial data not shown). Alcohol use is prevalent in Waterloo Region youth. Over half (52.1 per cent) of Waterloo Region youth in 2009 consumed alcohol in the past 12 months and nearly a quarter (23.3 per cent) binge drank on at least once occasion in the past 4 weeks. In addition, over a quarter (27.7 per cent) of Waterloo Region students in grades 7 to 12 exhibited potentially hazardous drinking according to the AUDIT (Alcohol Use Disorders Identification Test), and 18.7 per cent of students may have had a potential drug use problem, as measured using the CRAFFT substance abuse screening test. Those Waterloo Region youth with potentially hazardous drinking or a potential drug use problem may be at increased risk for suicidal behaviours.

Mental health disorders, suicidal ideation and self-reported suicide attempts

The presence of mental health disorders, particularly mood disorders, is likely the most common risk factor for suicide in youth, with up to 90 per cent of adolescent suicide victims

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5 The AUDIT screening tool was used by CAMH to screen OSDUHS participants for potential problem drinking. For more details, visit the WHO website: http://whqlibdoc.who.int/hq/2001/WHO_MSD_MSB_01.6a.pdf.

6 The CRAFFT Substance Abuse Screening Test acronym refers to the six items screened in the test (Car, Relax, Alone, Forget, Family/Friends, Trouble). The CRAFFT test was used by CAMH to screen OSDUHS participants for potential drug use problems. For more details, visit the CAMH website: http://knowledgex.camh.net/amhspecialists/Screening_Assessment/screening/screen_CD_youth/Pages/CRAFFT.aspx.
showing evidence of a mental health disorder (Kutcher, 2008). One study showed the lifetime prevalence of depression in Ontarian adolescents was 7.6 per cent (Cheung & Dewa, 2006).

Table 2.12 shows that approximately 6.5 per cent of youth aged 12 to 19 in Waterloo Region and 3.9 per cent in Ontario reported having an anxiety disorder, rates which are not significantly different from the overall regional or provincial rates. In Waterloo Region, there were more youth aged 12 to 19 years who reported having a mood disorder (8.3 per cent), although this proportion was not significantly different from the overall regional prevalence rate. In Ontario, the mood disorder prevalence rate was significantly lower in those aged 12 to 19 years (3.7 per cent) compared to the overall provincial rate. Although Waterloo Region youth had a higher prevalence of mood disorders than Ontario youth, the difference was not statistically significant. These youth with mental health disorders in Waterloo Region may be at an increased risk for suicidal behaviour.

Table 2.12. Proportion of the population aged 12 and older with anxiety or mood disorders, 12 to 19 years and overall, Waterloo Region and Ontario, 2007-2008

<table>
<thead>
<tr>
<th>Mental health disorder</th>
<th>Waterloo Region</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 to 19 years</td>
<td>Overall</td>
</tr>
<tr>
<td>Anxiety disorder†</td>
<td>6.5† (CI: 3.0-10.0)</td>
<td>4.6 (CI: 3.2-5.9)</td>
</tr>
<tr>
<td>Mood disorder‡</td>
<td>8.3‡ (CI: 3.1-13.4)</td>
<td>7.8 (CI: 6.0-9.5)</td>
</tr>
</tbody>
</table>

E = high sampling variability; estimates must be interpreted with caution. 
b = statistically significant difference from the overall Ontario estimate.  
‘CI’ refers to the 95% confidence interval of the estimate.  
† Anxiety disorder includes phobias, obsessive-compulsive disorder or a panic disorder and must have lasted for at least 6 months and must have been diagnosed by a health professional.  
‡ Mood disorder includes depression, bipolar disorder, mania or dysthymia and must have lasted for at least 6 months and must have been diagnosed by a health professional.  

As shown in Table 2.13, 9.1 per cent of Waterloo Region 15 to 19 year olds reported ever contemplating suicide in their lifetime, a proportion that was not significantly higher than the overall rate in Waterloo Region. The proportion of Waterloo Region youth who contemplated suicide in the past 12 months was too small to report. In Ontario, significantly more of those aged 15 to 19 years contemplated suicide in the past 12 months (3.5 per cent), compared to the overall provincial rate. This rate indicates that youth in this province are more likely to experience suicidal ideation in the recent past compared to adults.
Table 2.13. Proportion of the population aged 15 years and older who reported selected suicide-related indicators, 15 to 19 years and overall, Waterloo Region and Ontario, 2007-2008

<table>
<thead>
<tr>
<th>Suicide-related indicator</th>
<th>Waterloo Region</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15 to 19 years</td>
<td>Overall</td>
</tr>
<tr>
<td>Suicidal thoughts (lifetime)</td>
<td>9.1(\text{E}) (CI: 4.9-13.3)</td>
<td>7.6 (CI: 6.3-8.8)</td>
</tr>
<tr>
<td></td>
<td>7.8 (CI: 6.8-8.7)</td>
<td>7.9 (CI: 7.6-8.2)</td>
</tr>
<tr>
<td>Suicidal thoughts (past 12 months)</td>
<td>NR</td>
<td>1.3(\text{E}) (CI: 0.8-1.8)</td>
</tr>
<tr>
<td></td>
<td>3.5 (CI: 2.9-4.1)(\text{b})</td>
<td>1.7 (CI: 1.6-1.9)</td>
</tr>
<tr>
<td>Suicide attempt (lifetime)</td>
<td>NR</td>
<td>0.7(\text{E}) (CI: 0.3-1.0)</td>
</tr>
<tr>
<td></td>
<td>1.6 (CI: 1.2-2.0)(\text{b})</td>
<td>0.6 (CI: 0.5-0.6)</td>
</tr>
<tr>
<td>Suicide attempt (past 12 months)</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td>1.2 (CI: 0.9-1.6)(\text{b})</td>
<td>0.3 (CI: 0.3-0.4)</td>
</tr>
</tbody>
</table>

\(\text{E}\) = high sampling variability; estimates must be interpreted with caution.
\(\text{b}\) = statistically significant difference from the overall Ontario estimate.
NR = not reportable due to high sampling variability.
‘CI’ refers to the 95% confidence interval of the estimate.


In Ontario, youth aged 15 to 19 years were significantly more likely to report attempting suicide in their lifetime (1.6 per cent) than the entire population aged 15 and older (0.6 per cent; see Table 2.13). Prevalence of suicide attempts in youth aged 15 to 19 years in Waterloo Region could not be reported due to small sample size. Rates of suicide attempts could be even higher than these data suggest; one study reported the lifetime prevalence for suicidality (i.e., suicidal thoughts and/or suicide attempts) in Ontarian adolescents aged 15 to 18 years at 13.5 per cent (Cheung & Dewa, 2006). Although these CCHS data could not be analyzed by sex, research shows that, similar to trends by sex seen in the adult population, suicidal ideation and attempts are more frequent in adolescent girls compared to boys (Peter & Roberts, 2010).

**Emergency department visits and hospitalizations for suicide attempts**

According to Kutcher, about twelve times as many youth attempt suicide as die from it in Canada (2008). Figure 2.3 showed that in 2005 to 2009, the five-year average annual Waterloo Region rates of emergency department visits for suicide attempts were highest in 10 to 19 year olds (253.3 visits per 100,000 females and 118.4 per 100,000 males) and in 20 to 29 year olds (248.8 per 100,000 females and 189.9 per 100,000 males) compared to all other age groups.

Figure 2.12 shows rates of emergency department visits over time in 10 to 29 year olds compared to the overall rates in Waterloo Region and Ontario. Both locally and provincially, youth show higher rates of emergency department visits for suicide attempts compared to the overall Waterloo Region and Ontario rates. Youth rates show similar trends of slight decline over time, similar to the overall rates.
Figure 2.12. Standardized attempted suicide emergency department visit rates, ages 10 to 29 years and all ages, Waterloo Region and Ontario, 2005-2009*  

<table>
<thead>
<tr>
<th>Year</th>
<th>Waterloo 10-29</th>
<th>Waterloo all ages</th>
<th>Ontario 10-29</th>
<th>Ontario all ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>231.7</td>
<td>126.6</td>
<td>179.6</td>
<td>108.9</td>
</tr>
<tr>
<td>2006</td>
<td>184.5</td>
<td>115.2</td>
<td>167.9</td>
<td>102.5</td>
</tr>
<tr>
<td>2007</td>
<td>219.1</td>
<td>128.5</td>
<td>152.2</td>
<td>94.5</td>
</tr>
<tr>
<td>2008</td>
<td>213.5</td>
<td>126.2</td>
<td>146.4</td>
<td>92.1</td>
</tr>
<tr>
<td>2009</td>
<td>165.8</td>
<td>114.1</td>
<td>133.6</td>
<td>87.8</td>
</tr>
</tbody>
</table>

*Rates are age-standardized to the 1991 (adjusted) Canadian population.  

Nationally, Figure 1.1 showed that 15 to 19 year old females had the largest proportion of all hospitalizations due to attempted suicide (16 per cent) compared to females of all other age groups. For 15 to 19 year old males, suicide attempts represented 10.6 per cent of all hospitalizations.

For Ontario and Waterloo Region, Figure 2.6 illustrated that hospitalization rates for attempted suicide were highest in 10 to 19 year olds (90.4 per 100,000 females and 44.3 per 100,000 males) and in 20 to 29 year olds (89.6 per 100,000 females and 62.8 per 100,000 males). However, females aged 30 to 39 years and 40 to 49 years had rates that were not far behind the younger cohorts.

Figure 2.13 shows hospitalization rates due to suicide attempts over time in 10 to 29 year olds compared to the overall rates in Waterloo Region and Ontario.
Like emergency department visit rates, the hospitalization rates for suicide attempts for youth in Waterloo Region and Ontario were higher than the overall rates, but followed a similar trend of decline over time. The gap between youth hospitalization rates and overall rates narrowed over time both locally and provincially.

It is important to interpret emergency department visit rates and hospitalization rates for suicide attempts with caution, particularly in youth and young adults. Wagner suggested that some apparent suicidal behaviour in adolescents may actually be instrumental suicide-related behaviour, a term referring to “self-injurious behaviour [where there is evidence] that a) the person did not intend to kill him/herself and b) the person wished to use the appearance of intending to kill him/herself in order to attain some other end (e.g., to seek help, punish others, or receive attention)” (2009). Suicidal behaviour may also be confused with self-mutilation, where there is neither suicidal intent nor intention to give the appearance of suicidal intent (Wagner, 2009). Favazza estimated that about 1.5 to 2 per cent of the general adolescent population engages in self-mutilative behaviour (1998). The data used in this report to describe mortality, hospitalizations and emergency department visits cannot distinguish from intentional self-harm with or without suicidal intent, and the assumption is that all cases do have suicidal intent, which may not be the case. Given the prevalence of these non-suicidal self-harming behaviours in youth, it is possible that some non-fatal hospitalizations or emergency visits were not due to suicidal intent.
department visits attributed to suicide attempts in this report are misclassified cases of self-harm without suicidal intent.

**Suicide mortality**

In Canada, young males experience a slight peak in suicide mortality rates. Figure 1.3 showed that suicide rates were 19.6 per 100,000 20 to 24 year old males, and 19.9 per 100,000 per 25 to 29 year old males. National suicide rates remain the highest in middle age and older males. In Canada, Ontario and Waterloo Region, suicide rates in young females remain relatively low.

Waterloo Region and Ontario males do not experience a peak in the 20 to 29 year age group, as occurs nationally. Figure 2.11 showed the suicide rate for Waterloo Region males aged 20 to 29 years at 10.5 deaths per 100,000 population, and at 12.2 deaths per 100,000 males in Ontario. From 2000 to 2007, there were 7 to 10 deaths annually in Waterloo Region in 10 to 29 year olds (MOHLTC, 2007). While suicide deaths in youth and young adults do not occur as often as in the middle age and older adults, suicides in young people remain a vital issue due to the significant impact of these deaths on potential years of life lost and the fact that suicide remains a leading cause of death in young adults.

Different methods of suicide are more common in youth and young adults compared to older age groups. Waterloo Region data did not have adequate sample size to report in detail on suicide method in these younger age groups; only the most common method could be ascertained. In 2003 to 2007, 70.7 per cent of those aged 10 to 29 year olds in Waterloo Region who died by suicide did so by hanging, strangulation or suffocation (MOHLTC, 2007).

Table 2.14 summarizes the proportion of suicide deaths in Ontario from 2003 to 2007 in 10 to 19 year olds and 20 to 29 year olds, compared to the overall prevalence of various suicide methods in all age groups.

In Ontario, the likelihood of using hanging, strangulation or suffocation appears to increase in younger age groups. Overall use of these methods for all age groups was 40.4 per cent, compared to 52.5 per cent in 20 to 29 year olds and 70.6 per cent in 10 to 19 year olds. The increasing use of hanging, strangulation or suffocation may be related to limited availability of other means for younger age groups.
### Table 2.14. Proportion of suicide deaths by method, ages 10 to 19 years, 20 to 29 years and all ages, Ontario, 2003-2007

<table>
<thead>
<tr>
<th>Method</th>
<th>10 to 19 years</th>
<th>20 to 29 years</th>
<th>All ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Hanging, strangulation or suffocation</td>
<td>70.6</td>
<td>52.5</td>
<td>40.4</td>
</tr>
<tr>
<td>2 Poisoning by and exposure to drugs or alcohol</td>
<td>4.2</td>
<td>11.2</td>
<td>19.0</td>
</tr>
<tr>
<td>3 Firearm or handgun discharge</td>
<td>9.0</td>
<td>8.2</td>
<td>13.3</td>
</tr>
<tr>
<td>4 Jumping from a high place</td>
<td>7.3</td>
<td>11.9</td>
<td>8.4</td>
</tr>
<tr>
<td>5 Poisoning by and exposure to chemicals and/or vapours</td>
<td>2.4</td>
<td>4.8</td>
<td>7.2</td>
</tr>
<tr>
<td>6 Jumping or lying before a moving object</td>
<td>4.5</td>
<td>5.8</td>
<td>3.7</td>
</tr>
<tr>
<td>7 Self-harm by sharp object</td>
<td>NR</td>
<td>1.8</td>
<td>3.2</td>
</tr>
<tr>
<td>8 Drowning and submersion</td>
<td>NR</td>
<td>2.0</td>
<td>2.8</td>
</tr>
<tr>
<td>9 Other or unspecified means</td>
<td>NR</td>
<td>NR</td>
<td>0.9</td>
</tr>
<tr>
<td>10 Smoke, fire and flames</td>
<td>NR</td>
<td>1.3</td>
<td>0.6</td>
</tr>
<tr>
<td>11 Crashing of motor vehicle</td>
<td>NR</td>
<td>NR</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

NR = not reportable due to small numbers (less than 5).


One study suggested that with the introduction of Bill C-17 in Canada, a bill that promoted safer handling and storage of firearms through mandatory safety courses for all new gun owners, firearm suicide rates for youth aged 10 to 19 years old dropped from 60 per cent nationally to 22 per cent from 1979 to 1999, while hanging or suffocation-related suicide rates increased from 20 per cent to 60 per cent (Cheung & Dewa, 2005). The figures presented in Table 2.10 coincide with these results, as use of firearms are used relatively infrequently as a means for suicide in younger Ontarians.
3 Concluding Remarks

The data described in this report are subject to certain limitations and should be interpreted with some caution. The self-reported data from the Canadian Community Health Survey and the Ontario Student Drug Use and Health Survey may underestimate the true prevalence of mental health disorders, suicidal ideation and suicide attempts due to social desirability bias or other sources of error. It is important to note that there are no ‘suicide’ diagnosis codes, but rather, the mortality, hospitalization and emergency department data are classified as being caused by ‘intentional self-harm’. It was assumed that all cases of intentional self-harm had suicidal intent, which may not be the case. It is commonly acknowledged that the true incidence of suicide deaths and attempts are underestimated throughout most research on suicide, due to the extreme difficulty to identify true suicidal intent with accuracy, and to differentiate accidental injury from intentional self-harm (WHO, 2002; Health Canada 1994).

Data examined in this report revealed that local rates of suicide mortality, suicide attempts and suicidal behaviour are generally reflective of trends in Ontario and all of Canada. Canadian suicide mortality rates remained unchanged over the last eight years of most recent available data. Ontario and Waterloo Region rates followed essentially the same trend, although provincial and local rates were lower than national rates, possibly because of an issue of under-reporting in Ontario (Health Canada, 1994). Waterloo Region rates also varied over time due to small numbers.

In Waterloo Region and Ontario the most common method of suicide death was hanging, strangulation or suffocation, followed by poisoning by drugs or alcohol. The local hospitalization and emergency department visit rates for suicide attempts followed similar trends of decline as all of Ontario. Suicidal ideation and self-reported suicide attempts were less frequent in Waterloo Region, compared to Ontario and all of Canada.

Men represent the majority of suicide deaths in Canada, Ontario and Waterloo Region. Conversely, women comprise the majority of emergency department visits and hospitalizations for suicide attempts in the province and the region. These differences by sex are well documented in scientific literature. Men are more likely to die by suicide, but women are more likely to attempt suicide and survive; these trends persist over time and in many countries.

There was one notable difference in the local data compared to Ontario. The hospitalization and emergency department visit rates were higher in nearly every age group in Waterloo Region, compared to the entire province. Young females aged 10 to 29 years had particularly high rates of emergency department visits and hospitalizations for attempted suicide in Waterloo Region.

Suicide mortality rates are lower in young adults compared to middle-aged and older adults in Waterloo Region and Ontario. However, there are high rates of attempted suicides in young individuals seen in emergency departments and hospitals and there is a tremendous loss of potential years of life when young people die by suicide.
Several initiatives were recently proposed to the Ontario Minister of Health and Long Term Care to address emergency department wait times. These initiatives included developing and investing in a comprehensive 24-hour crisis response system in Ontario, and investing in community mental health and addiction services that connect directly to hospitals in order to facilitate appropriate diversion of patients out of emergency rooms (Addictions Ontario et al., 2008). Such initiatives would not only reduce inappropriate burden on emergency department, but would also increase the likelihood that emergency department patients at risk of suicide would receive needed treatment.

Research has shown certain strategies to be promising interventions to prevent suicide deaths. Leenaars identified several societal strategies that have demonstrated effectiveness, including public education campaigns, means (e.g., firearms) restriction, control of substances such as tobacco and alcohol, and toning down dramatic media reports on suicide deaths (2005). School-based programs such as peer helping programs, teacher ‘gatekeeper’ training to recognize mental health disorders, and crisis debriefing after youth exposure to a suicide have been found effective in adolescents (Kutcher, 2008; Leenaars, 2005; Szumilas & Kutcher, 2008).

Since suicide is a complex and multi-causal issue, a collaborative, community-based approach that targets multiple risk factors using evidence-based strategies may yield the greatest success in preventing suicide deaths in Waterloo Region.

Canada does not currently have a national strategy on suicide prevention, despite advocacy from experts recognizing the need for such a Canada-wide strategy for suicide prevention (Canadian Association for Suicide Prevention, 2009; Vogel, 2011). Locally, the Waterloo Region Suicide Prevention Council produced the Waterloo Region Suicide Prevention Strategy, “a framework for achieving the goal of suicide prevention in our community” (2006). An update on the Waterloo Region Suicide Prevention Council strategic plan is expected to be released later this year.

It is hoped that this report on suicide in Waterloo Region will serve to raise awareness of the importance of suicide in our local community, as well as to inform the activities of the Waterloo Region Suicide Prevention Council, its member organizations, and other community groups who aim to reduce the incidence of suicide in our region.
4 Methodology, Data Sources and Limitations

This report summarizes data related to suicide for Waterloo Region and Ontario, updating and expanding upon statistics that were released previously by Region of Waterloo Public Health (2006). The report includes multiple years of data, including the most recent available data and extending back to include all years not previously reported. Data sources and limitations used in this report are described below.

Tests of significance were performed using non-overlapping confidence intervals at the 95 per cent confidence level using a probability (p) value less than 0.05. The terms “significant” or “significance” indicate a statistically significant difference.

4.1 Canadian Community Health Survey

Data on mental health and suicide-related indicators were obtained from the Canadian Community Health Survey (CCHS). CCHS is a national, largely telephone-based survey conducted by Statistics Canada that provides estimates of health determinants, health status and health system utilization at the national, provincial, regional and health unit levels. The survey is conducted over a two-year, repeating cycle.

The CCHS target population includes household residents 12 years and older in all provinces and territories, excluding those living on Indian Reserves, Canadian Forces Bases, institutions, some remote areas, and individuals or households without a telephone. CCHS data are self-reported and may be subject to recall bias. Sensitive questions, such as those related to mental health, may be subject to social desirability bias or high non-response and result in an underestimate or overestimate of the true prevalence in the population. Note that suicide-related questions were only asked of those aged 15 years and older.

For Waterloo Region and Ontario analyses, data from CCHS cycles 3.1 (2005) and 4.1 (2007-2008) were analyzed using the Statistics Canada SPSS bootstrap method (BOOTVAR program version 3.1). Where sample sizes were sufficiently large, data were analyzed for Waterloo Region and Ontario, by age groups and sex. A superscript ‘E’ indicates that an estimate should be interpreted with caution due to high sampling variability. Responses such as “don't know,” refusals to answer or “not stated” were excluded from analysis if they represented less than 5 per cent of the responses. In removing these responses, it is assumed that they occur randomly, which may not be the case.

For national analyses, data from CCHS cycle 1.2 (2002) were used and were extracted directly from the Statistics Canada website. Note that at least some of the CCHS cycle 1.2 interviews were conducted in-person as opposed to over the telephone; this practice ended in CCHS 2.1. Canada-wide CCHS statistics presented in this report should be compared to the Waterloo Region and Ontario statistics with some caution due to this mixed-mode data collection in CCHS 1.2, which differed from the telephone-only data collection in CCHS 3.1 and 4.1.
4.2 Ontario Student Drug Use and Health Survey

Data on substance use in youth in Waterloo Region were obtained from the Ontario Student Drug Use and Health Survey (OSDUHS), a cross-sectional survey of Ontario students in grades 7 to 12 conducted on a bi-annual basis by the Centre for Addiction and Mental Health (CAMH). A cluster sampling design is used, where schools and classes in publicly funded schools are randomly selected, and all students in a classroom have the opportunity to participate. School dropouts, ‘street youth’ and youth not otherwise being educated in the publicly funded school system are excluded from the sampling frame.

The Waterloo Region-specific data for 2005, 2007 and 2009 were obtained through a special data request from CAMH. Note that the survey was designed to provide precise estimates of alcohol and drug use at the provincial level by grade level, and the survey may not provide precise estimates for local geographic areas. Since survey responses were self-reported, the true prevalence of drug and alcohol use may be over- or underestimated due to social desirability bias, recall bias or high non-response rates.

4.3 National Ambulatory Care Reporting System

Emergency department visit data for Waterloo Region and Ontario were obtained from IntelliHEALTH Ontario, a web-based health information database managed by the Ministry of Health and Long Term Care. These data originate from the National Ambulatory Care Reporting System (NACRS), an administrative database managed by the Canadian Institute for Health Information (CIHI). Emergency department visits for Waterloo Region and Ontario residents that occur outside of the province are not available through IntelliHEALTH.

An emergency department visit was determined to be suicide-related based on the all cause diagnosis codes assigned at the time of admission. These diagnoses were classified using an enhanced Canadian version of the 10th revision of the International Classification of Diseases (ICD), called the ICD-10-CA. See Appendix B for detailed suicide-related ICD codes. Note that in using Intentional Self-Harm ICD codes to represent suicide-related emergency department visits, it is assumed that all incidents of deliberate self-harm occurred with suicidal intention, which may not always be the case. Note that scheduled, non-emergent visits to emergency departments are also included in these data, although they are very rare (e.g., one scheduled visit per year in the entire province) and as such do not affect the rates described in this report.

NACRS data were analyzed for the years 2005 to 2009. Rates are age-standardized to the 1991 adjusted Canadian population where indicated, to allow comparisons between Waterloo Region and Ontario populations. It was necessary to combine multiple years of data in order to

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7 The ICD-10-CA was developed by CIHI to provide more detailed codes for certain diagnoses. For more details, see the CIHI website: http://www.cihi.ca/CIHI-ext-portal/internet/en/document/standards+and+data+submission/standards/classification+and+coding/codingclass_icd10.
obtain sufficiently large numbers to report age- and sex-specific rates, therefore five-year average age- and sex-specific rates are presented. Any rates based on counts less than 5 are not releasable due to confidentiality and have been suppressed.

NACRS data were also analyzed to describe the number of emergency department patients with a main problem diagnosis of selected mental and behaviour disorders that have been shown to be associated with some increased risk of suicide. Mental health conditions within the range of ICD-10-CA codes of F10-69, F90-99, and R45.8 (suicidal ideation) were selected due to extensive evidence linking these categories of mental health conditions to increased risk for self-harm and suicidal behaviours (APA, 2003; WHO, 2002; Health Canada, 1994). Categories of mental health conditions, F00-09 (organic, including symptomatic, mental health disorders, e.g. Alzheimer’s, dementia, etc.), F7079 (mental retardation), and F80-89 (disorders of psychological development, e.g. autism, learning disorders, etc.), were excluded due to lack of strong evidence linking those categories of disorders with intent to self-harm and suicidal ideation. See Appendix B for the full list of ICD-10-CA codes for mental and behaviour disorders used.

Repeat emergency visits for mental health and suicidal ideation were defined as unplanned and unscheduled visits to an Ontario hospital for mental health conditions followed by another unplanned and unscheduled visit by the same patient within 30 days. The index and repeat visits could be classified for the same or different mental health disorders or suicidal ideation codes. Patients were considered as Waterloo Region residents if their index visit occurred while they were a resident of the region, regardless if they moved to another region prior to their follow-up visit.

An index visit (first visit) could be for any mental health condition diagnosis including substance misuse disorders. Data from the calendar year 2009 were used; however, data had to be extracted 01-Jan-2009 to 31-Jan-2010 in order to capture the 30-day repeat visit “window” of January 2010 for any December 2009 index visits. Only visits that were classified as emergency visits (as opposed to planned or scheduled) were used in the analysis.

Note, for patients who left before seeing a physician, the ICD-10-CA main problem diagnosis code was based on the initial assessment or triage, not a formal diagnosis. This represents about 5.9 per cent of provincial visits and 4.0 per cent of local visits. In addition, not all institutions follow the same procedures for registration. For example, in some hospitals, patients are triaged before registration while in others they are registered first and then triaged. The impact of any changes to registration dates in the dataset should be minimal.

Index visits were calculated using Microsoft Excel 2007. Visits were sorted in ascending order by encrypted health number, then in ascending order by registration date. For each visit, the difference between the next visit and the current visit was calculated in days. If the number of

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days to the next visit was less than or equal to 30 days, the visit was coded as an index visit (1), otherwise the visit was coded as a non-index visit (0).

The definition of an index visit allowed for the following possible outcomes for each visit: index visit, follow-up visit, both (index and follow-up), and neither (index nor follow-up). For instance if a patient were to have a visit on day 1, 32, 45, and 65 the first visit would be neither an index nor a follow-up visit because visit two occurred more than 30 days after visit one. Visit 2 would only be an index visit because visit three came within 30 days of visit two. Visit 3 would be both an index visit, because it was within 30 days of visit four, and a follow-up visit, because it was within 30 days of visit two. Visit 4 would only be a follow-up visit because there are no additional visits (within 30 days).

### 4.4 Discharge Abstract Database

In-patient hospitalization data for Waterloo Region and Ontario were obtained from IntelliHEALTH. These data originate from the Discharge Abstract Database (DAD), an administrative database managed by CIHI and contains discharge information on all acute in-patient hospitalizations in Canada. Hospitalizations for Waterloo Region or Ontario residents that occur outside of the province are not available through IntelliHEALTH.

The cause of hospitalization is determined to be a suicide-related hospitalization based on the all cause diagnosis codes assigned to each hospital separation at the time of discharge. For 2002 data, causes were classified using the Ninth Revision of the ICD (ICD-9). See Appendix B for detailed suicide-related ICD-9 codes. Note that in using Intentional Self-Harm ICD codes to represent suicide-related hospitalizations, it is assumed that all incidents of self-harm occurred with suicidal intention, which may not always be the case.

For 2003 to 2009 data, causes were classified using the ICD-10-CA. Differences between DAD data from 2002 and 2003 to 2009 should therefore be interpreted with caution, as some of the difference may be because of coding changes, and not due to true changes in the population.

DAD data were analyzed for the years 2002 to 2009. Rates are age-standardized to the 1991 adjusted Canadian population where indicated to allow comparisons between Waterloo Region and Ontario populations. It was necessary to combine multiple years of data in order to obtain sufficiently large numbers to report age- and sex-specific rates, therefore five-year average age- and sex-specific rates are presented. Any rates based on counts less than 5 are not releasable due to confidentiality and have been suppressed.

### 4.5 National Trauma Registry

The National Trauma Registry relies on data from the Discharge Abstract Database and the Hospital Morbidity Database, for those provinces and territories not participating in the DAD. The Hospital Morbidity Database contains administrative, clinical and demographic data on
hospital in-patient events, and does not include discharge data from psychiatric facilities or emergency department visits. The year reported from the National Trauma Registry represents the year a patient was discharged.

The Trauma e-Report used in this report only contains data with ICD-10-CA codes. The last province to adopt the ICD-10-CA system was Quebec, during the 2006 to 2007 fiscal year. At time of publication, no Quebec data were available in the self-harm trauma e-Report. For this reason, the most recent year of data was used, without the province of Quebec data. Quebec had an average of 2,970 suicide related hospitalizations per year between 1990 and 2005. The rate of hospitalizations for suicide attempts in Quebec decreased between 2002 and 2005 (Burrows et al., 2010). See Appendix B for detailed suicide-related ICD-10-CA codes. Note that in using Intentional Self-Harm ICD codes to represent suicide-related hospitalizations, it is assumed that all incidents of self-harm occurred with suicidal intention, which may not always be the case.

4.6 Vital Statistics

Mortality data for Waterloo Region and Ontario were obtained from IntelliHEALTH. These data originate from the Vital Statistics administrative database managed by the Ontario Office of the Registrar General. Waterloo Region and Ontario residents who die outside of the province are not available through IntelliHEALTH.

A death is considered a suicide based on the underlying cause of death indicated on Death Certificates. As of January 1, 2000, primary cause of death is classified using the Tenth Revision of the ICD (ICD-10). All deaths coded as ‘intentional self-harm’ (i.e., X60-X84 or Y87.0) were classified as suicides and were included in the analysis of this report. See Appendix B for detailed suicide-related ICD codes. Note that in using Intentional Self-Harm ICD codes to represent suicide-related deaths, it is assumed that all incidents of self-harm occurred with suicidal intention, which may not always be the case. In the province of Ontario, a death of a child under age ten cannot be ruled a suicide, (OCC, 2010) so suicide mortality rates, which are calculated using a denominator including all age groups, may be artificially lower as a result.

Local and provincial suicide mortality rates likely underestimate the true incidence of death by suicide. Cause of death classification may be influenced by social or legal conditions surrounding the death as well as by the level of medical investigation. Information regarding the nature of the death may only become available after the original death certificate is complete. In some situations, assessing whether the death was intentional due to self-harm may be difficult, and a death can only be ruled a suicide when the victim’s intent is clear. At least one study has shown that Ontario has some of the highest suicide underreporting of all the provinces (Health Canada, 1994).

9 The underlying cause of death is either (a) the disease or injury that initiated the train of events leading directly to death, or (b) the circumstances of the accident or violence that produced the fatal injury.
Mortality data were analyzed for the years 2000 to 2007. Rates are age-standardized to the 1991 adjusted Canadian population where indicated to allow comparisons between Waterloo Region and Ontario populations. It was necessary to combine multiple years of data in order to obtain sufficiently large numbers to report age- and sex-specific rates, therefore five-year average age- and sex-specific rates are presented. Any rates based on counts less than 5 are not releasable due to confidentiality and have been suppressed.

Potential years of life lost figures were also obtained from the Vital Statistics mortality data. These figures were not specifically calculated for this report but rather were calculated by the MOHLTC and extracted from intelliHEALTH in this derived format. Potential years of life lost figures were calculated using the common cut-off of age 75 years, i.e., years of life were not considered ‘prematurely lost’ after age 75. Using this cut-off does not take local variance in life expectancy into consideration. Considering life expectancies in Waterloo Region have been higher than age 75 in the recent past (MOHLTC, 2007b), these figures may be an underestimate of potential years of life lost due to suicide.

**4.7 Population Estimates**

Population estimates were not explicitly presented in this report, but were used as denominators to calculate all incidence rates. These population estimate data were obtained from intelliHEALTH and originate from the Ontario Ministry of Finance, based on population counts from the 1996, 2001 and 2006 Canadian Censuses. These population estimates may differ from those presented elsewhere due to differences in methodology.
References


Appendix A. Glossary of Terms

**Age Standardization:** A method of adjusting rates to minimize the effects that different age compositions have on populations. This method is used when comparing two or more populations.

**Confidence Interval:** A calculated range of values in which the actual value (such as a mean, proportion or rate) is contained with a certain degree of confidence. For the purposes of this report, 95 per cent confidence intervals were used, meaning that there is a 95 per cent probability that the actual value falls within this range.

**Incidence Rate:** The rate at which new events occur in a specified time period within a defined population that is “at risk” of experiencing the condition or event.

**Indicator:** Measures that are used to examine health status and health system performance and characteristics of a given area.

**Mean:** The mean or average is the sum of all individual values in a set of measurements, divided by the total number of values in the set of measurements.

**Parasuicide:** A medical term that sometimes refers to gestures of self-harm with suicidal intention but without a completed death, e.g., suicide attempts with the intent to kill oneself.

**Potential Years of Life Lost:** A measure of the relative impact of various diseases and lethal forces that highlights the loss to society as a result of youthful or early deaths. The figure for potential years of life lost due to a particular cause is the sum, over all persons dying from that cause, of the years that these persons would have lived had they reached a specific age (usually life expectancy).

**Prevalence Rate:** The total number of all individuals who have an attribute or disease at a particular time (or during a particular time period) divided by the population at risk of having the attribute or disease at this point in time or midway through the period.

**Proportion:** A type of ratio in which the numerator is included in the denominator. A proportion is calculated by dividing the number of people with a common characteristic at a given point in time by the total population that shares the same event in the same time period.

**Risk Factor:** An aspect of someone’s behaviour or lifestyle, a characteristic that a person was born with, or an event that s/he has been exposed to that is associated with acquiring disease.

**Social Desirability Bias:** A systematic error that occurs when a respondent reports behaviours or conditions that are socially desirable in order to avoid embarrassment. For example, a respondent may underestimate their weight.

**Suicidal Ideation:** A medical term for thoughts about suicide, which may be as detailed as a formulated plan, without the suicidal act itself. Suicidal ideation may also be referred to as suicidal thoughts.
## Appendix B. International Classification of Diseases (ICD) Codes

Table B1. ICD-9 codes related to suicide

<table>
<thead>
<tr>
<th>Supplementary Classification of External Causes of Injury and Poisoning (E800-E900)</th>
<th>Suicide and Self-Inflicted Injury (E950-E959)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E950 Suicide and self-inflicted poisoning by solid or liquid substances</td>
<td></td>
</tr>
<tr>
<td>E950.0 Analgesics, antipyretics, and antirheumatics</td>
<td></td>
</tr>
<tr>
<td>E950.1 Barbiturates</td>
<td></td>
</tr>
<tr>
<td>E950.2 Other sedatives and hypnotics</td>
<td></td>
</tr>
<tr>
<td>E950.3 Tranquilizers and other psychotropic agents</td>
<td></td>
</tr>
<tr>
<td>E950.4 Other specified drugs and medicinal substances</td>
<td></td>
</tr>
<tr>
<td>E950.5 Unspecified drug or medicinal substance</td>
<td></td>
</tr>
<tr>
<td>E950.6 Agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers</td>
<td></td>
</tr>
<tr>
<td>E950.7 Corrosive and caustic substances</td>
<td></td>
</tr>
<tr>
<td>Includes: Suicide and self-inflicted poisoning by substances classifiable to E864</td>
<td></td>
</tr>
<tr>
<td>E950.8 Arsenic and its compounds</td>
<td></td>
</tr>
<tr>
<td>E950.9 Other and unspecified solid and liquid substances</td>
<td></td>
</tr>
<tr>
<td>E951 Suicide and self-inflicted poisoning by gases in domestic use</td>
<td></td>
</tr>
<tr>
<td>E951.0 Gas distributed by pipeline</td>
<td></td>
</tr>
<tr>
<td>E951.1 Liquefied petroleum gas distributed in mobile containers</td>
<td></td>
</tr>
<tr>
<td>E951.8 Other utility gas</td>
<td></td>
</tr>
<tr>
<td>E952 Suicide and self-inflicted poisoning by other gases and vapors</td>
<td></td>
</tr>
<tr>
<td>E952.0 Motor vehicle exhaust gas</td>
<td></td>
</tr>
<tr>
<td>E952.1 Other carbon monoxide</td>
<td></td>
</tr>
<tr>
<td>E952.8 Other specified gases and vapors</td>
<td></td>
</tr>
<tr>
<td>E952.9 Unspecified gases and vapors</td>
<td></td>
</tr>
<tr>
<td>E953 Suicide and self-inflicted injury by hanging, strangulation, and suffocation</td>
<td></td>
</tr>
<tr>
<td>E953.0 Hanging</td>
<td></td>
</tr>
<tr>
<td>E953.1 Suffocation by plastic bag</td>
<td></td>
</tr>
<tr>
<td>E953.8 Other specified means</td>
<td></td>
</tr>
<tr>
<td>E953.9 Unspecified means</td>
<td></td>
</tr>
<tr>
<td>E954 Suicide and self-inflicted injury by submersion [drowning]</td>
<td></td>
</tr>
</tbody>
</table>

Table B1. ICD-9 codes related to suicide (continued)

<table>
<thead>
<tr>
<th>Suicide and Self-Inflicted Injury (E950-E959) (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E955 Suicide and self-inflicted injury by firearms, air guns and explosives</td>
</tr>
<tr>
<td>E955.0 Handgun</td>
</tr>
<tr>
<td>E955.1 Shotgun</td>
</tr>
<tr>
<td>E955.2 Hunting rifle</td>
</tr>
<tr>
<td>E955.3 Military firearms</td>
</tr>
<tr>
<td>E955.4 Other and unspecified firearm</td>
</tr>
<tr>
<td>Includes: Gunshot not otherwise specified, shot not otherwise specified</td>
</tr>
<tr>
<td>E955.5 Explosives</td>
</tr>
<tr>
<td>E955.6 Air gun</td>
</tr>
<tr>
<td>Includes: BB gun, Pellet gun</td>
</tr>
<tr>
<td>E955.7 Paintball gun</td>
</tr>
<tr>
<td>E955.9 Unspecified</td>
</tr>
</tbody>
</table>

| E956 Suicide and self-inflicted injury by cutting and piercing instrument |

<table>
<thead>
<tr>
<th>E957 Suicide and self-inflicted injuries by jumping from high place</th>
</tr>
</thead>
<tbody>
<tr>
<td>E957.0 Residential premises</td>
</tr>
<tr>
<td>E957.1 Other man-made structures</td>
</tr>
<tr>
<td>E957.2 Natural sites</td>
</tr>
<tr>
<td>E957.9 Unspecified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E958 Suicide and self-inflicted injury by other and unspecified means</th>
</tr>
</thead>
<tbody>
<tr>
<td>E958.0 Jumping or lying before moving object</td>
</tr>
<tr>
<td>E958.1 Burns, fire</td>
</tr>
<tr>
<td>E958.2 Scald</td>
</tr>
<tr>
<td>E958.3 Extremes of cold</td>
</tr>
<tr>
<td>E958.4 Electrocution</td>
</tr>
<tr>
<td>E958.5 Crashing of motor vehicle</td>
</tr>
<tr>
<td>E958.6 Crashing of aircraft</td>
</tr>
<tr>
<td>E958.7 Caustic substances, except poisoning</td>
</tr>
<tr>
<td>Excludes: poisoning by caustic substance (E950.7)</td>
</tr>
<tr>
<td>E958.8 Other specified means</td>
</tr>
<tr>
<td>E958.9 Unspecified means</td>
</tr>
</tbody>
</table>

| E959 Late effects of self-inflicted injury |

*Note: This category is to be used to indicate circumstances classifiable to E950-E958 as the cause of death or disability from late effects, which are themselves classifiable elsewhere. The "late effects" include conditions reported as such or as sequelae which may occur at any time after the attempted suicide or self-inflicted injury.*

### Table B2. ICD-10 and ICD-10-CA codes related to suicide

**Chapter XX: External Causes of Morbidity and Mortality**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
</table>
| X60  | Intentional self-poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics  
  *Includes: 4-aminophenol derivatives, nonsteroidal anti-inflammatory drugs [NSAID], pyrazolone derivatives, salicylates* |
| X61  | Intentional self-poisoning by and exposure to antiepileptic, sedative, hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified  
  *Includes: antidepressants, barbiturates, hydantoin derivatives, iminostilbenes, methaqualone compounds, neuroleptics, psychostimulants, succinimides and oxazolidinediones, tranquillizers* |
| X62  | Intentional self-poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified  
  *Includes: cannabis (derivatives), cocaine, codeine, heroin, lysergide [LSD], mescaline, methadone, morphine, opium (alkaloids)* |
| X63  | Intentional self-poisoning by and exposure to other drugs acting on the autonomic nervous system  
  *Includes: parasympatholytics [anticholinergics and antimuscarinics] and spasmylytics, parasympathomimetics [cholinergics], sympatholytics [antiadrenergics], sympathomimetics [adrenergics]* |
| X64  | Intentional self-poisoning by and exposure to other and unspecified drugs, medicaments and biological substances  
  *Includes: agents primarily acting on smooth and skeletal muscles and the respiratory system, anaesthetics (general)[local], drugs affecting the: cardiovascular system, gastrointestinal system, hormones and synthetic substitutes, systemic and haematological agents, systemic antibiotics and other anti-infectives, therapeutic gases, topical preparations, vaccines, water-balance agents and drugs affecting mineral and uric acid metabolism* |
| X65  | Intentional self-poisoning by and exposure to alcohol  
  *Includes: alcohol not otherwise specified, butyl [1-butanol], ethyl [ethanol], isopropyl [2-propanol], methyl [methanol], propyl [1-propanol], fusel oil* |
| X66  | Intentional self-poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapours  
  *Includes: benzene and homologues, carbon tetrachloride [tetrachloromethane], chlorofluorocarbons, petroleum (derivatives)* |
| X67  | Intentional self-poisoning by and exposure to other gases and vapours  
  *Includes: carbon monoxide, lacrimogenic gas [tear gas], motor (vehicle) exhaust gas, nitrogen oxides, sulfur dioxide, utility gas  
  *Excludes: metal fumes and vapours (X69)* |
| X68  | Intentional self-poisoning by and exposure to pesticides  
  *Includes: fumigants, fungicides, herbicides, insecticides, rodenticides, wood preservatives  
  *Excludes: plant foods and fertilizers (X69)* |

Table B2. ICD-10 and ICD-10-CA codes related to suicide (continued)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X60-X84: Intentional Self-Harm (continued)</td>
<td></td>
</tr>
<tr>
<td>X69</td>
<td>Intentional self-poisoning by and exposure to other and unspecified chemicals and noxious substances</td>
</tr>
<tr>
<td>X70</td>
<td>Intentional self-harm by hanging, strangulation and suffocation</td>
</tr>
<tr>
<td>X71</td>
<td>Intentional self-harm by drowning and submersion</td>
</tr>
<tr>
<td>X72</td>
<td>Intentional self-harm by handgun discharge</td>
</tr>
<tr>
<td>X73</td>
<td>Intentional self-harm by rifle, shotgun and larger firearm discharge</td>
</tr>
<tr>
<td>X74</td>
<td>Intentional self-harm by other and unspecified firearm discharge</td>
</tr>
<tr>
<td>X74.00o</td>
<td>Intentional self-harm by BB gun discharge (ICD-10 CA only)</td>
</tr>
<tr>
<td>X74.01o</td>
<td>Intentional self-harm by air gun discharge (ICD-10 CA only)</td>
</tr>
<tr>
<td>X74.08o</td>
<td>Intentional self-harm by other specified firearm discharge (ICD-10 CA only)</td>
</tr>
<tr>
<td>X74.09o</td>
<td>Intentional self-harm by unspecified firearm discharge (ICD-10 CA only)</td>
</tr>
<tr>
<td>X75</td>
<td>Intentional self-harm by explosive material</td>
</tr>
<tr>
<td>X76</td>
<td>Intentional self-harm by smoke, fire and flames</td>
</tr>
<tr>
<td>X77</td>
<td>Intentional self-harm by steam, hot vapours and hot objects</td>
</tr>
<tr>
<td>X78</td>
<td>Intentional self-harm by sharp object</td>
</tr>
<tr>
<td>X79</td>
<td>Intentional self-harm by blunt object</td>
</tr>
<tr>
<td>X80</td>
<td>Intentional self-harm by jumping from a high place</td>
</tr>
<tr>
<td>X81</td>
<td>Intentional self-harm by jumping or lying before moving object</td>
</tr>
<tr>
<td>X82</td>
<td>Intentional self-harm by crashing of motor vehicle</td>
</tr>
<tr>
<td>X83</td>
<td>Intentional self-harm by other specified means</td>
</tr>
<tr>
<td>X84</td>
<td>Intentional self-harm by unspecified means</td>
</tr>
<tr>
<td>Y85-89: Sequelae of External Causes of Morbidity and Mortality</td>
<td></td>
</tr>
<tr>
<td>Y87.0</td>
<td>Sequelae of intentional self-harm</td>
</tr>
</tbody>
</table>

Table B3. Selected ICD-10-CA codes for mental and behavioural disorders

<table>
<thead>
<tr>
<th>Chapter V – Mental and Behavioural Disorders (F00-F99)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental and behavioural disorders due to psychoactive substance use (F10-F19)</td>
</tr>
<tr>
<td>F10 Mental and behavioural disorders due to use of alcohol</td>
</tr>
<tr>
<td>F11 Mental and behavioural disorders due to use of opioids</td>
</tr>
<tr>
<td>F12 Mental and behavioural disorders due to use of cannabinoids</td>
</tr>
<tr>
<td>F13 Mental and behavioural disorders due to use of sedatives or hypnotics</td>
</tr>
<tr>
<td>F14 Mental and behavioural disorders due to use of cocaine</td>
</tr>
<tr>
<td>F15 Mental and behavioural disorders due to use of other stimulants, including caffeine</td>
</tr>
<tr>
<td>F16 Mental and behavioural disorders due to use of hallucinogens</td>
</tr>
<tr>
<td>F17 Mental and behavioural disorders due to use of tobacco</td>
</tr>
<tr>
<td>F18 Mental and behavioural disorders due to use of volatile solvents</td>
</tr>
<tr>
<td>F19 Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Schizophrenia, schizotypal and delusional disorders (F20-F29)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F20 Schizophrenia</td>
</tr>
<tr>
<td>F21 Schizotypal disorder</td>
</tr>
<tr>
<td>F22 Persistent delusional disorders</td>
</tr>
<tr>
<td>F23 Acute and transient psychotic disorders</td>
</tr>
<tr>
<td>F24 Induced delusional disorder</td>
</tr>
<tr>
<td>F25 Schizoaffective disorders</td>
</tr>
<tr>
<td>F28 Other nonorganic psychotic disorders</td>
</tr>
<tr>
<td>F29 Unspecified nonorganic psychosis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mood [affective] disorders (F30-F39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F30 Manic episode</td>
</tr>
<tr>
<td>F31 Bipolar affective disorder</td>
</tr>
<tr>
<td>F32 Depressive episode</td>
</tr>
<tr>
<td>F33 Recurrent depressive disorder</td>
</tr>
<tr>
<td>F34 Persistent mood [affective] disorders</td>
</tr>
<tr>
<td>F38 Other mood [affective] disorders</td>
</tr>
<tr>
<td>F39 Unspecified mood [affective] disorders</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Neurotic, stress-related and somatoform disorders (F40-F49)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F40 Phobic anxiety disorders</td>
</tr>
<tr>
<td>F41 Other anxiety disorders</td>
</tr>
<tr>
<td>F42 Obsessive-compulsive disorder</td>
</tr>
<tr>
<td>F43 Reaction to severe stress, and adjustment disorders</td>
</tr>
<tr>
<td>F44 Dissociative [conversion] disorders</td>
</tr>
<tr>
<td>F45 Somatoform disorders</td>
</tr>
<tr>
<td>F48 Other neurotic disorders</td>
</tr>
</tbody>
</table>

### Chapter V – Mental and Behavioural Disorders (F00-F99) (continued)

<table>
<thead>
<tr>
<th>Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F50</td>
<td>Eating disorders</td>
</tr>
<tr>
<td>F51</td>
<td>Nonorganic sleep disorders</td>
</tr>
<tr>
<td>F52</td>
<td>Sexual dysfunction, not caused by organic disorder or disease</td>
</tr>
<tr>
<td>F53</td>
<td>Mental and behavioural disorders associated with the puerperium, not elsewhere classified</td>
</tr>
<tr>
<td>F54</td>
<td>Psychological and behavioural factors associated with disorders or diseases classified elsewhere</td>
</tr>
<tr>
<td>F55</td>
<td>Abuse of non-dependence-producing substances</td>
</tr>
<tr>
<td>F59</td>
<td>Unspecified behavioural syndromes associated with physiological disturbances and physical factors</td>
</tr>
</tbody>
</table>

### Disorders of adult personality and behaviour (F60-F69)

<table>
<thead>
<tr>
<th>Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F60</td>
<td>Specific personality disorders</td>
</tr>
<tr>
<td>F61</td>
<td>Mixed and other personality disorders</td>
</tr>
<tr>
<td>F62</td>
<td>Enduring personality changes, not attributable to brain damage and disease</td>
</tr>
<tr>
<td>F63</td>
<td>Habit and impulse disorders</td>
</tr>
<tr>
<td>F64</td>
<td>Gender identity disorders</td>
</tr>
<tr>
<td>F65</td>
<td>Disorders of sexual preference</td>
</tr>
<tr>
<td>F66</td>
<td>Psychological and behavioural disorders associated with sexual development and orientation</td>
</tr>
<tr>
<td>F68</td>
<td>Other disorders of adult personality and behaviour</td>
</tr>
<tr>
<td>F69</td>
<td>Unspecified disorder of adult personality and behaviour</td>
</tr>
</tbody>
</table>

### Behavioural and emotional disorders with onset usually occurring in childhood and adolescence (F90-F98)

<table>
<thead>
<tr>
<th>Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F90</td>
<td>Hyperkinetic disorders</td>
</tr>
<tr>
<td>F91</td>
<td>Conduct disorders</td>
</tr>
<tr>
<td>F92</td>
<td>Mixed disorders of conduct and emotions</td>
</tr>
<tr>
<td>F93</td>
<td>Emotional disorders with onset specific to childhood</td>
</tr>
<tr>
<td>F94</td>
<td>Disorders of social functioning with onset specific to childhood and adolescence</td>
</tr>
<tr>
<td>F95</td>
<td>Tic disorders</td>
</tr>
<tr>
<td>F98</td>
<td>Other behavioural and emotional disorders with onset usually occurring in childhood and adolescence</td>
</tr>
</tbody>
</table>

### Unspecified mental disorder (F99)

<table>
<thead>
<tr>
<th>Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F99</td>
<td>Mental disorder, not otherwise specified</td>
</tr>
</tbody>
</table>

### Chapter XVIII – Symptoms, Signs and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified

#### Symptoms and Signs Involving Cognition, Perception, Emotional State and Behaviour (R40-R46)

<table>
<thead>
<tr>
<th>Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R45</td>
<td>Symptoms and signs involving emotional state</td>
</tr>
<tr>
<td>R45.8</td>
<td>Other symptoms and signs involving emotional state</td>
</tr>
<tr>
<td></td>
<td>Suicidal ideation (tendencies)</td>
</tr>
<tr>
<td></td>
<td>Excludes: suicidal ideation constituting part of a mental disorder</td>
</tr>
</tbody>
</table>

TO: Chair Sean Strickland and Members of the Community Services Committee
DATE: May 24, 2011
FILE CODE: P04-80
SUBJECT: HEALTHY SMILES ONTARIO – UPDATE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo request the Ontario Ministry of Health and Long-Term Care continue to fund the costs associated with the client eligibility process of Healthy Smiles Ontario until that process is centralized at the provincial level;

AND THAT the Regional Municipality of Waterloo forward a letter with the recommendation and a copy of this report to the Association of Local Public Health Agencies (alPHA), as outlined in Report PH-11-025, dated May 24, 2011.

SUMMARY:
The purpose of this report is to provide Regional Council with an update on the new Healthy Smiles Ontario program, which is being funded 100% by the Ministry of Health and Long-Term Care. Healthy Smiles Ontario provides preventive and early treatment services to eligible children and youth aged 0 to 17 years. In Waterloo Region, Healthy Smiles Ontario consists of: (1) dental treatment services provided by dentists in public health clinics or in private practice; (2) preventive care services provided by public health dental hygienists, or by dentists or dental hygienists in private practice; (3) oral health screening services; and (4) health promotion activities. When Healthy Smiles Ontario was implemented in October 2010, local public health units assumed responsibility for assessing eligibility and processing Healthy Smiles Ontario client cards. At the time of the submission of the funding proposal, this function was to be centrally administered by the province. One-time funding was provided in 2010 to offset this additional responsibility.

However, public health units remain responsible for assessing eligibility and processing Healthy Smiles Ontario client cards at the local level. As a result, the provincial government should continue to provide public health units with funding for the administrative costs associated with the client eligibility process of Healthy Smiles Ontario until that process is centralized at the provincial level.

REPORT:

1.0 Background
In October 2010 the Healthy Smiles Ontario program was launched throughout the province and funded 100% by the Ministry of Health and Long-Term Care. Public health units have begun implementation of this new program which provides preventive and early treatment services to eligible children and youth aged 0 to 17 years.

Health units determine eligibility at the local level. Once eligible, children and youth qualify for services for up to a maximum period of three years provided the resident is under 18 years of age. After three years, children and youth will be reassessed for eligibility and if eligible be extended for another three years. The eligibility criteria for Healthy Smiles Ontario include financial and non-
financial elements. Financial criteria are aligned with the Ontario Child Benefit program and correspond with the Ontario Child Benefit maximum payment threshold, which uses an adjusted family net income of $20,000 or under. Non-financial criteria are as follows: children aged 0-17-years; resident of Ontario; and no access to dental or other forms of oral health coverage, including access to other provincial or federal dental programs that provide on-going basic dental care (e.g., Ontario Works).

In Waterloo Region, the components of Healthy Smiles Ontario include:

(1) Dental treatment services provided by dentists in public health clinics and by dentists in private practice on a fee-for-service basis.

(2) Preventive care services provided by public health dental hygienists working in public health clinics and community settings (e.g., Community Health Centres), and by private dental providers on a fee-for-service basis.

(3) Oral health screening provided by public health dental hygienists at public health and community sites to identify children and youth with early signs of dental disease and to assist residents with access to programs.

(4) Dental Health staff providing health promotion activities and community outreach services in partnership with local community programs and/or providers that service the low-income community.

Regional Council was previously updated on the development of Healthy Smiles Ontario when it was known as the Low-Income Dental Program: January 26, 2010 (CSC Report PH-10-006), April 27, 2010 (CSC Report PH-10-023), and September 28, 2010 (CSC Report PH-10-049).

2.0 Claims and Eligibility Processing
As of May 4th a total of 75 Healthy Smiles Ontario client cards have been issued and $9,668 in dental treatment costs had been paid for the 2011 calendar year. The annual dentist payment budget is $253,100.

One-time administrative funding was provided in the fall of 2010 to health units to support initial program start-up; Region of Waterloo Public Health received $19,359. This funding assisted Public Health with the costs associated with administration of the client eligibility process at the local level. Although the Ministry of Health and Long Term Care is exploring the possibility of creating a centralized process for program eligibility in the longer-term, health units will still provide this service for the foreseeable future. Therefore, continued funding is required to cover administration costs associated with program eligibility until the process is centralized at the provincial level.

3.0 Capital Funding
One-time capital funding of up to $200,000 (at 100%) was provided by the Ministry of Health and Long Term Care to develop or expand existing community-based dental infrastructure and purchase materials and supplies to enhance our ability to perform public health dental services in the public health clinics and community sites.

Leasehold improvements were completed by the March 31st deadline with the exception of construction at Langs Farm Village Association, which is delayed until the Fall. Funding has been used to upgrade chairs and equipment at the Public Health clinics and for the installation of cabinets, sinks, lighting and other upgrades at three Community Health Centre sites so that preventive clinic services can be provided. Public Health has requested that capital funding for the
construction Langs Farm Village Association be provided as part of Year Two Healthy Smiles Ontario capital funding.

Dental equipment and supplies were received by the March 31\textsuperscript{st} deadline. These items include dental instruments, ultrasonic scaling units, handpieces, dental compressors, chairs, stools, curing lights, dental sundries and laptop computers.

4.0 Implementation of Healthy Smiles Ontario at Community Health Centres
A key component of the local implementation of Healthy Smiles Ontario program is the collaboration of Public Health with three Community Health Centres; Kitchener Downtown Community Health Centre, Langs Farm Village Association and Woolwich Community Health Centre. Community Health Centres are well poised to facilitate reaching our target population through their staff, peer workers, and connections to local community agencies.

As outlined in the Healthy Smiles Ontario Local Implementation Model (Attachment #1); an implementation steering committee consisting of representatives from the three Community Health Centres and the Public Health dental program have met regularly and created an implementation strategy for each Community Health Centre (Attachment #2).

Current Community Health Centre peer health workers will play a key role in the promotion of Healthy Smiles Ontario and other Region of Waterloo dental services in the community and with their clients. Additional peer health workers may be hired by the Community Health Centres to specifically promote oral health and Healthy Smiles Ontario through identifying local needs and prevention opportunities; presentations and assisting clients with the application process and accessing services. Evidence from the Region of Waterloo Peer Program indicates that peer workers are very effective in reaching people with low incomes, people with English as a second language, parents with young children and recent immigrants and refugees all of whom may qualify for this program. Note: The term, peer health worker, is inclusive of all peer workers such as outreach workers, settlement workers, community health helpers or navigators.

Launch events for Healthy Smiles Ontario took place at Langs Farm Village Association on March 25\textsuperscript{th}, the Kitchener Downtown Community Health Centre on March 31\textsuperscript{st} and at Woolwich Community Health Centre on April 7\textsuperscript{th}. These events were well-attended and those in attendance included Community Health Centre board members, representatives from Regional Council, community agencies and members of the public.

5.0 Oral Health Month Activities
Oral health promotion activities to increase awareness of Healthy Smiles Ontario took place in April during Oral Health Month. Activities included:

- Dental Health Information Night for the dental community on April 6\textsuperscript{th}
- Health In Action article
- Physicians Update article
- “Hot Topics” presentation to Public Health and Social Services staff
- “Portal Spotlight” to promote awareness among Regional employees

In fall 2011, Public Health will facilitate the start of a local oral health network/coalition composed of stakeholder groups. Health promotion activities will be coordinated through this network/coalition, including:
• Education to improve oral hygiene skills of children and youth, parents and caregivers
• Presentations to raise awareness at local community groups
• Development and distribution of oral health promotion materials in multiple languages
• Advocacy to reduce barriers to achieving optimal oral health
• Coordination of regional oral health promotion activities and other health messaging
• Promotion of program to community stakeholders who are connected with low-income populations
• Professional development opportunities for dental providers and other groups

6.0 Conclusion
The new Healthy Smiles Ontario program addresses a significant gap that exists in dental care for children and youth from low income families. Public Health will continue to work with community partners, such as local dental providers and Community Health Centres, to improve access for those who cannot access regular dental care due to financial barriers. It is anticipated that over the long-term, the preventive and health promotion activities created by this program will help to reduce the amount of dental disease among children and youth in Waterloo Region.

CORPORATE STRATEGIC PLAN:
Focus Area 3 - Healthy and Safe Communities; and Focus Area 6 - Service Excellence.

FINANCIAL IMPLICATIONS:
All expenditures for Healthy Smiles Ontario are covered by 100% provincial funding with the exception of the on-going costs associated with assessing client eligibility.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:
NIL

ATTACHMENTS
Attachment #1: Healthy Smiles Ontario Local Implementation Model
Attachment #2: Community Health Centres Implementation Strategies

PREPARED BY: Dr. Robert Hawkins, Dental Consultant

APPROVED BY: Dr. Liana Nolan, Commissioner/Medical Officer of Health
ATTACHMENT #1
Healthy Smiles Ontario Local Implementation Model

Ministry of Health and Long-Term Care

Public Health Internal Steering Committee

Oral Health Advisory Group (TBD)

Community Health Centre Implementation Steering Committee

Public Health Dental Program

Region of Waterloo Staff

Local Dentists and Dental Hygienists and their Associations

Community Health Centres

Community Agencies

Peer Health and Outreach/Settlement Workers

Community Health Centre Staff

Target Population
### ATTACHMENT #2
Community Health Centres Implementation Strategies

#### Kitchener Downtown Community Health Centre
- **Implementation Factors**
  - limited per cent of existing CHC clients eligible
  - multiple target populations - languages, cultures
  - large number of peer workers
  - large number of programs
  - high population density
- **Strategy**
  - strategy to be developed with input from affiliated community agencies (launch event)
  - emphasis on promotion of HSO through affiliated community agencies
  - CHC staff to promote HSO
  - all peer workers to promote HSO through one-on-one consultations and groups
  - additional peer health workers with oral health focus

#### Langs Farm Village Association
- **Implementation Factors**
  - over 50 per cent of existing CHC clients eligible
  - multiple target populations - languages, cultures
  - medium number of peer health workers
  - medium number of programs
  - high population density
  - strong relationship with Public Health dental program
- **Strategy**
  - emphasis on promotion of program by peer health workers and CHC staff
  - all peer workers to promote HSO through one-on-one consultations and groups
  - information about HSO provided to affiliated community agencies
  - dental hygienist has visible presence at CHC
  - highlight dental services offered on site
  - additional peer health worker with oral health focus

#### Woolwich Community Health Centre
- **Implementation Factors**
  - over 80 per cent of existing old colony CHC clients eligible
  - strong focus on low-german speaking Mennonites from Mexico
  - small number of peer workers
  - small number of programs
  - low population density
  - strong relationship with Public Health dental program
- **Strategy**
  - emphasis on promotion of HSO through peer health worker (population specific)
  - CHC staff to promote HSO
  - strong link with WCHC dentist
  - peer health workers to link with outreach/settlement workers
  - development of new programming (schools)
  - additional peer health worker with oral health focus
TO: Chair Sean Strickland and Members of the Community Services Committee
DATE: May 24, 2011
FILE CODE: S04-01
SUBJECT: UPDATE ON BEST START CHILD AND FAMILY CENTRES

RECOMMENDATION:

For information only

SUMMARY:

Best Start Child and Family Centres have been identified as carrying a unique role in communities and will complete a large portion of the early years vision once established. CMSM's are identified in the report as the local leaders in development, planning and implementation. This report provides an update on the actions taken to date to support planning for the development of Best Start Child and Family Centres.

REPORT:

1.0 Provincial Early Years Framework – Best Start Child and Family Centres

The Provincial Early Years Policy Framework launched in 2009 outlined an ambitious plan to reshape programs and services for young children. The vision originally outlined in the report authored by Dr. Charles Pascal called: ‘Our Best Future in Mind’ recommended broad sweeping changes that would see a coordinated continuum of services available to families with young children from birth to twelve. The vision included four key areas of focus which are being implemented over a four year period.

- Full Day Early Learning Kindergarten Programs
- Before, After School and Summer Programs for children 4-12 years of age
- Quality Programs for Younger Children
- Best Start Child and Family Centres

1.1 Full Day Early Learning Kindergarten Programs

The first area of focus for the Province was to establish full day early learning kindergarten programs across the province. Staff have participated in the planning and development at a local level with partners at the Boards of Education. In September 2010, phase one of a five year plan was initiated with 21 (15%) schools in Waterloo Region offering full day early learning kindergarten. In September 2011 an additional 5% will be offering full day kindergarten. This will be followed by an additional 29% in September 2012, 25% in 2013, and 26% in 2014. The Province anticipates full implementation across Ontario by 2014/2015.
1.2 Before, After School and Summer Programs

In addition to full day kindergarten the Province now requires Boards of Education to offer before and after school care between the hours of 7 am and 6 pm on a fee for service basis. Locally the Boards of Education are phasing in the extended day portion for children from 4 to 7 years of age in schools were there is demonstrated demand. The extended day program is administered by the Board of Education and parents pay a fee for service.

1.3 Quality Programs for Younger Children

Municipalities as the Consolidated Municipal Service Managers (CMSM) have been identified as the system leaders in two key roles;

- Maintenance and expansion of high quality, licensed early learning and child care programs for children under the age of four years and
- Leaders in the development of a community based Early Years Service System plan that will include Best Start Child and Family Centres

The 2010 Children’s Services, Service Plan and Stabilization Strategy provided an overview of the current system and outlined a plan to focus on supporting the current licensed child care operators through the transition.

The service plan addressed two areas of focus; services for children from birth to four years and development of best start child and family centres. This report provides an update on the process unfolding for the development of Best Start Child and Family Centres.

2.0 Best Start Child and Family Centres

The Provincial vision for Best Start Child and Family Centres (BSCFC), is being rolled out through a series of consultations to inform the development of a policy framework to guide implementation. Staff are anticipating an announcement regarding implementation within a year. Dr Charles Pascal, original author of the Early Years Report, ‘Our Best Future in Mind’ was appointed as special advisor to the Minister of Children and Youth Services to guide the process.

Best Start Child and Family Centres (BSC&FC), are described as providing families with a variety of services and supports within neighbourhoods or communities. The following list provides some examples of the types of services that might be located in a BSC&FC:

- flexible, part-time/full-day/full-year early learning/care options for children up to age 4;
- prenatal and postnatal information and supports;
- parenting and family support programming, including home visiting, family literacy, and playgroups;
- nutrition and nutrition counselling;
- early identification and intervention resources;
- links to special needs treatment and community resources, including libraries, recreation and community centres, health care, family counselling, housing, language services, and employment/training services.

To support the service continuum and support children’s transitions to the Early Learning Program, the preferred location for Best Start Child and Family Centres is within schools or school communities. Under the systems management of municipal authorities, the direct operation of Best
Start Child and Family Centres could be provided by local or regional governments, school boards, post-secondary institutions, or non-profit agencies.

3.0 Community Consultation and Engagement

In anticipation of Provincial announcements regarding BSC&FC, a series of information sessions were provided by staff in November and December, 2010. The sessions were attended by over 100 people. At each session the vision for BSC&FC was shared with participants and their input was solicited on how the model might be implemented in Waterloo Region. A summary of the community feedback was presented to the Region of Waterloo Children and Parent Services Committee (ROWCAPS) and a copy of the report was forwarded to the Province on behalf of ROWCAPS. As a result of the input ROWCAPS endorsed the decision to proceed with a working group to help develop a process for Waterloo Region.

3.1 Best Start Child and Family Centre Working Group

The purpose of the Child & Family Centre working group is to develop a plan and framework for development of BSCFC when Provincial funding comes available. The Best Start Child and Family Centre (BSCFC) Working Group will develop a decision making mechanism to guide the eventual establishment of Best Start Child and Family Centre(s) in Waterloo region. The Working Group will make recommendations to the Region of Waterloo Children and Parent’s Services Committee (ROWCAPS) about the location of the Child and Family Centre(s), and will work with Provincial guidelines once available.

The Child & Family Centre Working Group will take the lead on planning for Best Start Child and Family Centres to be established in Waterloo region and the criteria for the selection of the lead agency/organization(s) for Best Start Child and Family Centres. Members were selected through an application process to ensure representation from each of the following sectors;

- Education
- Early Learning and Child Care
- Recreation
- Ontario Early Years Centres
- Special Needs Resourcing
- Developmental Services
- Mental Health/Health Services
- Neighbourhood Associations/Community Centres
- Multicultural
- Aboriginal
- Libraries
- Child Protection
- Public Health Staff
- Ministry of Children and Youth Services Staff
- Children’s Services Staff
- Social Planning, Policy and Program Administration Staff.

The Child & Family Centre working group will hold it’s first meeting in June 2011. This working group will report back to ROWCAPS on their work and seek input into the development of a framework for implementation in our community. The members of the working group each represent a service sector and bring knowledge, experience and expertise.
3.2 Joint Planning

The Child & Family Working Group will work with another working group called the Early Learning Planning and Technical Team. The team is comprised of staff from Public Health, Social Services, Planning, Housing and Community Services and Facilities. Planning staff from the local Boards of Education, the Ontario Early Years Data Analysis Coordinator and representatives from the Ministry of Education and Ministry of Children and Youth Services are also on the technical team.

The EL Planning and Technical Team Objectives for Best Start Child and Family Centres are:
- To assist in planning Best Start Child and Family Centres.
- To identify issues and opportunities in developing Best Start Child and Family Centres.
- To identify issues related to Best Start Child and Family Centres specific to their neighbourhoods/districts (e.g. transportation).
- To recommend sites/space for Best Start Child and Family Centres when appropriate.

CORPORATE STRATEGIC PLAN:

This report supports the Region’s Strategic Focus Area 4: (to) Promote quality of life and create opportunities for residents to develop to their full potential and Strategic Objective 3: by investing in the development and expansion of quality child care services.

FINANCIAL IMPLICATIONS:

The development of a framework and implementation plan can be accommodated within the Children’s Services 2011 budget allocation for planning. Implementation of Best Start Child and Family Centres will be contingent on Provincial funding.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The ongoing participation of Public Health, Facilities, Planning, Housing and Community Services staff on working groups is required to support the development of this project.

ATTACHMENTS

NIL

PREPARED BY: Nancy Dickieson, Director, Children’s Services

APPROVED BY: Michael Schuster, Commissioner, Social Services
TO: Chair Sean Strickland and Members of the Community Services Committee
DATE: May 24, 2011
FILE CODE: S14-20
SUBJECT: ABORIGINAL SERVICE PLAN AND FUNDING ALLOCATION

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the 2011 Aboriginal Service Plan conditional on Provincial funding as outlined in report SS-11-022, dated May 24, 2011.

SUMMARY:

This report outlines Provincial changes to funding provided to municipalities to support planning. A portion of the funding has been reallocated to require municipalities to ensure planning involves Aboriginal communities. A 2011 Aboriginal Service plan is attached for Committees review. The plan outlines two key activities that will be taken in 2011 to ensure involvement with the Aboriginal community.

REPORT:

1.0 Background

In 2010 responsibility for licensed early learning and child care was transferred to the Ministry of Education from the Ministry of Children and Youth Services. As of January 2011 all funding for licensed early learning and child care is flowed to the municipality through the EDU with the exception of two funding envelopes.

The Ministry of Children and Youth Services retained funding responsibility for the Infant & Child Development program and a portion of the Best Start Planning funding. In 2010 the allocation was $73,900.

2.0 Best Start Planning/Early Child Development Funding

In April 2011, (letter attached), staff received notification from MCYS that 20% of the Best Start Planning funds, $73,900 was being re-purposed. This reflects a reduction in the funding provided to support Best Start planning. The total allocation for 2011 will be $59,100 which reflects 80% of the amount from previous years. The 20% removed from the budget approval has been re-purposed by the Province to support planning for Aboriginal children, families and communities and redistributed based on population statistics for each municipality.

Staff received notification that the re-purposed funding allocation for Waterloo Region to support planning with our Aboriginal community will be up to a maximum of $8,400. This funding allocation is conditional on the submission and approval of an Aboriginal Service Plan. The Aboriginal Service Plan for 2011 has been endorsed by the local Best Start network, Region of Waterloo Children and Parent Services Committee (ROWCAPS) as required in the Provincial guidelines.
3.0 Aboriginal Service Planning

The Aboriginal community has been involved with ROWCAPS since its inception in 2005. The 2011 Aboriginal Service planning is attached for Committee’s review. The service plan has been completed using the Provincial template. A draft of the template has been reviewed with the Aboriginal community and reviewed and endorsed by ROWCAPS at their meeting on May 11, 2011. The plan must be submitted to the Province for approval by June 3rd.

The Aboriginal Service plan for 2010 identifies two key activities which can be supported with the planning allocation:

- Updating an overview and profile of the Aboriginal community in Waterloo Region using needs assessments completed in 2006 and 2010 as the foundation.
- Development of a proposal for the establishment of an Aboriginal Best Start Child & Family Centre for Waterloo Region.

This will be achieved through ongoing meetings with the Aboriginal community and review with ROWCAPS committee.

CORPORATE STRATEGIC PLAN:

This report supports the Region’s Strategic Focus Area 4: (to) Promote quality of life and create opportunities for residents to develop to their full potential and Strategic Objective 3: by investing in the development and expansion of quality child care services.

FINANCIAL IMPLICATIONS:

The anticipated planning allocation of $8,400 is 100% Provincial funding. The re-distribution of the Best Start Planning allocation results in a net reduction of $6,400 for the 2011 Children’s Services budget. The total allocation for Best Start/Early Child Development planning is anticipated to total $67,500 ($59,100 + $8,400).

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The assistance of Finance and Social Planning, Policy and Administration is required to administer the funding and provide planning support.

ATTACHMENTS

A - Ministry of Children and Youth Services letter, April 2011 (separate attachment)
B - 2011 Aboriginal Service Plan Template (separate attachment)

PREPARED BY: Nancy Dickieson, Director, Children’s Services

APPROVED BY: Michael Schuster, Commissioner, Social Services
April 28, 2011

MEMORANDUM TO: Nancy Dickieson
Director, Children’s Services
Regional Municipality of Waterloo

Debbie Hoekstra, Co-Chair
Waterloo Best Start Network

FROM: Vince Tedesco
Regional Director

RE: 2011-12 Early Learning and Child Development
Allocations - Transfer Payments for Best Start Network
Planning

I am pleased to advise you that the fiscal year 2011-12 Transfer Payment allotment for Best Start Network Planning in your region is 67,500. This amount is based on 80% of the 2010-2011 allotment for the Best Start Network (BSN) in your region and an allotment for Aboriginal planning. The funding allocation is broken down as follows:

- TP allotment for Best Start Network Planning - $59,100;
- Projected allotment for Aboriginal Planning, pending the approval of a local plan. - $ 8,400

Twenty per cent of the overall Best Start planning allocation for 2011-12 has been redistributed to more purposefully support Aboriginal engagement. The Best Start Aboriginal Planning Fund will support the focus of BSNs on building relationships and supporting planning for Aboriginal children, families and service providers. Under new ministry guidelines (enclosed) an amount based on the local Aboriginal child population aged 0-6 is dedicated separately in each Consolidated Municipal Service Manager (CMSM).
Your allotment for Aboriginal planning has been calculated based on the share of children of Aboriginal identity, aged 0-6 years in your municipal area. This allotment for your BSN is to be used in accordance with the enclosed guidelines which are to be shared with the networks.

BSNs are required to complete the planning template (enclosed) with costing estimates that support their engagement efforts. The completed template should be submitted to the regional office by May 31st, 2011. Plans will be approved and funding flowed in mid-June 2011. The networks’ first report-back on activities and expenditures will be submitted in Q1 2012 using the same template.

Should you have any questions, please contact Pamela Martindale-Nevin, Program Supervisor at 905-567-7177 ext. 264.

Vince Tedesco  
Regional Director

Copy: Karen Eisler, Program Manager, Municipal Services  
Pamela Martindale-Nevin, Program Supervisor, Municipal Services

Attachments: Guidelines  
Template
### Best Start Network Composition and Activities

In Waterloo Region, the Best Start Network is called Region of Waterloo Children and Parents Services Committee, (ROWCAPS). This committee has broad representation across sectors providing services and supports to families and young children. Representation from the Aboriginal community has been in place since its inception in 2005. ROWCAPS is currently engaged in guiding the creation of a comprehensive early years system plan for Waterloo Region for children and families from birth to 12 years of age. In addition, a new working group has been formed to develop a planning framework for establishing Best Start Child and Family Centres in Waterloo Region. Aboriginal representation has been requested on this working group. In addition staff from Children’s Services are meeting with the Aboriginal community to explore further working relationships.

### Activity and Description

<table>
<thead>
<tr>
<th>Activity and Description</th>
<th>Partners</th>
<th>Projected Expenditure</th>
<th>Achievements/Outcomes (How did the activity support Aboriginal needs at the local level)</th>
<th>Actual Expenditure ($)</th>
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<tbody>
<tr>
<td>Best Start Network Composition and Activities</td>
<td>Wilfrid Laurier Aboriginal MSW Program, Healing of the Seven Generations, ROWCAPS,</td>
<td></td>
<td>Involvement of the Healing of the Seven Generations with the Best Start Network has provides a mutually beneficial opportunity for committee members to learn about Aboriginal-specific events and perspectives and for the Aboriginal community to learn more about the actives of community partners. In addition regular meetings are scheduled with the Aboriginal community to build relationships and identify ongoing needs. Local Aboriginal community involvement supports the consideration and identification of local Aboriginal needs.</td>
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Ministry of Children and Youth Services

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<th>Actual Expenditure ($)</th>
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<tbody>
<tr>
<td><strong>Community Engagement Process</strong></td>
<td>Healing of the Seven Generations, Waterloo Wellington LHIN, Wilfrid Laurier University, Aboriginal MSW program and aboriginal community members</td>
<td>2,000</td>
<td>A draft proposal will be developed in consultation with the Best Start Child and Family Centre working group for the establishment of an Aboriginal C&amp;FC. Consultation sessions will be conducted with the Aboriginal community to ensure the framework for this proposal fits traditions and values. The local Aboriginal community will be involved in the ongoing system planning work of ROWCAPS and the BS Child &amp; Family Centre Working Group as well as through individual consultations.</td>
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<tr>
<td><strong>Planning/System Coordination Activities</strong></td>
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# Ministry of Children and Youth Services

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<td>A preliminary draft proposal for an Aboriginal Family Resource Centre was initiated in 2009 and was not completed due to lack of staff resources. Staffing resources will be provided through the BS Planning funding to support the completion of a proposal for an Aboriginal Child &amp; Family Resource Centre for Waterloo Region. One to one meetings with representatives from the Healing of Seven Generations will be ongoing during the development phase to provide input and guidance in the writing of the proposal. Assistance will be provided in writing the proposal, publishing it and distribution for funding. In 2011, representation from the local Aboriginal community was invited to participate in the Best Start Child and Family Centres Working Group. Given limited staff resources in Aboriginal agencies, a separate planning process with the local Aboriginal community will be required to work towards establishing an Aboriginal C&amp;FC.</td>
<td>Healing of the Seven Generations</td>
<td>$6,400</td>
<td>A mapping exercise will be completed to show all the Aboriginal organizations &amp; mandates to support further planning. Staff resources will be provided in 2011 to the Aboriginal community for the creation of a proposal for development of an Aboriginal Child and Family Centre. Once completed the proposal will be presented to ROWCAPS for endorsement. Support will be provided to the Aboriginal community to develop proposals to seek sources of funding for development of the project. As requested additional planning support will be provided to develop a workplan for implementation. Through joint planning relationships with the Aboriginal community will continue to grow and prosper.</td>
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<tr>
<th>Other Activities/Processes</th>
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<tr>
<td>The Aboriginal community hosted a two-day forum on Aboriginal tradition in April 2011. Members of ROWCAPS were invited to attend.</td>
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<td>The LHIN completed a health needs assessment in 2010 and data will be used to provide context for the Aboriginal C&amp;FC proposal.</td>
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REGION OF WATERLOO
SOCIAL SERVICES
Children’s Services

TO: Chair Sean Strickland and Members of the Community Services Committee
DATE: May 24, 2011
FILE CODE: S04-01
SUBJECT: RESILIENCY INITIATIVE FUNDING FOR CHILDREN’S SERVICES

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into a funding agreement with the Resiliency Initiative Waterloo Region as outlined in SS-11-023, May 24, 2011;

AND THAT the 2011 Operating Budget for Children’s Services be increased by $10,000 gross and $0 net Regional levy as outlined in Report SS-10-018.

SUMMARY:
NIL

REPORT:

1.0 Background

Provincial changes to the education and early learning and child care systems are creating a need to redefine and re-engineer the programs and services offered for young children in Waterloo Region. In 2010 full day kindergarten, five days a week with options for extended days was offered at 15% of schools in Waterloo Region, this will increase by 5% in 2011 and an additional 29% by 2012. Full implementation of the program will be completed by 2014. The availability of full day kindergarten programs in Ontario will significantly impact the need for licensed child care programs for four and five year old children. Children’s Services has responsibility as the system manager and administrator for licensed early learning and child care. The 2010 stabilization strategy identified a goal of ensuring availability of high quality, vibrant and stable child care options for families in Waterloo Region. Children’s Services in consultation with community operators, partners and education sector staff is working on a multi faceted approach to stabilize and reshape the delivery of services for children in Waterloo Region during this transition period.

2.0 Fiscal and Strategic Resiliency

The area of fiscal and strategic resiliency is a relatively new concept for the licensed early learning and child care community. To support licensed operators in developing resilient business models, Children’s Services submitted a proposal to the Waterloo Region Resiliency Initiative to request sponsorship for a workshop series to be delivered in Waterloo Region. Staff, have received notification that the Waterloo Region Resiliency Initiative will provide $10,000 in funding to support the delivery of the workshops in 2011.

The Waterloo Region Resiliency Initiative began in 2009 as a new space for funders and non-profit organizations to learn more about transforming business models and increasing sector effectiveness. The current partners include: Lyle S. Hallman Foundation; United Way of Kitchener
Waterloo and Area; United Way of Cambridge and North Dumfries; The Kitchener Waterloo Community Foundation; Cambridge Community Foundation; The Robert and Judith Astley Family Foundation; The Corporation of the City of Kitchener; The City of Waterloo; The Region of Waterloo (Social Services); Ontario Trillium Foundation. This funder's collaborative is currently focusing its project funding opportunities on organizations looking to re-build their resiliency in the face of the systemic changes.

Licensed Early Learning and Child Care operators impacted by full day kindergarten will be invited to participate in the business resiliency workshops. The workshops will be one and a half days in length and will be offered three times over the next twelve months. There are two key areas of focus; providing information on how to develop a restructuring plan including fiscal and strategic resiliency; and allowing operators to work with their own financial scenarios to find ways to restructure and revitalize their organizations.

Anticipated Outcomes & Benefits

- Organizations will be able to fully assess the impact of full day kindergarten on their programs
- Programs and organizations will be able to make strategic decisions about their services
- Organizations will develop a draft strategic and financial restructuring plan
- Multi-service operators will be able to transfer use of tools to other aspects of their business

The workshop series supports and compliments the stabilization strategies implemented in 2010 with the community to sustain the current available child care spaces and develop fiscal resiliency. Staff are currently working in consultation with the community to finalize further strategies to be implemented in 2011 conditional on Provincial funding.

CORPORATE STRATEGIC PLAN:

This report supports the Region's strategic focus area Human Services to promote quality of life and create opportunities for residents to develop to their full potential by investing in the development and expansion of quality child care services.

FINANCIAL IMPLICATIONS:

Funding from the Waterloo Region Resiliency Initiative of $10,000 will cover the cost of delivering the workshop series in 2011.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The assistance of Financial Services staff will be required for administration of the funding.

ATTACHMENTS

A - Letter Waterloo Region Resiliency Initiative, April 29, 2011

PREPARED BY: Nancy Dickieson, Director, Children’s Services

APPROVED BY: Michael Schuster, Commissioner, Social Services
April 29, 2011

Mrs. Nancy Dickleson, Director
Region of Waterloo, Children's Services
99 Regina Street South, 5th Floor
Waterloo, ON N2J 4G6

Dear Nancy:

The Funders' group for the Waterloo Region Resiliency Initiative is pleased to assist Region of Waterloo – Children's Services and your resiliency project with a 2011 grant of $10,000. The Resiliency Initiative is investing in seven projects from organizations across the not for profit sector in Waterloo Region to support transformational work.

The grant is for the purposes and activities set forth in your letter of intent and project outline submitted to the Resiliency Initiative on January 21, 2011. Please see attached grant cheque letter outlining grant provisions and commitments from your organization through the year.

The Waterloo Region Resiliency Initiative wishes to convey our appreciation to the Council, staff, volunteers and partners of Children's Services for the sincere interest, efforts and contribution in working toward strengthening the not for profit sector.

Waterloo Region Resiliency Initiative
Collaborative Partners

TO: Chair Sean Strickland and Members of the Community Services Committee

DATE: May 24, 2011

FILE CODE: S08-20

SUBJECT: ENHANCED EMPLOYMENT SERVICES INITIATIVE FOR VULNERABLE PERSONS

RECOMMENDATION:

For Information only.

SUMMARY:

The Region of Waterloo was provided funds as part of the Province’s Enhanced Employment Services Initiative for Vulnerable Persons in 2009-10 and 2010-11. The Region of Waterloo's allocation was $738,842 in each of the two fiscal years. This funding ended on March 31, 2011.

REPORT:

1.0 Overview of Initiative

The purpose of this initiative was to enhance service capacity to connect, support and prepare vulnerable populations for participation in appropriate education, training and employment. Employment and Income Support, Social Services implemented several strategies to achieve the goals of this initiative. Three staff carried smaller caseloads to provide more employment focused interventions. Employment Related Expense funding was enhanced and expanded to assist a greater number of participants. An Employment Supervisor was seconded, for the length of the project, to act as a project manager and to research, plan and implement a new employment services plan for the division based on feedback from staff, program participants, and community partners. This work was outlined in the annual Ontario Works Service Plans and addenda for each of the years as approved by Council.

2.0 Program Highlights

With this funding 3,148 participants received additional services through this initiative. Employment Resource Counsellors provided one to one support to participants who have additional barriers to finding and retaining employment. Through the additional Employment Related Expense funds 25 participants were assisted to obtain their General Equivalency Diploma. Other employment related expenses included the cost of pardons for those that required them as a next step to employment; educational fees and supplies; recertification costs such as tow motor licenses; expanded items of clothing for job search and interviews; child care funds to assist those who are entering programs or employment while awaiting Regional subsidized childcare; additional psychosocial and educational assessments; short term counselling for social assistance recipients was expanded to all Conestoga College Campuses within the Region of Waterloo; Project Read and Conestoga College were enabled to expand family literacy programming and employment expenses for their programming; and increased
travel and transportation support to those attending programming and educational institutions.

3.0 Program Development

Through these funds a number of additional programs were developed and/or funded. These include:

- a General Equivalency Diploma (GED) program;
- an employment program focusing on the more experienced displaced worker;
- a program to assist women to move towards employment;
- a skills development program geared towards the retail food industry; and
- an essential skills program for those entering the workforce.

Finally, the Enhanced Employment Services project provided an opportunity for Employment Services to complete a thorough review of existing internal employment programs at the Region of Waterloo. This was a detailed and extensive research project, ending with a comprehensive list of recommendations to enhance employment services within the Employment and Income Support Division. Through this project Employment & Income Support reviewed existing internal employment programs to determine if they were still viable in today's labour market and for our existing caseload profile, and made recommendations for enhancements to employment programs. Committee will be updated on the progress of this work.

CORPORATE STRATEGIC PLAN:

The provision of Enhanced Employment Services supports Focus Area 2, Growth Management; Strategic Objective 5: (To) foster a diverse, innovative and globally competitive economy. Also, Focus Area 3 of the Corporate Strategic Plan, Healthy and Safe Communities; Strategic Objective 1: (To) improve health by reducing or preventing the environmental and social conditions or behaviors that lead to poor health and/or poverty.

FINANCIAL IMPLICATIONS:

The Region was approved $738,842 (100% provincial funds) in each of the fiscal years 2009/2010 and 2010/2011. Funds were used in each of the calendar years 2009, 2010 and 2011.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

This report was prepared in consultation with staff from Finance.

ATTACHMENTS

NIL

PREPARED BY:   Kathie Lamie, Supervisor, Employment Services
                Graeme Fisken, Manager, Employment Services
                David Dirks, Director of Employment and Income Support

APPROVED BY:   Michael Schuster, Commissioner of Social Services
MEMORANDUM

To: Chair Sean Strickland and Members of the Community Services Committee

From: Graeme Fisken, Manager, Employment Services
       David Dirks, Director, Employment and Income Support

Copies: Michael Schuster, Commissioner, Social Services

File No.: S08-20

Subject: VOICE MAIL SERVICE THROUGH THE REGIONAL EMPLOYMENT RESOURCE CENTRES

Summary:

The Region of Waterloo entered into an agreement with the Ministry of Training, Colleges & Universities (MTCU) as a Service Provider of the Employment Ontario Program. (See Report SS10-017, March 9, 2010, Employment Services Implementation.) With one time transitional funds provided 100% by the MTCU, the Employment & Income Support Division purchased a voice mail system to assist citizens of the Region, who do not possess a phone or voicemail, to have the ability for potential employers to be able to contact them. This service commenced in April 2011.

Employment Resource Centres

Social Services, Employment & Income Support Employment provides Resource Centers which are utilized by the citizens of the Region to assist them in seeking and obtaining employment. In 2010, 55,398 citizens utilized the three centres in Cambridge, Kitchener and Waterloo. The services provided by these centres include public access computers, phones, photocopy and printing service for resume and cover letters, employment and educational materials and related publications, a job bank service, and employment coaching. Now the ability for employers to contact job seekers more easily and quickly via a public access voice mail system is available. Citizens are now able to sign up for three month periods and have access to the voice mail system. Access will be renewed, at the participant’s request, for additional three month periods thereafter. Those who do not readily have access to a phone or voice mail can now leave a phone and mailbox number with employers to receive messages. The system can be accessed by the user from any phone including those available to the public in the Resource Centres.
Corporate Strategic Plan:

This service supports the Region’s Strategic Focus Area 6: Foster a culture of citizen/customer service that is responsive to community needs; Strategic Objective 1: (to) ensure all Regional programs and services are citizen/customer focused in order to meet the needs and expectations of the community.

For further information please contact Graeme Fisken, Manager, Employment Services, at Phone: 519-883-2101 Extension 5665 or gfisken@regionofwaterloo.ca
May 9, 2011

TO: Day Nursery and Private-Home Day Care Operators
   Central West Region
   Consolidated Municipal Service Managers

FROM: Vince Tedesco,
      Regional Director

SUBJECT: Launch of Licensing Inspection Findings on the Licensed Child Care Website

In April 2009, the Ministry of Children and Youth Services (MCYS) distributed a memorandum to child care operators informing them of the new requirement to post their Licensing Inspection Summary, and have the completed licensing checklist and the Summary of Licensing Requirements and Recommendations (licensing summary sheets) available for parents upon request. The memorandum also indicated that the ministry would post licensing inspection findings online in the future.

MCYS and the Ministry of Education (MEDU) are pleased to announce the launch of enhancements to the Licensed Child Care Website that provide information on child care licensing inspection findings. This is the third phase of the posting initiative that began in July 2007 with the initial development of the Licensed Child Care Website and the on-site posting of licensing summary charts in June 2009. The availability of child care inspection findings on the website will significantly enhance access to licensing information for the public. It will also assist parents to make informed choices about child care and discuss the compliance record with child care operators.

Beginning May 9, 2011, the Licensed Child Care Website, available at http://www.ontario.ca/ONT/portal61/licensedchildcare, will include the following web pages for each licensed child care centre and private-home day care agency:

1. Program Information Page – in addition to each child care program’s general information and licence status, the web page will display the date of the last licensing inspection, as well as overall compliance level for the inspection based on the total applicable licensing questions and whether non-compliances were resolved before the licence was issued. Over time, up to three years of inspection history will be displayed. Clicking on the date of the inspection opens the next page.

2. Licensing Inspection Summary Page - a new web page displays the ministry inspection summary. The summary shows the level of compliance that was observed on the date of the licensing inspection and is based on the number of applicable questions in each checklist category. The summary also indicates whether the non-compliances were resolved before the licence was issued. Clicking on “Category of Child Care Licensing...
Requirements under the *Day Nurseries Act* opens the glossary explanations for each checklist category. Clicking on the name of a category opens the details page.

3. Licensing Checklist Details Page – a new page displays more detailed inspection findings. Website visitors can look at the questions in each category, or "expand all" to scroll through the detailed findings for all categories in the checklist. The page also displays whether the licensing requirement was in-compliance or not-in-compliance on the date of inspection, and whether it was resolved before the licence was issued.

Additional features of the website include:
- Plain language text of licensing requirements;
- Ability to switch from English to French or French to English at any point of website navigation;
- Printer friendly versions of the web pages;
- Expanded glossary explanations available in both languages; and
- "Breadcrumb trail" for easy navigation to previous pages.

Following the launch date, child care inspection findings will be updated when licensing inspections are conducted and licences are renewed. You will continue to receive a paper copy of the Licensing Inspection Summary chart following licensing inspections for posting as required by the term and condition on your licence.

Please distribute the attached letter to parents about the availability of licensing inspection findings on the Licensed Child Care Website.

Should you have any questions, please contact our Program Review & Compliance Unit at (905) 567-7177 or Toll Free at 1-877-832-2818 ext. 245.

Sincerely,

[Vince Teodosco]
Regional Director

cc : Consolidated Municipal Service Managers: Mr. Eddie Alton, Mr. Keith Palmer, Ms. Mary Beth Jonz, Nancy Dickieson, Ms. Janice Graves

Attachment
Message from the Commissioner

Social Services Department staff are committed to “Making a Difference in our Community.” During 2010 the economic situation improved in Waterloo Region. However of the 500,000 plus who live here, many still needed the services provided by Social Services to help alleviate some of the difficulties facing them.

As you read the 2010 Social Services Annual Report you will get a sense of the many innovative ways we touched the lives of Waterloo Region residents. In order to maintain and expand our services, the Department collaborated in a number of new program and funding relationships with new Provincial partners such as the Ministry of Education and the Ministry of Training, Colleges and Universities as well as the Waterloo Wellington Local Health Integration Network.

The report will also provide you with a summary of the Department’s achievements especially in relation to the Region’s Corporate Strategic Plan for 2007-2010. Social Services had the lead role in 12 of the Corporate Actions (see page 3). The final report on the success in achieving our targets can be found on the Region’s website www.region.waterloo.on.ca or on the E-Portal under “Strategic Planning”.

In addition to highlighting the achievements of staff in 2010, the report provides some key directions for 2011 from the four divisions. These directions will contribute to the development of the 2011-2014 Regional Corporate Strategic Plan to be completed in June 2011. The new Strategic Plan will help us refine and hopefully expand our programs and services upon which so many of our residents rely to overcome obstacles and create opportunities.
Departmental Strategic Action Areas 2007-2010:

Focus Area 2
- Increase affordable transportation options for people with low incomes
- Conduct a Conference for employers to promote employment of disabled persons

Focus Area 3
- Enhance the Community Outreach Program to assist families and children living in poverty
- Develop a funding proposal for an Aboriginal Family Resource Centre and Preschool program with the Aboriginal community
- Explore the development of a poverty reduction strategy for Waterloo Region
- Develop and work towards implementation of the Waterloo Region Best Start Community Plan
- Refine the Emergency Social Services Program to include a recovery plan
- Work with LHIN on Community of Interest Committees (e.g., health, promotion, seniors, mental health, palliative care, addictions, emergency network, respite)

Focus Area 4
- Redevelop and expand Christopher Children’s Centre
- Complete and implement the Homelessness to Housing Stability Strategy
- Invest in the development and expansion of quality child care services
- Develop and implement a plan for full day kindergarten and child care in partnership with local school boards
- Develop a proposal for a Professional Resource and Accreditation Centre for Early Childhood Educators with the community and Conestoga College
- Develop a Regional Strategy for Seniors that ensures a healthy quality of life in communities
- Build the Supportive Housing Project at Sunnyside Home
- Develop a Region-wide planning body for Senior Services
- Develop and implement a strategy that ensures access to programs and services among families that are culturally and linguistically diverse

Focus Area 6
- Develop and implement the Service Path Redesign for Ontario Works clients
- Implement the Social Services Actions identified in the Human Services Plan
- Establish a Recreation Coalition of municipal and regional leaders to increase access to recreation
- Improve access to Regional Services based on the Accessibility Survey Tool
- Continue to develop the Region of Waterloo Annual Accessibility Plan
- Implement a Diversity Assessment Tool for all Social Services programs and services
- Implement continuous Quality Improvement Measures for services and programs
- Consolidate and expand quality assurance initiatives across the Children’s service system
- Conduct a review of the Counselling Programs provided by Community Agencies
Children’s Services

Overview of Services
The Children’s Services division provides a range of services to children and families in Waterloo Region. This includes:

- Financial help with child care (fee subsidy)
- Operation of five Children’s Centres
- Operation of the licensed Home Child Care program
- Quality assurance (Raising the Bar Program)
- Supports for children with special needs
- Community service planning for early years services
- Financial help for licensed child care operators

Highlights from the 2010 Service Statistics:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total operating budget</td>
<td>$36 M</td>
</tr>
<tr>
<td>Total licensed child care programs and home child care agencies</td>
<td>129</td>
</tr>
<tr>
<td>Average monthly number of children in receipt of child care subsidy</td>
<td>2,859</td>
</tr>
<tr>
<td>Percentage of children under the age of 12 years who have access to a licensed child care space in Waterloo Region</td>
<td>18%</td>
</tr>
<tr>
<td>Number of children and their families served by the Infant and Child Development Program (ICDP) in 2010</td>
<td>385</td>
</tr>
<tr>
<td>The percentage programs that participated in Raising The Bar on Quality accreditation program in 2010</td>
<td>95%</td>
</tr>
<tr>
<td>Number of children who received special needs resourcing services in licensed early learning and child care settings in 2010</td>
<td>635</td>
</tr>
</tbody>
</table>
Children’s Services

Highlights of how Children’s Services Made a Difference in 2010:

- Child Care Subsidy conducted a business process review to look for efficiencies and effective business practices.
- Infant and Child Development program was part of a presentation at the International Society of Early Intervention in New York on best practices in developmental screening of children.
- Raising the Bar on Quality program had a successful pilot year for a new accreditation version for Special Needs Resourcing Agencies.
- Home Child Care implemented web based billing processes for 425 contracted caregivers, reducing paper, errors and increasing efficiencies.
- New partnerships formed with Boards of Education to support implementation of full day Kindergarten and extended day programs.
- Completion of a 2010 Children’s Services Service Plan and Stabilization Strategy for community operators.
- Annual client satisfaction surveys were completed in the directly operated Children’s Centres, Home Child Care program and the Child Care Special Needs Resourcing Partnership.
- A new professional resource centre for early childhood educators in Waterloo Region was opened in partnership with Conestoga College.
- Formation of the Early Learning and Child Care Community Advisory Committee to advise on the work of Children’s Services.

In 2011, Children’s Services will:

- Continue to address funding pressures in the Child Care fee subsidy program.
- Develop an early years system plan for children 0-12 years with community partners.
- Complete a new strategic plan to guide next four years.
- Develop strategies to support licensed early learning and child care operators with impact of full day kindergarten and extended day programs.
- Continue to partner with school boards in the implementation of full day Kindergarten and extended day.
- Completion of strategic directions and plan for the child care special needs resourcing partnership.
- Continue to support high quality standards and practice in directly operated programs and services.

“Making a Difference in our Community”
Overview of Services

- Increase employability to enable people to obtain sustainable employment and achieve increased financial independence.
- Provide financial assistance under the Ontario Works Act to persons in need to cover the costs of food, shelter and clothing.
- Through Discretionary Benefits provide additional financial support for such items as transportation, vision, dental and medical services.
- Assist sole support parents to receive the child and spousal support for which they are eligible.
- Employment Resource Areas serve as a central source of employment and training information.
- Ontario Works participants can access a full range of employment services and supports.
- Serve as an Employment Ontario Service provider.

Highlights from the 2010 Service Statistics:

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average monthly caseload including individuals and families</td>
<td>8,551</td>
</tr>
<tr>
<td>Average monthly number of persons assisted with emergency or discretionary benefits</td>
<td>201</td>
</tr>
<tr>
<td>Average monthly number of persons funded in an emergency shelter</td>
<td>344</td>
</tr>
<tr>
<td>Average monthly number of referrals to Family Support</td>
<td>234</td>
</tr>
<tr>
<td>Total number of employment placements</td>
<td>305</td>
</tr>
<tr>
<td>Total number of visits to Employment Resource Areas</td>
<td>55,398</td>
</tr>
</tbody>
</table>
**Employment and Income Support**

Highlights of how Employment and Income Support Made a Difference in 2010:

- Assisted 36% more individuals and families than at the outset of the recession though strategies such as an Ontario Works Community Forum in Cambridge.
- Successfully redesigned and implemented a full suite of services as an approved Employment Ontario service provider.
- Through the Enhanced Employment Services initiative reviewed, developed and enriched supports and programs for Ontario Works participants such as the delivery of the General Equivalency Diploma.
- Based upon community consultation undertook a pilot to assist Ontario Works participants upgrading their education with the costs of affordable transportation.
- Administered the Waterloo Region Energy Assistance Program that provides assistance to low income residents unable to pay utility bills and assisted 283 households with utility payments totalling $135,252.

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**In 2011, Employment and Income Support Will:**

- Look for opportunities to engage our staff and community in the Social Assistance Review announced by the Province.
- Implement the on-line application process for social assistance as the first step in the replacement of our Provincial technology.
- Develop our skills through the Supportive Approaches through Innovative Learning training initiative successfully launched in 2010.
- Validate the findings of our Service Delivery Evaluation from 2010 and move to recommendations and action.
- Build upon the service innovation of the past year including voice mail for program participants, greater access to employment services in our rural communities and enhanced program supports.
Overview of Services

- Seniors’ Services works collaboratively with the community to plan, support and operate a long-term care home, supportive housing, and numerous community programs for adults living in Waterloo region.
- Sunnyside Home is fully accredited with Accreditation Canada.
- Sunnyside Home provides professional services for 151 residents challenged by physical or mental health disabilities, cognitive impairments such as Alzheimer’s disease, and end of life conditions.
- Community programs include Alzheimer Programs, affordable supported living, convalescent care (10 beds), respite care (2 beds), community homemaking and nursing services, integrated assisted living services and a wellness centre.

Highlights from the 2010 Service Statistics:

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people on the long term care home waitlist at the end of 2010</td>
<td>397</td>
</tr>
<tr>
<td>Number of worship services offered</td>
<td>168</td>
</tr>
<tr>
<td>Number of meals served to our community programs clients (K-W Senior Day Program, Loaves and Fishes Program, Community Alzheimer Program, and Supportive Housing Lunch Program)</td>
<td>27,613</td>
</tr>
<tr>
<td>Number of infectious disease outbreaks</td>
<td>0</td>
</tr>
<tr>
<td>Number of staff to date who attended diversity awareness training</td>
<td>320</td>
</tr>
<tr>
<td>Number of clients served by the Community Alzheimer Programs</td>
<td>190</td>
</tr>
<tr>
<td>Number of Clients admitted to Convalescent Care in 2010</td>
<td>82</td>
</tr>
<tr>
<td>Number of clients on homemaking and nursing services program</td>
<td>185</td>
</tr>
</tbody>
</table>

Seniors’ Services

Gail Kaufman Carlin
Director
519-883-8494
extension 6310
Seniors’ Services

Highlights of How Seniors’ Services Made a Difference in 2010:

● Construction of Supportive Housing was completed in February and 33 tenants moved into their apartments in March 2010.
● Sunnyside Wellness Centre officially opened to the public on May 1, 2010. Initially, fitness memberships, foot care and massage therapy were offered with a goal of future expansion into other therapies.
● The Sunnyside Foundation reimbursed the Region $400,000 from campaign proceeds to cover the construction costs of the Wellness Centre.
● The Integrated Assisted Living Program was launched in partnership with the Community Care Access Centre. The program provides assistance to seniors who are at risk and living independently in the Stanley Park community.
● Implemented “Just Clean Your Hands” Program and improved staff hand washing compliance by 25%.
● Decreased the amount of waste generated by implementing green bins home wide and educating staff on recycling and composting.
● Implemented the Long Term Care Homes Act (2007) regulations.

In 2011, Seniors’ Services will:

● Establish a Seniors Advisory body.
● Participate in “Residents First”, a provincial quality initiative aimed at improving resident outcomes across the long term care sector.
● Support the Sunnyside Foundation to complete the Sunnyside Wellness Centre campaign and fund equipment, furnishings, programs and subsidies.
● Expand services in the Sunnyside Wellness Centre to include a dental hygienist, Nurse Practitioner and other programs to promote health and wellness.

More then a Home….a Community
Social Planning, Policy and Program Administration

Overview of Services

- Seeks to strengthen local social infrastructure by: identifying and responding to community needs, providing direct support to the community, analyzing social trends, developing social policy responses, undertaking social planning and system modeling.
- Plans for the delivery of programs which support social development, housing stability, the integration of federal and provincial initiatives, and inter-agency collaboration.
- Consolidated Service System Manager for Homelessness.
- Provides one time funding grants for innovative research and projects that advance social development and infrastructure.
- Advances social development through various programs that support low income children and families.
- Provides leadership in social planning, policy, research and evaluation.

Lynn Randall, Director
519-883-2190

Highlights from the 2010 Service Statistics:

<table>
<thead>
<tr>
<th>Description</th>
<th>Count/Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people who used emergency shelters in 2010</td>
<td>2,859</td>
</tr>
<tr>
<td>Number of Housing Stability Programs with funding administered through SPPPA</td>
<td>54</td>
</tr>
<tr>
<td>Number of children supported through the Community Outreach Program</td>
<td>21,662</td>
</tr>
<tr>
<td>Amount spent on Social Development Grants</td>
<td>$130,000</td>
</tr>
<tr>
<td>Amount spent on recreation through the Community Outreach Program</td>
<td>$134,170</td>
</tr>
</tbody>
</table>
SOCIAL PLANNING, POLICY AND PROGRAM ADMINISTRATION

Highlights of How Social Planning, Policy and Program Administration Made a Difference in 2010:

- Completed the Homelessness to Housing Stability Strategy (2007-2010) with 90% of 92 actions completed (86%) or in progress (4%).
- Through the Homelessness to Housing Stability Strategy exceeded targets to support 150 people experiencing or approaching persistent homelessness to find and maintain housing.
- Transitioned the Counselling Grants into the Counselling Collaborative Program with common program parameters and funding formula.
- Completed a web 2.0 data collection system for the Community Outreach Program.
- Launched the Rural Realities Network to enhance outreach to families living with low incomes in rural areas.
- Completed two background documents to understand the role of the Regional Municipality of Waterloo in poverty reduction.
- Completed 33 process/program/system evaluations.
- Offered 9 research and evaluation skill development training opportunities for staff.

In 2011, Social Planning, Policy and Program Administration will:

- Develop a comprehensive approach to poverty reduction for the Region.
- Implement action plans to enhance outreach supports to low income families who are linguistically diverse.
- Host the Immigration Partnership, a comprehensive collaboration with local community stakeholders responsible for developing and implementing strategies that facilitate successful settlement and integration of immigrants and refugees in Waterloo Region.
- Work collaboratively with community partners and area municipalities to plan for our aging population.

“Making a Difference in our Community”
Our Locations

99 Regina Street, South, Waterloo
- Commissioner’s Office
- Social Planning, Policy and Program Administration, Research and Evaluation, Social Development and Homelessness Policy and Planning
- Children’s Services Administration, Child Care Subsidy, Infant and Child Development Program, Quality Initiatives and Home Child Care
- Income Support, Intake, Program Development and Appeals, Special Services, Automation and Administration, Employment Services, Family Support Unit, Employment Resource Area

50 Queen Street, Kitchener
- Immigration Partnership

247 Franklin Street North, Kitchener
- Sunnyside Home Long Term Care
- Community Alzheimer Programs
- Homemaking & Nursing Services

245 Franklin Street North, Kitchener
- Supportive Housing
- Sunnyside Wellness Centre

235 King Street, Kitchener
- Employment Services, Employment Resource Area

150 Main Street, Cambridge
- Family Support Unit, Income Support, Employment Services, Employment Resource Area, Special Services
- Home Child Care, Child Care Subsidy

Children’s Centres
- Christopher Children’s Centre, 30 Christopher Drive, Cambridge
- Edith MacIntosh Children’s Centre, 104 Stirling Ave. South Kitchener
- Elmira Children’s Centre, 200 Mockingbird Drive, Elmira
- Kinsmen Children’s Centre, 651 Concession Road, Cambridge
- Cambridge Children’s Centre, 99 Beechwood Road, Cambridge

Visit us on the Internet: www.region.waterloo.on.ca

General Inquires: 99 Regina St. S. Waterloo ON N2J 4G6
Phone: 519-883-2010 Fax: 519-883-2234 TTY: 519-883-2428

This report is available in alternative formats upon request.
<table>
<thead>
<tr>
<th>Meeting date</th>
<th>Requestor</th>
<th>Request</th>
<th>Assigned Department</th>
<th>Anticipated Response Date</th>
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</thead>
<tbody>
<tr>
<td>28-Sep-10</td>
<td>Committee</td>
<td>Staff report regarding the impact of revised technology for Delivery of Social Assistance on applicants.</td>
<td>Social Services</td>
<td>early 2011</td>
</tr>
<tr>
<td>23-Mar-11</td>
<td>Budget Committee</td>
<td>Staff report regarding the potential for long-term funding support for Opportunities Waterloo Region.</td>
<td>Social Services</td>
<td>Fall 2012 (prior to the 2012 budget process)</td>
</tr>
</tbody>
</table>