Waterloo Region Suicide Prevention Strategy Update

2006 – 2011

A project of

Waterloo Region
Suicide Prevention Council

and the

Waterloo Region Suicide Prevention Strategy
Planning Group

2011 Revision Prepared and Coordinated by:

WRSPC
171 King St. S
Waterloo
N2J 1P7

TABLE OF CONTENTS

MESSAGE FROM THE CHAIR

In 2002, the World Health Organization declared suicide a major public health concern. Since that time, countries around the world have been dedicating resources to reduce the incidence of suicide. The Waterloo Region Suicide Prevention Council (WRSPC), within its existing structure, pulled together leaders from our community to create a 'think tank' and plan strategies and goals for suicide prevention in our region.

As a result of this collaborative multi-agency effort, in March 2006, the Waterloo Region Suicide Prevention Planning Group released a document outlining a strategy for Suicide Prevention within Waterloo Region. On April 18, 2006 The Regional Municipality of Waterloo endorsed this document and recommended the implementation of its goals using the same multi-agency collaboration and commitment.

This report/document now represents an update to the work that has taken place over the past five years. Through a series of goals, objectives and planned actions, much has been accomplished related to public awareness, prevention, training and education, advocacy and community commitment. Our partnering agencies have also provided important statistical information.

Suicide prevention is a complex public health issue that has no easy solutions; it continues to affect individuals, families and communities in our region on a daily basis. Suicide statistics are complex because they do not always answer all questions, such as current attitudes towards mental health. Indeed the issue of Suicide Prevention is in its infancy compared to how far we have come with other health awareness strategies, so there is much to be hopeful for; it just takes time and evolution.

The Waterloo Region Suicide Prevention Planning group created the strategy, the dedication of the WRSPC provided implementation of its goals, and individuals and agencies within Waterloo Region have participated in the positive movement towards hope and wellness. We would also like to acknowledge the tireless efforts of our coordinator Tana Nash who has been instrumental in bringing our community together towards this important cause; the talents of our secretary Eva Neufeld who compiled the information in this update; and the members of the WRSPC for their dedication to helping our community and ensuring this strategy became a reality.

Suicide is a community issue. We urge you to review this update and rekindle your commitment towards Suicide Prevention within our region.

Dena Moitoso, Chair
Waterloo Region Suicide Prevention Council

1.0 INTRODUCTION

1.1 Introduction to the Project

In the spring of 2006 the Suicide Prevention Strategy was developed by a coalition of providers of human services in the Region of Waterloo. The partners in this project included representatives from government, mental health, public health, police, education and social services who had come together to develop a strategy to raise the profile of suicide as an issue, and to educate our community in how every member can play a role in reducing the incidence of suicide. (Please see page 15 for a list of the membership organizations represented on the Waterloo Region Suicide Prevention Strategy Planning Group.)

The work was a framework/blueprint for achieving the goal of reducing the incidence of suicide in our community. It laid out a set of objectives for achieving this goal, and specific actions that the Planning Group agreed needed to be implemented in order to work toward achieving those objectives. The actions set the agenda for suicide prevention in Waterloo Region over the following 18 months to 2 years. The framework itself was designed to be a flexible tool that could be revisited and developed over time as need and circumstances dictated. As certain initiatives were implemented, or certain objectives met, the framework could be adjusted to take into account successes experienced and new challenges to be set.

The strategy was developed through a series of meetings and discussions with members of the Waterloo Region Suicide Prevention Strategy Planning Group. Planning assistance was provided through funds made available by Grand River Hospital Corporation, a hospital with Schedule 1 mental health services in Waterloo Region.

Through focus group discussions, it was decided that the Waterloo Region Suicide Prevention Council would dedicate the next three years to moving the Strategic Plan forward. The following pages of this report outline the Council's response to the specific action items that were laid out by the community, along with key accomplishments for each objective. Current statistical information is included which provides a sense of trends and change. While most of the information is directly related to Waterloo Region, there is also information that allows for comparisons with provincial norms, which can create standards and accountability. Once again, the contributions from individuals, public health, hospitals, and law enforcement serve to highlight the complexity of suicide prevention.

2.0 THE STRATEGY

2.1 Terms of Reference

As a first step, the Waterloo Region Suicide Prevention Strategy Planning Group developed a Terms of Reference that addressed the key issues involved in their working together, in both developing and implementing the Strategy.

2.2 The Strategy

The Waterloo Region Suicide Prevention Strategy was developed over a period of several months. It proceeded from the formulation of an overall goal, to the development of a set of objectives to achieve that goal, and the development of a series of evidence-based actions associated with each objective. Diagrammatically, the Strategy can be portrayed as follows:

In the pages that follow, objectives and action items of the original strategy are outlined, followed by the accomplishments achieved for each objective.

2.2.1 Objective 1: COMMITMENT

Objective 1

Commitment: To increase community commitment to participation in a Regional Suicide Prevention Strategy.

Actions

- Secure the formal endorsement of this strategy by the participating organizations
- Report to the community about our achievements and accomplishments in developing this framework
- Invite groups, individuals and organizations to identify how they can help advance the Waterloo Region Suicide Prevention Strategy
- Identify our needs, and advocate for the resources to implement the strategy effectively (e.g. to hire a coordinator)
- Identify and communicate the concrete outcomes of a successful Waterloo Region Suicide Prevention Strategy (e.g. more collaboration, common language, more referrals, more calls to crisis lines, fewer deaths, etc.)

Objective 1

Commitment: To increase community commitment to participation in a Regional Suicide Prevention Strategy.

Accomplishments

- Formal endorsements by organizations represented on the WRSPC
  - Cambridge Memorial Hospital
  - Canadian Mental Health Association, Grand River Branch
  - Community Care Access Centre of Waterloo Region
  - Conestoga College
  - Grand River Hospital
  - Lutherwood
  - Mental Health and Wellness Network
  - Mosaic Counselling and Family Services
  - Regional Municipality of Waterloo (Region of Waterloo Public Health)
  - St. Mary's General Hospital
  - University of Waterloo
  - Waterloo District Catholic School Board
  - Waterloo Region District School Board
  - Waterloo Regional Homes for Mental Health
  - Waterloo Regional Police
  - Wilfrid Laurier University
- Built a community membership of concerned citizens
  - Volunteer base of 50+ members
- .4FTE WRSPC Coordinator hired
- Engaged and maintained community connections:
  - WWLHIN
  - Spiritual Care & Long Term Mental Health Care, Grand River Hospital
  - Hospice Waterloo and Wellington
  - Regional Council Chair Ken Seiling
  - MP's Office (H. Albrecht, P. Braid, G. Goodyear, S. Woodworth)
  - Funeral Homes
  - Self Help Alliance
  - Partners for Safe and Caring Schools
  - Crime Prevention Council
  - Suicide Awareness Wilmot-Wellesley
  - Suicide Resource Group of Wellington Dufferin

2.2.2 Objective 2: PUBLIC AWARENESS

Objective 2

Public Awareness: To increase awareness that suicide is a significant health problem in our community and that it is preventable through community action.

Actions

Media

- Develop a culturally appropriate information package to educate the media in knowledge and sensitivity around suicide, and in the fact that suicide can be prevented
- Develop, distribute and promote a code of ethics that would provide guidelines and consistency in reporting about suicide
- Monitor the media for potential media award candidates

General Public

- Develop culturally sensitive information packages about suicide and how everyone can help in its prevention (a common message)
- Develop a community strategy to reach a variety of target audiences(such as children, adolescents, professionals, seniors, general public) and develop best ways of reaching them (e.g. story telling tailored to the audience)
- Piggyback suicide information onto existing mailings and websites of partner and other organizations

Objective 2

Public Awareness: To increase awareness that suicide is a significant health problem in our community and that it is preventable through community action.

Accomplishments

Media

- Community Forum with Province Wide CTV
- 570 News (Local Talk Radio) Q & A, interviews, call-in shows, educational series, public service announcements
- KOOL FM (Public service announcements)
- Rogers Newsmakers, Rogers Daytime, Rogers TalkLive (Cable Network highlighting local issues)
- The Record (Feature articles, promotional advertisements)
- Pennysaver Smart Shopper (Promotional advertisements)
- SNAP KW (Event coverage)
- Cambridge Times (Feature articles)
- CORD WLU newspaper (Feature articles)
- Community Partnerships Awards presentation to media representatives for responsible reporting and inclusion of local resources for support
- MP Harold Albrecht lunch with Your Life Counts

General Public

- Daniel Tudisco Memorial Golf Tournaments, bringing suicide awareness to the community (Recipient of the provincial Arnold Deville Award for exceptional promotion of community awareness)
- Annual community gathering and butterfly release in recognition of September 10th World Suicide Prevention Day
  - Promotional displays at Grand River Hospital / Cambridge Hospital / Minds in Motion / Wilfrid Laurier University / CMHA
- Waterloo Region District School Board (Displaying of HelpLine Posters)
- Lutherwood Speakers Series
- Youth Talk Conference
- University of Waterloo David Johnston Run for Mental Health
- Canadian Association for Suicide Prevention Conference (Poster presentation)
- Scott Chisholm: Images of Those Left Behind by Suicide
  - Community presentation
  - Conestoga College presentation to Fire Fighting Program
  - Wilfrid Laurier presentation to Peer Help Advisors
- WRSPC Annual Conferences and Community Evening Forums
- Three Public Service Announcements, made for television created by Conestoga College student Alex Cooke (To be aired in Fall 2011)

2.2.3 Objective 3: PREVENTION

Objective 3

Prevention: To work together/collaborate to increase community capacity to identify and assist people in all aspects of suicide prevention.

Actions

- Develop and distribute a tool(s) that can be used by individuals to recognize the risk factors for suicide and where to get help (adults, children)
- Develop a protocol that lays out a collaborative process for getting help for people who are at risk for suicide, so that wherever a person touches the system, that person can be assured of linkage to all available resources
- Develop a protocol that lays out an interagency debriefing process

Objective 3

Prevention: To work together/collaborate to increase community capacity to identify and assist people in all aspects of suicide prevention.

Accomplishments

- Increased collaboration with the Waterloo Regional Crisis Committee and support to their work
- Revision and distribution of WRSPC Caregivers Booklets, Bookmarks, and Brochures (Youth, Older Adult, Grief)
  - 11,200 pieces of literature distributed to 86 community organizations
- Website development and ongoing maintenance
- Ongoing support and connection with other Suicide Prevention groups both provincial and national
- Speaking engagements with schools, organizations, universities, churches, etc.
- Packages sent to all local funeral homes with resources for newly bereaved family members
- Collaborative community Applied Suicide Intervention Skills Training (ASIST) team expansion through a Trillium grant
  - 467 workshops participants as of 2nd quarter (target was 375)
  - Evaluations: 100% of participants have increased hope that community partnerships will make a difference
  - 75% felt better prepared to respond
  - Increased in special requests by organizations for in-house training
- Collaboration with CMHA, Self Help Alliance and St. Michael's Hospital Toronto to bring "Skills for Safer Living" to our Region, a 20-week Psychosocial/Psycho-educational group for individuals with 2+ attempted suicides
- 161 High school students attended safeTALK, a three-hour suicide alertness workshop (through ongoing support from the Preston Chapter IODE and the Rotary Club of Kitchener Grand River)

2.2.4 Objective 4: TRAINING & EDUCATION

Objective 4

Training & Education: To increase the capacity of the community to respond to the risk factors of suicide.

Actions

- Promote broader participation (e.g. physicians) in training programs such as ASIST. Identify target groups for inter-sectoral training
- Identify means of expanding the capacity of training programs such as ASIST to train people in suicide
- Provide a forum for the general public on the risk factors of suicide
- Identify target groups for training (within the community or within organizations) and identify their specific training needs

Objective 4

Training & Education: To increase the capacity of the community to respond to the risk factors of suicide.

Accomplishments

- Trillium Grant funding secured, 6 new ASIST trainers added to the community team and over 450 people trained
- safeTALK & Suicide Care basic and advanced training
- Secured funding for and trained Secondary School students
- Forum – Risk factors
- Annual Dimensions of Suicide Conference 2005-2009
- Annual Community Forum 2005-2009
- 3400 'WHY' brochures go into WLU first year student packages and 140 packages annually Residence Dons
- Funding secured for 1st Suicide Support Group and Skills for Safer Living

- Presentations:
  - Youth Talk Conference
  - WRDSB High School Counselors
  - WLU Peer Distress Lines
  - Kitchener Grand River Rotary
  - Lutherwood Speakers Series
  - Stanley Park Senior Public School Staff
  - St. Mark's Lutheran Church
  - Elmira Kiwanis
  - Canadian Propane Association (250 Business Owners)
  - Bill Wilkerson, Co-founder of the Global Business and Economic Roundtable on Addiction and Mental Health
  - Skills for Safer Living information workshop for frontline workers
  - Crime Prevention Council
  - Family Initiatives Conference
  - Regional Crisis Committee
  - Scott Chisholm presentation
  - U of W Peer Health Advisors
  - WLU Masters of Social Work Class
  - Calvary United Church
  - Preston Chapter IODE
  - GCI Peer Helpers & Student Union
  - Michael Wilson, Canada's former ambassador to the United States, Chair of the C.D. Howe Institute's International Economic Policy Council

2.2.5 Objective 5: ADVOCACY

Objective 5

Advocacy: To influence community change to implement a coordinated suicide strategy.

Actions

- Identify potential funders of proposals for suicide prevention initiatives
- Explore the feasibility of securing advocates for people with mental health issues who are in clinical settings
- Coordinate traumatic regional responses to systemic issues that occur in the community
- Advocate for the adoption of the "Blueprint for a National Suicide Prevention Strategy" to reduce suicide and its impact (Ministry of Health Promotion)
- Communicate our Strategy to the Ministry of Health Promotion, the Ministry of Health and Long Term Care, the Ministry of Children and Youth and other relevant governments and ministries

Objective 5

Advocacy: To influence community change to implement a coordinated suicide strategy.

Accomplishments

- Proposals sent to Trillium (ASIST trainers – successful), WWLHIN (co-coordinator – resubmitted)
- Advocacy for a National Strategy through MP's
- Taglines for suicide prevention at WLU on student information video
- Identification of potential donors
- Peer support position through Self Help Alliance at Grand River Hospital
- Advocacy for continuation of peer position and expansion to Cambridge Memorial Hospital
- Article to be published in the final report of the "Global Business and Economic Roundtable on Addiction and Mental Health"

Fundraising Activities

- Daniel Tudisco Memorial Golf Tournament
- Bowlathon
- University of Waterloo Run for Mental Health
- TABU Music Festival – donation recipient for 2011
- Increase in third-party fundraising initiatives

2.3 Next Steps for the Waterloo Region Suicide Prevention Council

As outlined in this document, the Waterloo Region Suicide Prevention Council has been working diligently the past five years to achieve the goal of suicide prevention in our community. There has been a heightened awareness through literature distribution and increased media attention, there have been new programs implemented by community partners such as the important Skills for Safer Living Group and there have been more community members, professionals and students trained in both ASIST and Safe Talk, internationally recognized suicide awareness and intervention programs.

However, suicide continues to be a serious and complex issue in Waterloo Region and cannot be ignored. The issue needs to be addressed using a collaborative approach involving many different community agencies. Continued training, public awareness and advocating for a national strategy accompanied with proper funding are all key elements. We must also look at broadening our scope to address this issue at all community levels and not just with health service providers.

Suicide is a community issue. Hence, we must work together as a community to have the greatest success in reducing suicidal behaviour in our Region.

3.0 WRSPC MEMBERS

Member Organizations of the Original Waterloo Region Suicide Prevention Strategy Planning Group (2005)

Cambridge Memorial Hospital
Canadian Mental Health Association, Grand River Branch
Community Care Access Centre of Waterloo Region
Conestoga College
Grand River Hospital
Lutherwood
Mental Health and Wellness Network
Mosaic Counselling and Family Services
Regional Municipality of Waterloo (including Region of Waterloo Public Health)
St. Mary's General Hospital
University of Waterloo
Waterloo District Catholic School Board
Waterloo Region District School Board
Waterloo Region Suicide Prevention Council
Waterloo Regional Homes for Mental Health
Waterloo Regional Police
Wilfrid Laurier University

Current Members of the Waterloo Region Suicide Prevention Council

- *Tana Nash, WRSPC Coordinator*
- *Dena Moitoso (People Needing People, Erb & Good Family Funeral Home)*
- *Kathy Payette (Lutherwood)*
- *Linda Bender (Canadian Mental Health Association, Grand River Branch)*
- *Eva Neufeld (University of Waterloo)*
- *Cathy McDonald-Reis & Sandra Ayerst (Waterloo Catholic District School Board)*
- *Tom Connolly & Joanna Sipos (Waterloo Region District School Board)*
- *Debbie Emery (K-W Community Representative)*
- *Marion Mills (Grand River Hospital Psychiatric Program)*
- *Cathy Du Preez-Kiss & Julie Deruytter (Cambridge Memorial Hospital)*
- *Rob Martin (Waterloo Region Homes for Mental Health Inc)*
- *Mark Koiter (Waterloo Regional Police Services)*
- *Kim Hewitt (Trellis)*
- *Pat Allan (Centre for Addictions & Mental Health)*
- *Dwight Syms (Addictions and Mental Health Network)*

4.0 YOUTH MENTAL HEALTH & WELLNESS

WWLHIN Report

A priority of the Waterloo Wellington Local Health Integrated Network (WWLHIN) is the reduction of mental health issues among youth. The following tables display several mental health indicators and their prevalence among Waterloo-Wellington secondary students (Grades 9-12), compared to the Ontario average in 2007 and 2009 using the Ontario Student Drug Use Survey (OSDUS).

As the tables demonstrate, improvements in youth mental health were made from 2007 to 2009 across several indicators. **The prevalence of suicidal ideation dropped by 8.4%** to below the provincial average. The WWLHIN will continue to monitor youth mental health with the OSDUS, which is refreshed every two years.

Secondary Students (Grades 9-12) Mental Health and Well-Being Indicators 2007/2009

Indicator	WWLHIN 2007	Ontario 2007
Mental Health Visit	**25.7%**	21.4%
Poor Self Rated Mental Health	**15.9%**	13.0%
Poor Self-Rated Physical Health	**21.6%**	15.9%
Psychological Distress	**35.4%**	35.2%
Suicide Ideation	**17.3%**	10.3%
3 or More Delinquent Acts	**17.9%**	15.4%
Carried a Weapon	**12.1%**	9.2%
1 or More Fights	**14.3%**	12.0%
Threatened/Injured with Weapon at School	**12.7%**	8.1%
Been Bullied	**36.6%**	27.8%
Bullied Others	**35.4%**	25.0%

Indicator	WWLHIN 2009	Ontario 2009
Mental Health Visit	22.2%	**23%**
Poor Self Rated Mental Health	12.5%	**13.1%**
Poor Self-Rated Physical Health	**17.5%**	16.8%
Psychological Distress	28.3%	35.1%
Suicide Ideation	8.9%	10.3%
3 or More Delinquent Acts	11.6%	12.9%
Carried a Weapon	**10.2%**	8.1%
1 or More Fights	**16.6%**	12.6%
Threatened/Injured with Weapon at School	7.6%	7.4%
Been Bullied	26.3%	**27.9%**
Bullied Others	27%	**25.8%**

WWLHIN Report OSDUS 07/09

Your Life Counts Survey

YOUR LIFE COUNTS Survey Suggests Canadians are Ready to Break Silence about Suicide as World Suicide Prevention Day Approaches

Toronto, ON, — August 26, 2010
As World Suicide Prevention Day (recognized by the World Health Organization) approaches on September 10th, a new survey conducted by Harris/Decima on behalf of Your Life Counts (www.yourlifecounts.org) — Canada's leading charity dedicated to youth suicide prevention – reveals Canadians are in the dark on the issue.

An astonishing 86 per cent did not know suicide was the second leading cause of death among our youth and one third (34 per cent) thought it was a small problem or not a problem at all. Conversely, 96 per cent of Canadians believe that in order to help reduce youth suicide in Canada, the topic should be freely discussed without fear or shame. This is a surprising finding that breaks with the outdated, destructive tradition of silence around the issue. In a message to the Canadian government, which is one of only two in the G8 that fails to fund a prevention program, the survey revealed that an overwhelming 84 per cent of Canadians believe the government should invest in suicide prevention (Your Life Counts National Poll: Harris/Decima, August 2010).

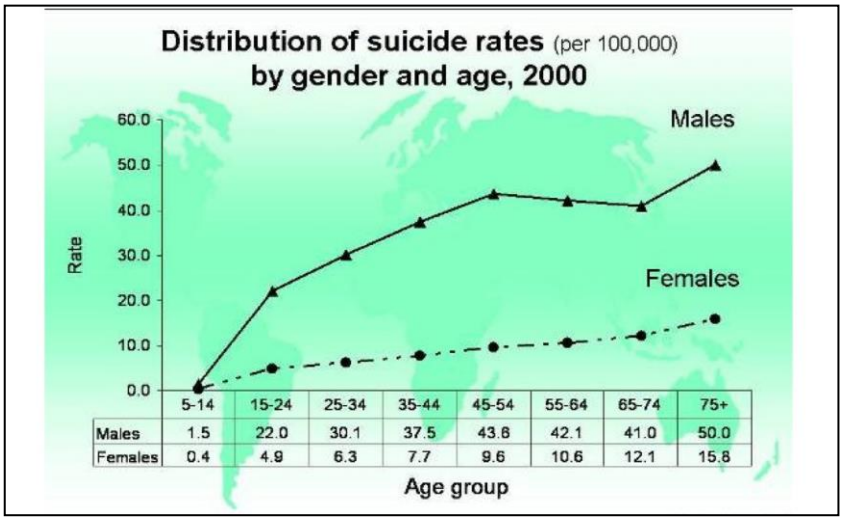
Facts About Youth Suicide

- Second leading cause of death among Canadian youth – after vehicular accidents[1]
- 15 – 24 youth die by suicide daily; 1 every 90 minutes; 434 a month in North America[1-2]
- The death toll is equivalent to crashing a commercial airplane full of youth with no survivors each month or like having a 9/11-type incident every 6 months
- At least 23,000 hospitalizations per year in Canada are a result of suicide attempts[3]
- Aboriginal Youth Suicide rate is at least 6 times the national average[4]
- Under reporting of suicide events occurs for many reasons, but the result is inaccurate statistics[5]
- Globally more people die by suicide than are killed by others each year[6]
- If youth in Ontario are referred to a registered counsellor it may take as long as a year before they even get to meet[5]

[1]Health Canada [2]US Government [3]Canadian Association for Suicide Prevention
[4]Statistics Canada, National Aboriginal Health Organization [5]Stakeholders in Public Health, Police and other Agencies
[6]World Health Organization

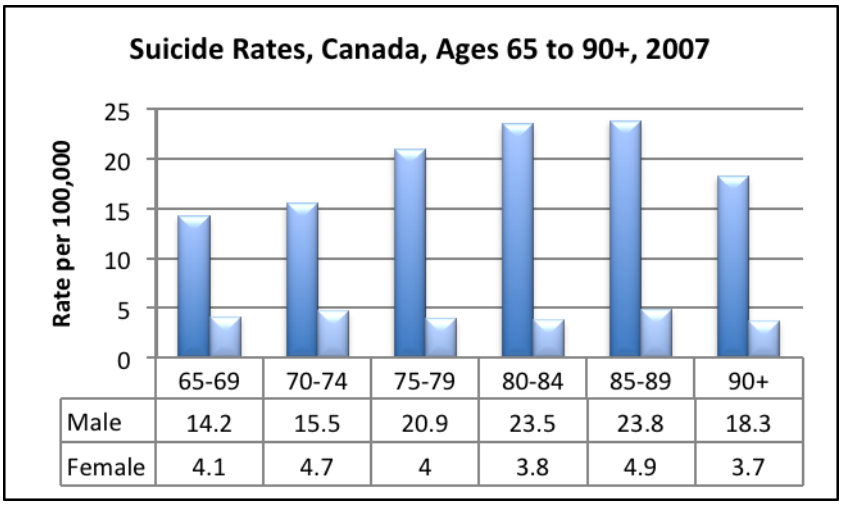
5.0 RISK FACTORS FOR SUICIDE AMONG OLDER ADULTS

Suicide has been identified as a serious health concern in all industrialized countries. On a global scale, men and women over 74 years of age have the highest rates of suicide; however, men over 84 years have the highest rate across all age groups.[1-2] In spite of these high rates, relatively little attention is paid to suicides in the older population given that public health promotion and media attention generally focuses on younger age groups.[3] At all ages, a previous suicide attempt(s) is a strong predictor of future suicidal behaviour.[2] Additional risk factors for older adults include male gender, Caucasian race, being single, socially isolated, and having poor physical health.[4] Furthermore, a loss of independence, lowered self-esteem, depression symptoms and a diminished purpose/meaning in life have been identified as predictors of suicide-related ideation in later life.[5] Among adults over 64 years of age, there is one death for every four suicide attempts.[6] This ratio may under-report rates of suicide in later life as purposeful deaths may be deemed accidental, in part, due to the stigma of suicide and other factors that may lead family members and healthcare professionals to avoid labelling these as intentional deaths.[2]



	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+
Males	1.5	22.0	30.1	37.5	43.8	42.1	41.0	50.0
Females	0.4	4.9	6.3	7.7	9.6	10.6	12.1	15.8

In general, the male to female ratio of suicide increases with age from approximately 3:1 in younger adults to 12:1 among those over 85 years of age.[7] In Canada, the gender disparity in suicide rates is quite evident when displayed graphically. Older Canadian males have rates of suicide approximately six times greater than older females. In 2011, the eldest of the baby boomer generation turned 65 years old. As the baby boomers enter the later stages of life, awareness and recognition of factors that may place an older adult at risk for suicide becomes paramount. A multi-disciplinary and collaborative approach is effective for suicide prevention in later life.



	65-69	70-74	75-79	80-84	85-89	90+
Male	14.2	15.5	20.9	23.5	23.8	18.3
Female	4.1	4.7	4	3.8	4.9	3.7

{Sources provided in Appendix II}

6.0 REGION OF WATERLOO PUBLIC HEALTH REPORT

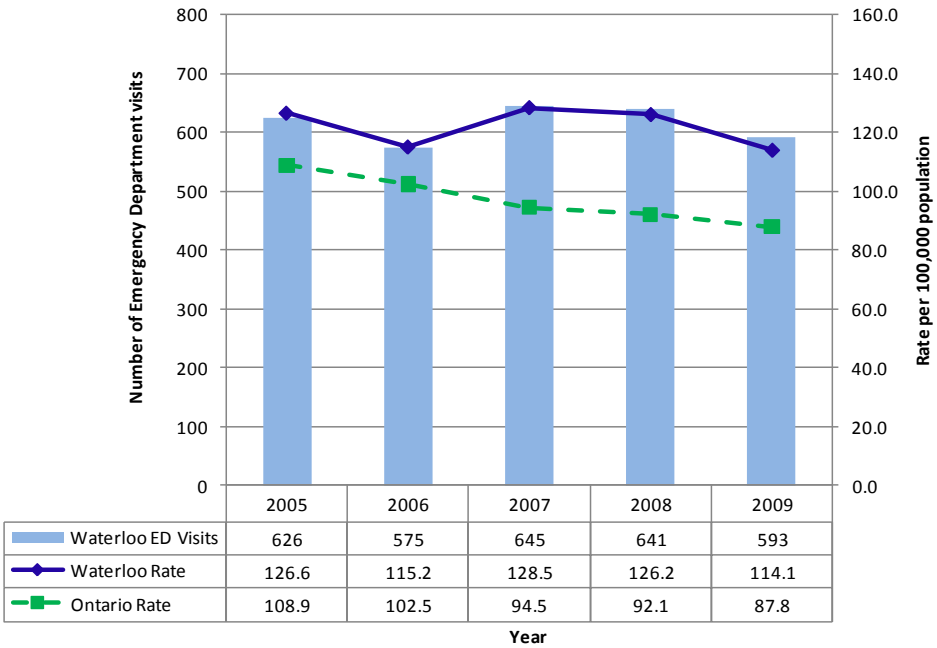
Suicide in Waterloo Region: A Health Status Report

In May 2011, the Region of Waterloo Public Health released a health status report focusing on suicide in the Waterloo Region.[1] This report provides unique comparisons between the Waterloo Region and the province of Ontario across a number of mental health indicators. Selected figures and excerpts from the Public Health report are presented in this Strategy given their significant relation to the Waterloo Region Suicide Prevention Council's mandate of reducing suicidal behaviour and its impact on individuals, families and communities.

Emergency Department Visits for Suicide Attempts

Emergency departments (ED) are often the first point of contact to the health care system, particularly for individuals in crisis. It is important to examine rates of ED visits for suicidal behaviour, as it includes incidents of suicidal behaviour that may be less serious or urgent and did not necessitate a hospital admission. It is assumed in this data that ED visits for suicidal behaviour were with the intention to die, however this may not always be the case (e.g., non-suicidal self-injury). As such, some of the information presented here should be interpreted with caution.

Figure 1.0 shows the number and rate of Emergency Department (ED) visits for attempted suicide in Waterloo Region and the province of Ontario from 2005 to 2009. Compared to the consistent decline in the provincial rate, the Waterloo Region rate has not significantly changed over time.



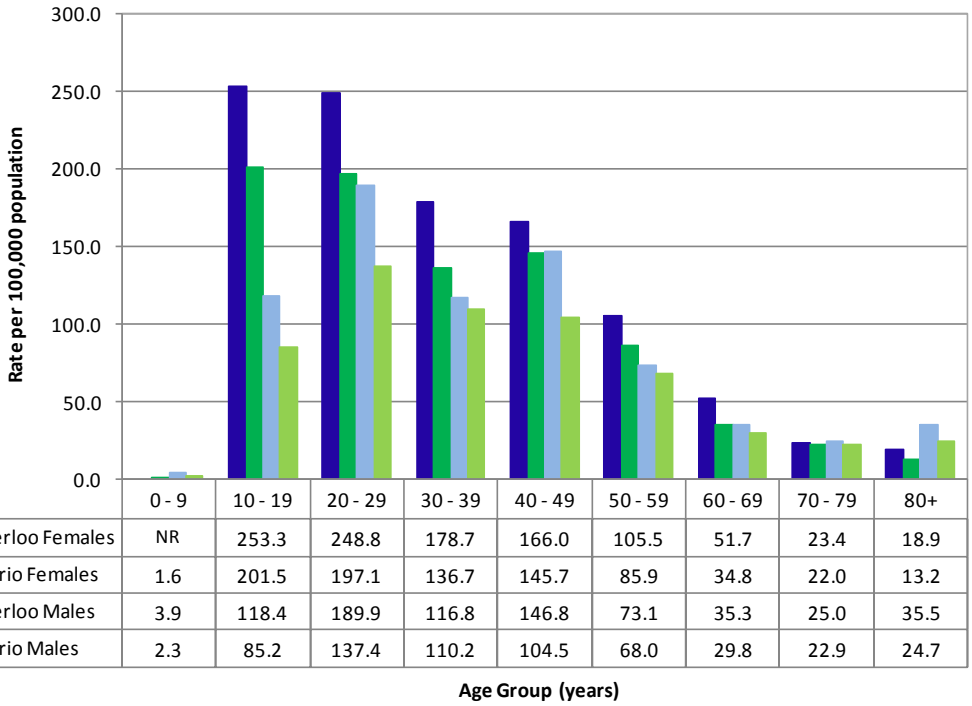
	2005	2006	2007	2008	2009
Waterloo ED Visits	626	575	645	641	593
Waterloo Rate	126.6	115.2	128.5	126.2	114.1
Ontario Rate	108.9	102.5	94.5	92.1	87.8

Figure 1.0. Number of emergency department visits for attempted suicide and standardized emergency department visit rates, Waterloo Region and Ontario, 2005-2009

Rates are age-standardized to the 1991 (adjusted) Canadian population. Source: Ontario Ministry of Health and Long Term Care (MOHLTC), Ambulatory All Visit Problem Diagnosis & External Cause Table (2005-2009) and Population Estimates (2005-2009), IntelliHEALTH Ontario. Extracted January 17-24 & February 15, 2011.

When ED visit rates are examined by sex (Figure not shown) it was found that in 2009, female Waterloo Region residents had ED visit rates for suicide attempts of 140.8 per 100,000 compared to the female Ontario provincial rate of 103.9 per 100,000. This higher rate of ED visits for suicidal behaviour among females in the Waterloo Region account, in part, for the higher than provincial rates.

Emergency department (ED) visits for suicide attempts were more likely among youth and young adults compared to older age groups. **Figure 1.1** shows the average ED visit rates by sex and age for Waterloo Region and Ontario. In general, average rates in Waterloo Region remained higher than Ontario rates over the five-year period. Among youth in the Waterloo Region (aged 10-19 years) the ED visit rate for suicide attempts among females was double the rate for males (253.3 vs. 118.4 per 100,000 respectively). Again, it is assumed in this data that suicidal behaviour was with the intention to die, however this may not always be the case.



	0 - 9	10 - 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80+
Waterloo Females	NR	253.3	248.8	178.7	166.0	105.5	51.7	23.4	18.9
Ontario Females	1.6	201.5	197.1	136.7	145.7	85.9	34.8	22.0	13.2
Waterloo Males	3.9	118.4	189.9	116.8	146.8	73.1	35.3	25.0	35.5
Ontario Males	2.3	85.2	137.4	110.2	104.5	68.0	29.8	22.9	24.7

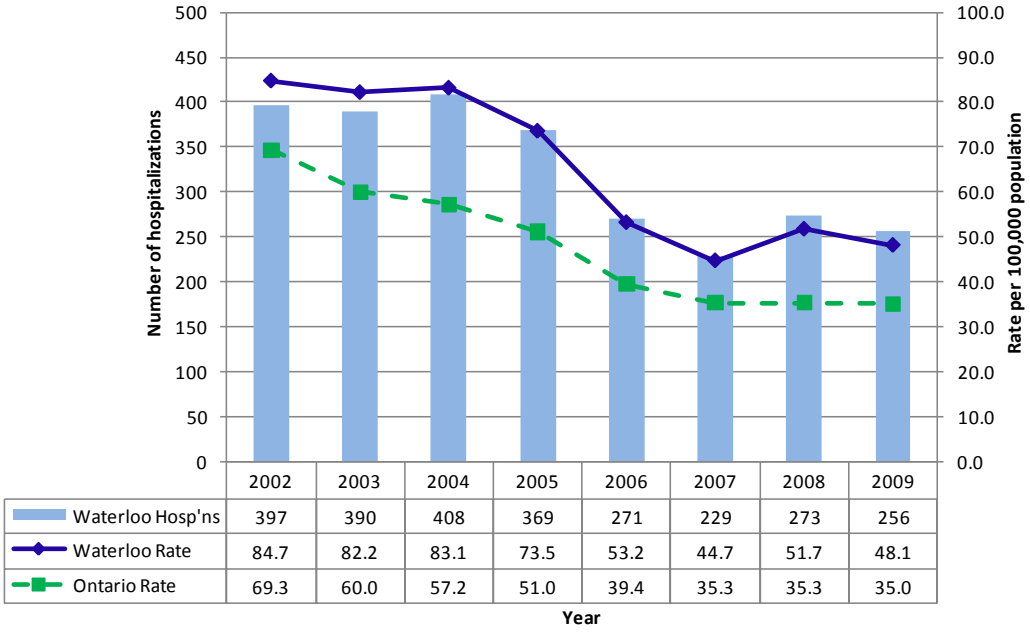
Figure 1.1. Age-specific attempted suicide emergency department visit rates, by sex, Waterloo Region and Ontario, 2005-2009 (5-year average)

NR = not reportable due to small numbers (less than 5). Source: Ontario MOHLTC, Ambulatory All Visit Problem Diagnosis & External Cause Table (2005-2009) and Population Estimates (2005-2009), IntelliHEALTH Ontario. Extracted January 17-24 & February 15, 2011.

Hospitalizations for suicide attempts

While data on visits to the emergency department show trends in service utilization, data on hospitalization is useful to examine suicidal behaviour that is more serious and urgent, requiring admission to hospital for at least 24 hours. **Figure 2.0** shows the number and rate of hospitalizations for suicide attempts in Waterloo Region and Ontario. Although the rate of hospitalizations for suicidal behaviour in Waterloo Region remained higher than the provincial rate, both the local and the provincial rate of hospitalizations declined steadily over time.

A number of contributing factors exist that may account for the decline in hospitalizations. Differences in service delivery and availability of hospital beds, for example, may lead to variations in the proportion of individuals hospitalized for suicidal behaviour.[2] Increases in community-based resources and services for persons in crisis may also explain, in part, the decline in hospitalization rates. Without a more in depth exploration of this data however, these contributing factors are only speculation.



	2002	2003	2004	2005	2006	2007	2008	2009
Waterloo Hosp'ns	397	390	408	369	271	229	273	256
Waterloo Rate	84.7	82.2	83.1	73.5	53.2	44.7	51.7	48.1
Ontario Rate	69.3	60.0	57.2	51.0	39.4	35.3	35.3	35.0

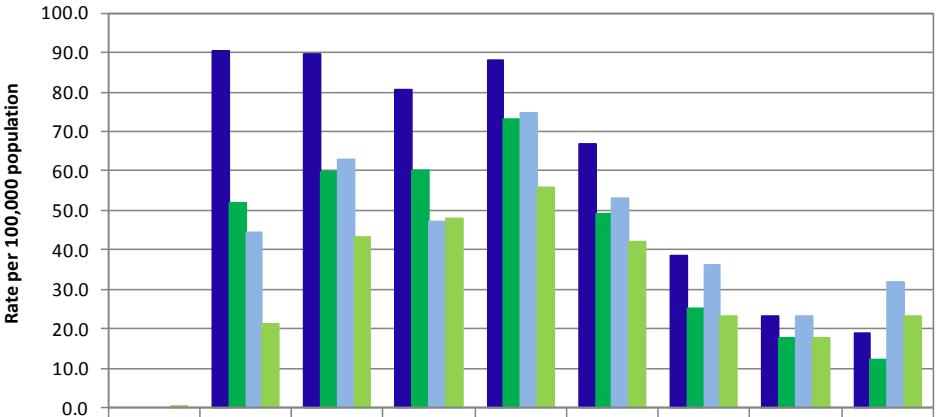
Figure 2.0. Number of hospitalizations for attempted suicide and standardized hospitalization rates, Waterloo Region and Ontario, 2002-2009

Rates are age-standardized to the 1991 (adjusted) Canadian population. Source: Ontario MOHLTC, Inpatient Diagnosis & External Cause Table (2002-2009) and Population Estimates (2002-2009), IntelliHEALTH Ontario. Extracted January 20, 2011.

Females in Waterloo Region (aged 10 to 49 years) had particularly high rates of hospitalization for suicidal behaviour. **Figure 2.1** shows the average hospitalization rates by sex and age group for Waterloo Region and Ontario. The gap between female and male average hospitalization rates in Waterloo Region is greatest among the youth population (10-19 years). This gap narrows over time as age increases, and reverses in later life with more hospitalizations for suicidal behaviour among males than females (32.0 vs. 18.9 per 100,000 in Waterloo

respectively). Overall, hospitalizations for suicidal behaviour in Waterloo Region and Ontario peaked for males and females in the middle-aged population (aged 40-49 years).

This observed difference in hospitalizations for Waterloo Region females and males has been found in most Canadian jurisdictions.[2] Females are much more likely to have emergency department visits and hospitalizations for suicidal behaviour, as males are more likely to die from self-inflicted injuries.



	0 - 9	10 - 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80+
Waterloo Females	NR	90.4	89.6	80.7	88.0	66.7	38.5	23.4	18.9
Ontario Females	NR	52.0	59.8	60.3	73.0	49.1	25.1	17.7	12.3
Waterloo Males	NR	44.3	62.8	47.3	74.9	53.2	36.4	23.2	32.0
Ontario Males	0.2	21.2	43.4	48.1	55.9	42.1	23.3	17.7	23.2

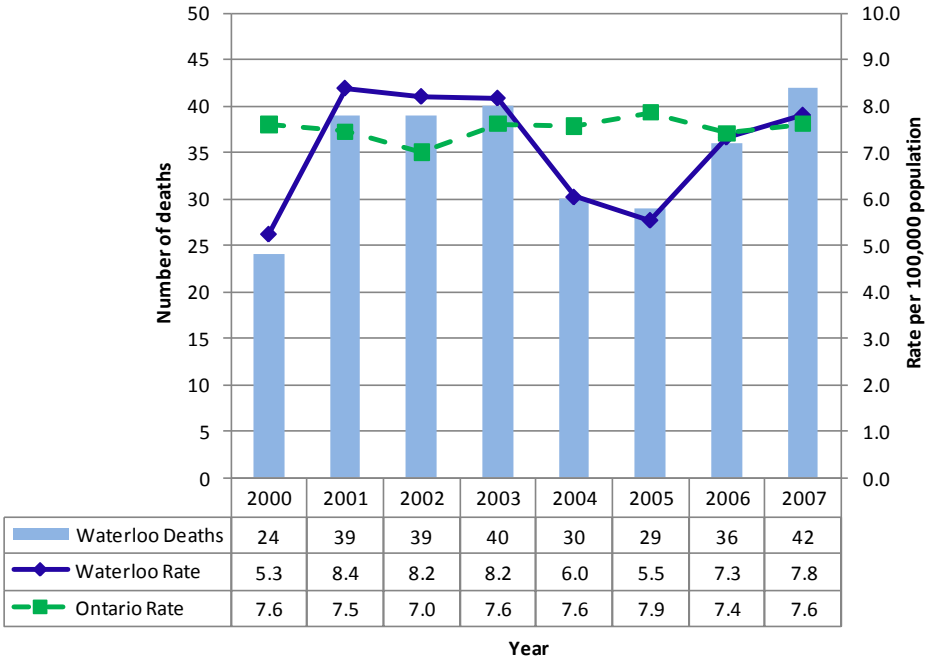
Figure 2.1. Age-specific attempted suicide hospitalization rates, by sex, Waterloo Region and Ontario, 2005-2009 (5-year average)

NR = not reportable due to small numbers (less than 5). Source: Ontario MOHLTC, Inpatient Diagnosis & External Cause Table (2002-2009) and Population Estimates (2002-2009), IntelliHEALTH Ontario. Extracted January 20, 2011.

Suicide Mortality

The suicide mortality rate in Waterloo Region has fluctuated compared to the provincial rate. **Figure 3.0** shows the number and rate of suicide deaths in Waterloo Region and Ontario. Relative to the rate in Canada over the same timeframe (Figure not shown), Waterloo Region and the province of Ontario experienced lower rates of death by suicide.

It should be noted that local and provincial suicide mortality rates likely underestimate the true number of deaths by suicide. How a death is classified may be influenced by several conditions (e.g., social, medical, legal). Only when the person's intent is clear can the death be ruled a suicide. In some cases, assessment of this intent can be difficult to ascertain.

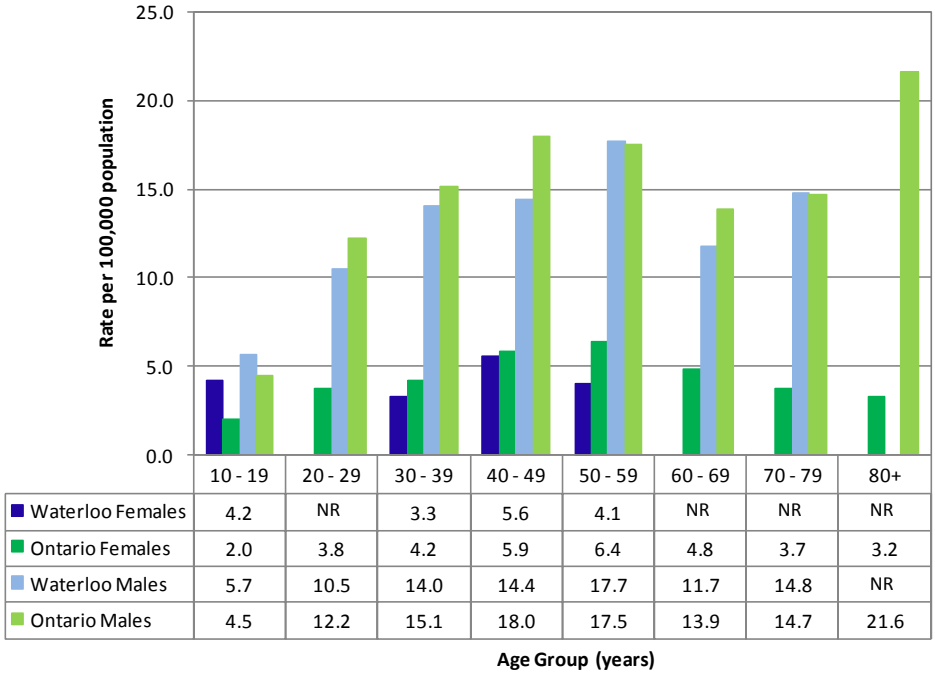


	2000	2001	2002	2003	2004	2005	2006	2007
Waterloo Deaths	24	39	39	40	30	29	36	42
Waterloo Rate	5.3	8.4	8.2	8.2	6.0	5.5	7.3	7.8
Ontario Rate	7.6	7.5	7.0	7.6	7.6	7.9	7.4	7.6

Figure 3.0. Number of suicide deaths and standardized suicide mortality rates, Waterloo Region and Ontario, 2000-2007

Rates are age-standardized to the 1991 (adjusted) Canadian population. Source: Ontario MOHLTC, Vital Statistics Death Table (2000-2007) and Population Estimates (2000-2007), IntelliHEALTH Ontario. Extracted December 30, 2010 and March 2, 2011.

Unlike the patterns for emergency department visits and hospitalizations, males have higher suicide mortality rates than females at the local and provincial level. **Figure 3.1** shows the age-



	10 - 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80+
Waterloo Females	4.2	NR	3.3	5.6	4.1	NR	NR	NR
Ontario Females	2.0	3.8	4.2	5.9	6.4	4.8	3.7	3.2
Waterloo Males	5.7	10.5	14.0	14.4	17.7	11.7	14.8	NR
Ontario Males	4.5	12.2	15.1	18.0	17.5	13.9	14.7	21.6

Figure 3.1. Age-specific suicide mortality rates, by sex, Waterloo Region and Ontario, 2003-2007 (5-year average)

NR = not reportable due to small numbers (less than 5). Source: Ontario MOHLTC, Vital Statistics Death Table (2003-2007) and Population Estimates (2003-2007), IntelliHEALTH Ontario. Extracted December 30, 2010 and March 2, 2011.

specific mortality rates by sex for Waterloo Region and Ontario. Suicide mortality rates for Waterloo Region (where available) and provincially appears to peak in middle age for both sexes, and again in later life for males.

Summary

This updated report from Waterloo Region Public Heath demonstrates that efforts in suicide awareness and prevention are still warranted in Waterloo Region. Mortality rates for suicide in Waterloo Region were highest for males between 50 and 59 years of age and females between 40 and 49 years of age. Compared to the statistics presented in the 2005 Strategy, suicide mortality rates have shown greater fluctuations and less stability. The trends for hospitalization however have remained similar to 2005 patterns; as did the sex differences in hospitalization and mortality rates. This report on suicide in the Waterloo Region serves to inform the activities of the Waterloo Region Suicide Prevention Council and its community partners by clearly demonstrating where the community stands relative to the province of Ontario and where greater suicide prevention and awareness efforts may be needed.

[1]A full copy of the Waterloo Public Health Report is available online at http://chd.region.waterloo.on.ca/en/researchResourcesPublications/resources/Suicide_Status.pdf.
[2]CIHI (2011).Health Indicators 2011. Available online at http://www.cihi.ca/CIHI-ext-portal/internet/en/document/health+system+performance/indicators/indicators.

Data Sources for the Region of Waterloo Public Health Report

National Ambulatory Care Reporting System

Emergency department (ED) 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). ED visits for Waterloo Region and Ontario residents that occur outside of the province are not available through IntelliHEALTH.

An ED visit is determined to be suicide-related based on the 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.[1] Note that in using Intentional Self-Harm ICD codes to represent suicide-related ED visits, it is assumed that all incidents of self-harm occurred with suicidal intention, which may not always be the case.

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 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.

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 external 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). 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 as a result of coding changes, and not due to true changes in the population.

[1] 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.

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.

National Trauma Registry

The National Trauma Registry relies on data from the Discharge Abstract Database (DAD) 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). 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.

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 to be a suicide based on the underlying cause of death[2] indicated on Death Certificates. As of January 1, 2000, causes of death are 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. 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.

[2] 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.

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).

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 (PYLL) figures were also obtained from the Vital Statistics mortality data. PYLL statistics were not specifically calculated for this report but rather were calculated by the MOHLTC and extracted from intelliHEALTH in this derived format. PYLL 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,[3] these figures may be an underestimate of potential years of life lost due to suicide.

Population Estimates

Population estimates are not explicitly presented in this report but were necessary 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

References

Burrows, S., Auger, N., Roy, M., & Alix, C. (2010). Socio-economic inequalities in suicide attempts and suicide mortality in Quebec, Canada, 1990-2005. *Public Health, 124*(2), 78-85.

Office of the Chief Coroner of Ontario. (2010). *2010 annual report of the Paediatric Death Review Committee and Deaths under Five Committee.* Retrieved Feb 23, 2011 from http://www.mcscs.jus.gov.on.ca/stellent/groups/public/@mcscs/@www/@com/documents/webasset/ec082796.pdf.

Health Canada. (1994). *Suicide in Canada: Update of the report of the Task Force on Suicide in Canada.* No. H39-107/1995E.

[3] Source: Ontario MOHLTC, *Vital Statistics Death Table (2005) and Population Estimates (2005), IntelliHEALTH Ontario*. Extracted December 30, 2010 and March 25, 2010.

7.0 SUICIDE RELATED DEMAND ON WATERLOO REGIONAL POLICE SERVICES 2009-2010

A Report Written for the Waterloo Region Suicide Prevention Council

The Waterloo Regional Police Service (WRPS) responded to over 2,000 suicide-related calls for service during 2009 and 2010. These occurrences required 9,666 hours of service time from police officers. This number of occurrences is similar to the number of suicide-related service calls reported in the 2005 Strategy.

Of Note: As of 2008, the WRPS uses a Computer Aided Dispatch (CAD) system which assigns one of two codes for suicide-related calls; attempted suicide occurrences and suicide occurrences. The number of unique occurrence numbers that are generated in CAD with the two suicide-related call types makes up the total number of occurrences. Some suicide-related service calls may be categorized under other occurrence types, such as mental health, and would not be captured in this report. Furthermore, any change to the service call or police service time spent after it has been cleared is not recorded in the CAD system. It should be noted therefore, that the numbers in this report are an approximation.

Attempted Suicide Occurrences

During 2009 there were 1,034 attempt suicide occurrences. A total of 3,209 police units were dispatched to those occurrences with a total service time of 263,890.7 minutes (4,398.2 hours). During 2010 there were 1,045 attempt suicide occurrences with a total of 3,168 police units with a total service time of 232,632.3 minutes (3,877.2 hours). The total service time for police officers responding to attempted suicide occurrences decreased from 2009 to 2010 by approximately 13%.

Attempted Suicide Occurrences	2009	2010	% Change
Number of Attempted Suicide Occurrences	1,034	1,045	1.1%
Number of Units Dispatched	3,209	3,168	-1.3%
Total Service Time Minutes	263,890.70	232,632.30	-11.8%
Total Service Time Hours	4,398.18	3,877.21	-11.8%
Total Service Time per Occurrence (Minutes)	255.21	222.61	-12.8%

The WRPS breaks down attempted suicide occurrences into six subtypes. The subtype of Adult-Male Subjects was found to make up approximately 40% of the total occurrences relating to attempt suicides. A difference to note is that between 2009 and 2010, the gap between the number of Adult-Male Subjects and Adult-Female Subjects decreased, as did the difference between the number of Child-Male Subjects and Child-Female Subjects. For occurrences that were Domestic Related, Multiple Subject and Subtype Not Available, the subjects may have been either child or adult, male or female (see Figure 1).

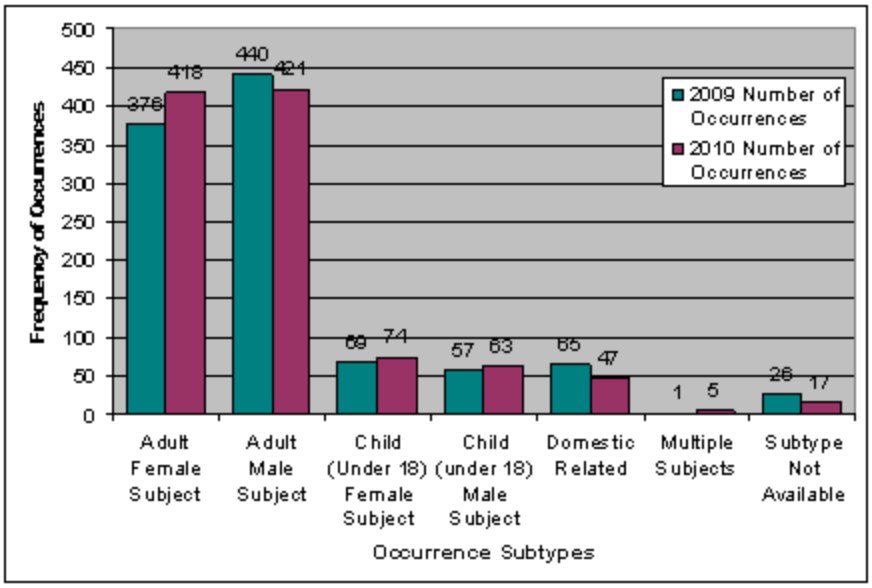


Figure 1: Attempted Suicide Occurrences by Subtype, 2009-2010

The demands on police services fluctuate by day of week and month of year. For attempted suicides, it was found that the weekdays had a greater demand on police services than the weekends. When attempted suicides are broken down by month, there appears to be no consistent pattern. These trends are comparable to the statistics presented in the 2005 Strategy.

Suicide Occurrences

There were significantly less suicide occurrences than attempted suicide occurrences. In 2009, there were 33 suicide occurrences. A total of 251 police units were dispatched to those occurrences with a total service time of 42,235.6 minutes (703.9 hours). During 2010, there were 28 suicide occurrences. A total of 206 police units were dispatched with a total service time of 41,213.4 minutes (686.9 hours). The total service time for police officers responding to suicide occurrences increased from 2009 to 2010 by approximately 15%.

Suicide Occurrences	2009	2010	% Change
Number of Suicide Occurrences	33	28	-15.2%
Number of Units Dispatched	251	206	-17.9%
Total Service Time Minutes	42,235.60	41,213.40	-2.4%
Total Service Time Hours	703.93	686.89	-2.4%
Total Service Time per Occurrence (Minutes)	1,279.87	1,471.91	15.0%

No discernable patterns emerged when suicide occurrences were broken down by day of week or by month.

The total number of suicide-related occurrences in Waterloo Region has remained fairly constant from 2009 to 2010. The amount of service time police officers spent attending to these occurrences has decreased by approximately 11%.

Suicide-Related Occurrences	2009	2010	% Change
Total Suicide-Related Occurrences	1,067	1,073	<1.0%
Total Number of Units Dispatched	3,460	3,374	-2.5%
Total Service Time Minutes	306,126.30	273,845.70	-10.5%
Total Service Time Hours	5,102.11	4,564.10	-10.5%
Total Service Time per Suicide-Related Occurrence (Mins)	286.90	255.22	-11.0%

Summary

This report on attempted suicide and suicide occurrences and the associated service time spent by police officers provides some insight into the issue of suicide in Waterloo Region. The number of attempted suicides is by no means a complete number within the Region. The amount of service time for suicide-related occurrences reported here does not take into account the time spent by call takers, dispatchers or possible follow up investigation after the original occurrence was closed in the Service's dispatching system.

While the number of attempted suicide occurrences increased only slightly from 2009 to 2010 and the number of suicide occurrences decreased, there is not enough data to determine if these are reflective of any long term trends in the Region. Further detailed analyses over a longer timeframe would be required to examine this concept more closely.

8.0 CLOSING REMARKS

A Message from the WRSPC Coordinator: Where do we go from here?

Five years ago when this Strategy was developed, the intent was "to raise the profile of suicide as an issue, and to educate our community in how every member can play a role in reducing the incidence of suicide." Using five key objectives as a platform, the Waterloo Region Suicide Prevention Council has worked diligently to increase community participation, public awareness, and training and education initiatives while continuing to advocate for a coordinated suicide strategy nationally.

While the remarkable amount of work that the Council has accomplished in the past five years has been highlighted in this report, so too is the troublesome persistence of suicide in Waterloo Region. The updated reports from the Waterloo Region Public Health on Suicide in Waterloo Region and the Suicide Related Demand on Police Services underscore the need for continued efforts in suicide awareness and prevention. Some key learning's from these reports can be translated into future action points within the framework of the Council's five key objectives. Although there are numerous issues that warrant attention, some key points jumped out. Here are some observations.

First, how do we help the 616 individuals that end up in our emergency department for attempted suicide (the average number of visits between 2005 and 2009)? We know that once an individual has tried to take their life, the likelihood of trying again increases. We also know that ending up in emergency can be a turning point and a second chance. What programs do we put in place to reduce these numbers? Do we make follow up telephone calls or visits or pair these individuals with a peer navigator that point them to community services and can act as a lifeline when feeling suicidal? How do we collaborate as a community to help the hospital lower these numbers? How do we broaden our resources so that we can expand the successful Skills for Safer Living program into the rural areas and run concurrent groups across our Region and ensure its viability?

Secondly, how do we reach the 50 – 59 year old male, our Region's highest suicide mortality demographic? Perhaps it is through public awareness campaigns targeted to men this age at specific times on television, such as Scotland has done or via a campaign aimed at males through beer stores and pubs as PEI launched last year. Perhaps it is an education and awareness program developed for the business workplace; an often ignored training area for mental health issues and suicide alertness programs.

Thirdly, the number of attempted suicide occurrences the Waterloo Regional Police Services is dispatched to annually is greater than 1000. What resources do our Police need to help with this volume of calls? The Mobile Crisis Team and the Police Services have been working collaboratively on suicide related calls. Does our community require further Mobile Teams to help with the high demand of calls and our expanding population?

Finally, emergency department visits for suicide attempts were more likely among youth and young adults compared to older age groups. Suicide also continues to be the second leading cause of death among our youth. Interestingly enough, a survey conducted by Harris/Decima Poll on behalf of Your Life Counts last August, showed a whopping 96% of Canadians believe that in order to help reduce youth suicide in Canada, the topic should be freely discussed without fear or shame. Fortunately, both our school boards plus our two universities and college have been working conscientiously on suicide prevention initiatives. To broaden our reach, could we be offering training and awareness programs to coaches, parents, Brownie and Scout leaders and to staff at neighbourhood community centres? Are there Public Service Announcements that we can be airing?

Whether we decide to tackle the four issues I have emphasized here or other important findings from the reports, what is clear is the need for a continued, concentrated effort on suicide prevention strategies in Waterloo Region. I urge you and your organization to continue supporting the work of the Council as we continue our efforts to reduce the incidence of suicide in our region. Our community deserves to have this issue be a priority.

Tana Nash
WRSPC Coordinator

APPENDIX I: LETTERS OF ENDORSEMENT

APPENDIX II: REFERENCES

From Page 18

[1]World Health Organization. (2005). Distribution of Suicide Rates (per 100,000), by Gender and Age, 2000. Retrieved June 9, 2011 from the World Wide Web: http://www.who.int/mental_health/prevention/suicide/suicidecharts/en/.

[2]Canadian Coalition for Seniors Mental Health. (2006). The assessment of suicide risk and prevention of suicide. *National Guidelines for Seniors Mental Health*. Toronto, ON: Baycrest.

[3]O'Connell, H., Chin, A., Cunningham, C., & Lawlor, B. A. (2004). Recent developments: Suicide in older people. *BMJ, 329*, 895-899.

[4]Conwell, Y. (1995). Suicide among elderly persons. *Psychiatric Services, 46*, 563-564.

[5]Rosowsky, E. (1993). Suicidal behaviour in the nursing home and a postsuicide intervention. *American Journal of Psychotherapy,* 47,127–142.

[6]Goldsmith, S.K., Pellmar, T.C., Kleinman, A.M., et al. (2002). *Reducing suicide: A national imperative.* Washington (DC): National Academy Press.

[7]De Leo, D. & Spathonis, K. (2004). Suicide and suicide behaviour in late-life. In D. De Leo, U. Bille-Brahe, A. Kerkhof, & A. Schmidtke (Eds.). *Suicidal Behaviour: Theories and Research Findings* (pp. 253-286). Göttingen, Germany: Hogrefe & Huber Publishers.