1. MOTION TO GO INTO CLOSED SESSION

THAT a closed meeting of Community Services Committee be held on
Tuesday, October 16, 2012 at 8:45 a.m. in the Waterloo County Room, in
accordance with Section 239 of the Municipal Act, 2001, for the purposes of
considering the following subject matters:

a) personal matters about identifiable individuals – committee appointments

2. MOTION TO RECONVENE INTO OPEN SESSION

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

4. PRESENTATIONS

a) Mary MacKeigan, Executive Director, Opportunities Waterloo Region,
Re: Increasing Local Food Security

5. REPORTS – Social Services

a) SS-12-045, Homeless Individuals And Families Information System Local
Coordination Project (2012-2014)

REPRESENTATIONS – Public Health

b) PH-12-041, Contraband Tobacco

c) PH-12-042, Quarterly Charged/Closed Food Premises Report

d) PH-12-043, West Nile Virus Activity – 2012 Season End Update

e) PH-12-044, Public Health Sector Strategic Planning and Collaboration with
LHINS

f) PH-12-045, Tuberculosis Program Report

g) PH-12-046, 2012-2013 Influenza Season Update

h) PH-12-047, 2011-2012 Influenza Season Summary
REOORTS – Planning, Housing & Coummunity Services

i) P-12-106, Waterloo Region's Updated Community Action Plan for Low to Moderate Level Housing 26

j) P-12-110, Waterloo Region Museum–Mid Year Update 33

k) P-12-111, Housing Services Corporation Insurance Program Update 41

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8. NEXT MEETING – November 6, 2012

9. ADJOURN
TO: Chair Sean Strickland and Members of the Community Services Committee
DATE: October 16, 2012
FILE CODE: S13-80
SUBJECT: HOMELESS INDIVIDUALS AND FAMILIES INFORMATION SYSTEM LOCAL COORDINATION PROJECT (2012-2014)

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve entering into an extension of the funding Agreement in the additional amount of up to $60,971 with the Federal Government of Canada or a Ministry or agency thereof for continued local coordination of the Homeless Individuals and Families Information System (HIFIS) for the period July 25, 2012 to March 31, 2014;

AND THAT the Regional Municipality of Waterloo enter into an Agreement with the House of Friendship of Kitchener for up to $32,171 for continued delivery of certain aspects of the Homeless Individuals and Families Information System (HIFIS) for the period July 25, 2012 to March 31, 2014;

AND THAT the Regional Municipality of Waterloo enter into an Agreement(s) with consultant(s), as determined by the Commissioner of Social Services from time to time, for up to a maximum of $26,700 collectively for continued delivery of certain aspects of the Homeless Individuals and Families Information System (HIFIS) for the period July 25, 2012 to March 31, 2014;

AND FURTHER THAT the 2012 Operating Budget for Social Planning be increased by $17,604 gross and $0 net as outlined in Report SS-12-045, dated October 16, 2012.

SUMMARY:

This report seeks approval to enter into an annual contribution Agreement with the federal government for local coordination of the Homelessness Individual and Family Information System (HIFIS). It also seeks approval to again enter into Agreements with the House of Friendship and consultant(s) to support HIFIS use in the community. The Region has been receiving funding for the local coordination of HIFIS since 2006 through annually negotiating contribution Agreements.

REPORT:

1.0 Background
The Homeless Individuals and Families Information System (HIFIS) is an electronic data management system that allows agencies working with people experiencing homelessness to manage their day-to-day operations as well as collect data on homelessness trends. The HIFIS initiative has been funded through Human Resources and Skills Development Canada (HRSDC) since 2006. There is no purchasing or licensing cost for the software, and training and support are offered at no cost to participants.
Locally, all agencies providing emergency shelter services to people experiencing homelessness who receive funding from the Region use HIFIS. These agencies include: Argus Residence for Young People, Cambridge Shelter, Charles Street Men’s Hostel, Marillac Place, Reaching Our Outdoor Friends-Providing a ROOF (ROOF-PAR), YWCA-Mary’s Place and Lutherwood-Safe Haven.

There are several benefits to participating in the HIFIS initiative:
- The ability to collect longitudinal, multi-locational and unduplicated data on service use/trends.
- An enhanced capacity to work with service providers in the area of housing stability research, program and policy development.
- Participation in a national initiative with a long-term strategy for the promotion, continued development and deployment of a data management system that can compare trends across Canada.

The Region was an early adopter and first became involved with the HIFIS software in the fall of 2002. Following attendance at HIFIS Community Coordinator Training in 2002, Region Staff took on the role of the local Community Coordinator, establishing a HIFIS Working Group and assisting in the implementation of HIFIS in three emergency shelters beginning 2003. A Data Sharing Protocol Agreement was signed between the shelters and the Region in January 2004 and shelters began exporting data to the Region shortly thereafter.

HIFIS implementation in Waterloo Region has experienced considerable success since receiving initial funding in 2006 through HRSDC. Since 2006, the Region has worked with emergency shelters to develop and update local policies, procedures, protocols, tools, forms, training resources and reports to support the implementation of HIFIS software. The HIFIS Coordination Project represents unique partnering of an IT technical skill set and intensive technical support with an innovative social and community planning approach that encourages optimization of the HIFIS software.

2.0 History of HIFIS Funding in Waterloo Region
Since September 2006, the Region has been engaged with Human Resources and Social Development Canada (HRSDC) with the HIFIS Coordination project in Waterloo Region. Council approved a HIFIS local coordination demonstration project for the period September 1, 2006 to March 31, 2007 with total funding of $50,000 (100% federal funds) (SS-06-050). Local coordination of HIFIS has since continued through a series of 100% funded one-time HRSDC allocations: $49,079 for 2008/2009 (SS-07-015 and SS-08-29); $55,214 for 2009/2010 (SS-09-015); $57,490 for 2010/2011 (SS-10-018); and $57,963 for 2011/2012 (SS-11-014). The current contribution Agreement is set to expire March 31, 2014.

3.0 Funding for 2012-2014
Region staff was asked by HRSDC to submit a proposal based on their intention to amend the current Agreement for 20 additional months of funding at $60,971 (July 25, 2012 to March 31, 2014). A proposal was submitted and has been approved by the Government of Canada. It is planned that current project activities will be similar to previous years. Regional staff will directly undertake the roles of coordinator and data analyst while the House of Friendship and consultant(s) will again be contracted to administer other aspects of the project including technical support, training, and some data analysis.

CORPORATE STRATEGIC PLAN:
Participating in HIFIS is aligned with the Region’s Corporate Strategic Plan (2011-2014), Focus Area 4: Healthy and Inclusive Communities: to “reduce inequities and enhance community health, safety, inclusion and quality of life”; and specifically, Strategic Objective 4.5 to “Work collaboratively to increase the supply and range of affordable housing and reduce homelessness”.
FINANCIAL IMPLICATIONS:

The HIFIS local coordination project is 100% federally funded. An additional amount of $60,971 will be received from the federal government for the period July 25, 2012 to March 31, 2014. A total of $32,171 will be provided to the House of Friendship of Kitchener and a total of $26,700 will be provided to a consultant(s) to administer technical support and some data analysis aspects of the project. An amount of $1,100 will be provided for HIFIS Community Coordinator attendance at the HIFIS national conference and $1,000 will be provided to support the purchase of a laptop through House of Friendship. An estimated total of $17,604 will be spent in 2012; $35,049 in 2013 and the remaining $8,318 will be used from January to March 2014.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Legal Services has reviewed this report and is consulted regarding execution of agreements. Finance has reviewed this report and provides support in reviewing project financial statements, conducting required audits and financial reporting.

ATTACHMENTS

NIL

PREPARED BY:  Cris Renna, Social Planning Associate
               Marie Morrison, Manager Social Planning

APPROVED BY:  Gail Kaufman Carlin, Acting Commissioner, Social Services
TO: Chair Sean Strickland and Members of the Community Services Committee

DATE: October 16, 2012

FILE CODE: P13-80

SUBJECT: CONTRABAND TOBACCO

RECOMMENDATION:

THAT the Regional Municipality of Waterloo write to the Premier in support of the Ontario Government’s most recent budget commitments to eradicate contraband tobacco through the implementation of additional regulatory, enforcement, and other provisions in Bill 186;

AND THAT the provincial government is encouraged to continue to strengthen their strategies to address the manufacture and supply of contraband tobacco;

AND FURTHER THAT this resolution be shared with surrounding Central West municipalities (based on Ministry of Health and Long Term Care boundaries); local area municipalities; local Members of Parliament (MPs); and, local Members of Provincial Parliament (MPPs), as noted in report PH-12-041, dated October 16, 2012.

SUMMARY:

Contraband tobacco has negative health impacts and is easily accessible in our community. The responsibility for addressing issues related to contraband rests within provincial and federal jurisdictions. The recently introduced provincial legislation provides new measures to further protect young people from the dangers of cheap, illegal tobacco.

REPORT:

What Is Contraband Tobacco?

Contraband is defined as any type of tobacco product that does not include the packaging or labeling required by law or where applicable taxes and duties have not been paid. Contraband tobacco is considered illegal.

In Canada, contraband products include:

- illicitly manufactured cigarettes produced domestically;
- tax-exempt cigarettes designated for Aboriginal communities that are sold without taxes to non-Aboriginal people;
- smuggled tobacco products (legally manufactured in the United States (U.S.) and illegally brought into Canada);
- manufactured cigarettes produced in the U.S without a license and smuggled into Canada;
- and counterfeit cigarettes (imitations of Canadian brands).

The current trend of manufacturing, distributing and selling contraband tobacco products, which has developed exponentially over the last six years, involves organized crime networks.
exploiting Aboriginal communities.¹

**Recent Legislation on Contraband**

In order to address the issue of contraband, the provincial government introduced a bill as an amendment to the Tobacco Tax Act (1990), in order to support the Smoke-Free Ontario Act. The bill, entitled *Bill 186, Supporting Smoke-Free Ontario by Reducing Contraband Tobacco Act, 2011*, provides new measures to further protect young people from the dangers of cheap, illegal tobacco.

On June 1, 2011, the Reducing Contraband Tobacco Act, 2011 (S.O. 2011, c. 15), received Royal Assent. Implementation of the Act will happen over a two-year period from June 1, 2011 to April 1, 2013. As a brief summary, the new legislation addresses the contraband tobacco problem by providing:

<table>
<thead>
<tr>
<th>New Measure</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fine levels</strong>: New fine levels for offences related to possessing illegal cigarettes better reflect the extent and type of offence committed.</td>
<td>June 1, 2011</td>
</tr>
<tr>
<td><strong>Police seizures</strong>: Police officers now have authority to seize illegal cigarettes discovered in plain view. Once the marking of fine-cut tobacco is implemented, police officers will also have the authority to seize illegal, fine-cut tobacco discovered in plain view.</td>
<td>June 1, 2011 (there will be a planning and transition period)</td>
</tr>
<tr>
<td><strong>Raw leaf tobacco</strong>: The regulation of raw leaf tobacco will come under the Tobacco Tax Act and be expanded to include all types of raw leaf tobacco (i.e., flue-cured, burley, black/dark - partially and fully processed) grown in and imported into Ontario.</td>
<td>October 1, 2012 (for the 2013 growing season)</td>
</tr>
<tr>
<td><strong>Marking scheme</strong>: A marking scheme for fine-cut tobacco will make it easier for law enforcement officials to identify illegal, fine-cut tobacco. Once the marking of fine-cut tobacco is implemented, police officers will also have the authority to seize illegal fine-cut tobacco discovered in plain view.</td>
<td>April 1, 2013</td>
</tr>
</tbody>
</table>

**Public Health Role**

Being a federally and provincially regulated issue, Public Health’s role in curbing contraband is minimal and prescribed compared to other agencies that address the contraband issue (i.e. RCMP, Ministry of Finance, Health Canada and Police). Smoke-Free Ontario enforcement staff (e.g. Tobacco Enforcement Officers) follow established referral protocols for the Ministry of Finance, Health Canada, RCMP and Police when contraband tobacco has been identified during the course of a Smoke-Free Ontario Act inspection or enforcement check.

Public Health continues to focus on reducing access and use of tobacco products regardless of how they are obtained. Our rates of daily use of tobacco remain at a concerning level and we support provincial efforts aimed at reducing access including retail display bands and age-of-sale restrictions as well as those specific to contraband.

**CORPORATE STRATEGIC PLAN:**

<table>
<thead>
<tr>
<th>Strategic Focus Area 3: Health and Safe Communities – Support safe and caring communities that enhance all aspects of health.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Focus Area 4: Human Services – Promote quality of life and create opportunities for</td>
</tr>
</tbody>
</table>

residents to develop to their full potential.

Strategic Focus Area 6: Service Excellence – Foster a culture of citizen/customer service that is responsive to community needs.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

This report was reviewed by staff from Health Protection and Investigation and Licensing and Enforcement Services, Corporate Resources.

ATTACHMENTS:

NIL

PREPARED BY: Sharlene Sedgwick Walsh, Director, Healthy Living
Jonathan Mall, Manager, Tobacco and Cancer Prevention
Brenda Miller, Manager, Infection Control, Rabies, Vector-Borne Diseases, Tobacco Enforcement and Kitchener and Area Team

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

References:

REPORT:

During the third quarter of 2012, nine establishments were charged and two establishments ordered closed under the Health Protection and Promotion Act, Ontario Food Premises Regulation 562 (See Table 1: Food Safety Enforcement Activity).

Food premises charges and closures can be viewed on the Food Premises Inspection Reports website Enforcement Actions Page for a period up to 6 months from the date of the charge or closure. Every food premises charged has the right to a trial and every food premises ordered closed, under the Health Protection and Promotion Act, has the right to an appeal to the Health Services Appeal and Review Board.

CORPORATE STRATEGIC PLAN:

Health and Safe Communities: Support safe and caring communities that enhance all aspects of health.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS

Table 1: Food Safety Enforcement Activity

PREPARED BY: Chris Komorowski, Manager, Food Safety, Recreational Water and Cambridge & Area Team

APPROVED BY: Dr. Liana Nolan, Commissioner/Medical Officer of Health
<table>
<thead>
<tr>
<th>Name of Establishment</th>
<th>Date of Charges or Closure</th>
<th>Charges or Closure</th>
<th>Total Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alan Restaurant</td>
<td>Two Provincial Offences Notices issued for infractions observed on July 6, 2012</td>
<td>Operate food premise maintained in manner adversely affecting sanitary condition ($120)</td>
<td>$240</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use dirty cloth for cleaning utensils ($120)</td>
<td></td>
</tr>
<tr>
<td>Kuchen Pops</td>
<td>Establishment ordered closed on July 6, 2012</td>
<td>An investigation revealed the following which in the Public Health Inspectors opinion, upon reasonable and probable grounds constituted a health hazard, namely: Food storage and food preparation is conducted in the kitchen of the private residence, without separation from foods and items for personal use and there was no designated handwash equipment available in the food preparation area.</td>
<td>Closure Order</td>
</tr>
<tr>
<td>Crystal Palace Chinese Restaurant</td>
<td>Two Provincial Offences Notices issued for infractions observed on July 16, 2012</td>
<td>Operate food premise mechanical equipment not maintained to provide sufficient chemical solution rinse ($120)</td>
<td>$420</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fail to protect food from contamination or adulteration ($300)</td>
<td></td>
</tr>
<tr>
<td>Napa Grille &amp; Wine Den</td>
<td>One Provincial Offences Notice issued for an infraction observed on July 20, 2012</td>
<td>Operator fail to ensure cover will prevent contamination or adulteration ($120)</td>
<td>$120</td>
</tr>
<tr>
<td>Whistle Bear Golf Club</td>
<td>One Provincial Offences Notice issued for an infraction observed on July 26, 2012</td>
<td>Operate food premise mechanical equipment not maintained to provide sufficient chemical solution rinse ($120)</td>
<td>$120</td>
</tr>
<tr>
<td>Establishment</td>
<td>Date of Infraction</td>
<td>Violation</td>
<td>Fines</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>The Fiddle &amp; Firken 704-710 King Street East Cambridge</td>
<td>August 1, 2012</td>
<td>Hazardous foods in walk-in cooler at temperatures between 12 degrees Celsius and 19 degrees Celsius for approximately 24 hours</td>
<td></td>
</tr>
<tr>
<td>The Fiddle &amp; Firken 704-710 King Street East Cambridge</td>
<td>August 1, 2012</td>
<td>Maintain hazardous foods at internal temperature between 5 Celsius and 60 Celsius</td>
<td>$455</td>
</tr>
<tr>
<td>Café 13 Main Street Grill 13 Main Street Cambridge</td>
<td>August 13, 2012</td>
<td>Operate food premise – fail to keep facility clean                                                                 $55</td>
<td></td>
</tr>
<tr>
<td>Sushi Boat Japanese Restaurant 4 – 465 Highland Road West Kitchener</td>
<td>August 30, 2012</td>
<td>Use dirty cloth for cleaning utensils                                                                                $120</td>
<td></td>
</tr>
<tr>
<td>Use dirty cloth for cleaning utensils ($120)</td>
<td></td>
<td>Fail to protect food from contamination or adulteration ($300)                                                     $420</td>
<td></td>
</tr>
<tr>
<td>Reporter Café 26 Ainslie Street South Cambridge</td>
<td>September 11, 2012</td>
<td>Operate food premise – mechanical equipment not maintained to maintain wash water between 60 Celsius – 71 Celsius    $120</td>
<td></td>
</tr>
<tr>
<td>Operator fail to ensure floor of food handling room kept clean ($55)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Black Badger 55 Water Street North Cambridge</td>
<td>September 24, 2012</td>
<td>Operator fail to ensure floor of food handling room kept clean ($55)                                                  $55</td>
<td></td>
</tr>
</tbody>
</table>
TO: Chair Sean Strickland and Members of the Community Services Committee

DATE: October 16, 2012

FILE CODE: P03-20

SUBJECT: WEST NILE VIRUS ACTIVITY – 2012 SEASON END UPDATE

RECOMMENDATION:

For information

SUMMARY:

There was a significant increase in West Nile virus activity across Ontario in 2012 as compared to recent years. Provincially, Public Health Ontario reported 220 confirmed and probable human cases as of September 25, 2012. There have been two deaths (one in Toronto, one in Windsor) attributed to West Nile virus. Waterloo Region has had three confirmed cases of West Nile virus as of October 10, 2012.

Another indicator of risk of West Nile activity is the number of positive mosquito pools detected in a region. Mirroring provincial trends, there has been an increase in the number of positive mosquito detected in Waterloo Region in 2012 as compared to recent years.

Once there has been a significant frost, we can expect West Nile virus activity to end.

While most people infected with West Nile Virus will show no symptoms or mild symptoms, serious health outcomes can occur in a small minority of people. During the West Nile virus season Region of Waterloo Public Health has been urging residents to take personal protective measures and reminding them of ways they can reduce their risk.

REPORT:

Human Cases

Waterloo Region has had three confirmed human cases of West Nile virus to date in 2012. Human cases were expected, given the increased number of human cases across the Province this year. As of September 25, 2012, there are 220 confirmed and probable human cases across Ontario. In 2011, Waterloo Region had one confirmed and one probable human case of West Nile virus and before then, the last case occurred in 2005.

The majority of people infected with West Nile virus show no symptoms. However, 1 in 5 infected individuals develop mild flu-like symptoms and 1 in 150 can develop serious neurological symptoms. While serious symptoms can occur at any age, persons over the age of 50 and persons with compromised immune systems are at highest risk. The usual time from infection with West Nile virus to onset of disease symptoms ranges from 2 – 15 days.
Vector Surveillance
Six positive mosquito pools for West Nile virus have been found across the region as of September 29, 2012. This is the highest number of pools which have tested positive in Waterloo Region since 2002 (when 12 pools tested positive). Public Health Ontario reported 462 pools of mosquito have tested positive for West Nile virus across Ontario as of August 25, 2012. The last time the number of positive mosquito pools across Ontario exceeded 462 pools was in 2002 when 580 positive mosquito pools were reported.

Warm temperatures are known to accelerate mosquito development and the extrinsic incubation period (i.e. the developmental stage within the mosquito required for the mosquito to be capable of transmitting the virus), thereby improving the probability of viral transmission to humans. This year many parts of southern Ontario including Waterloo Region have had more than 300 accumulated degree days (i.e. temperatures above 18.3°C for more than 24 hours). More than 200 accumulated degree days is associated with increased risk of human infection.

Active West Nile virus vector surveillance continued across the Region until Sept 26, 2012. Mosquito’s are expected to enter into their overwintering period once the temperatures drop and the daylight hours decrease, typically by mid to late September.

Control Efforts
For the 2012 season, Region of Waterloo Public Health continued to perform a preventative larviciding program. The scope of the larviciding program is informed each year by the abundance of West Nile virus vector species observed during larval surveillance and by the historical incidence of positive pools and human cases. A total of three rounds of catch basin larviciding (150,523 catch basins), 25.8 hectares of standing water and two sewage lagoons were treated this season to suppress mosquito populations and ultimately reduce the risk of human exposure to West Nile virus. Control efforts ended for the season as of September 29, 2012.

Reduction of standing water throughout the region to suppress mosquito populations is promoted to the residents through the Region’s “fight the bite “ public education program and is also promoted to program stakeholders (e.g. Grand River Conservation Authority, Cities and Municipalities and educational institutions). Standing water complaints regarding privately owned properties are investigated by Public Health Staff and property owners are provided with information on remediation. Standing water on public sites is investigated for the presence of mosquito larvae and control measures applied as needed.

Public Messaging
During the 2012 West Nile virus season, Region of Waterloo Public Health worked to promote West Nile virus public awareness and protection messaging to the residents of Waterloo Region via media releases, the “Fight the Bite” public education program and education for community stakeholders. With the arrival of a significant frost, we can expect West Nile virus activity to end.

CORPORATE STRATEGIC PLAN:

Strategic Focus Area 4: Healthy and Inclusive Communities – Foster healthy living through information, education, policy development and health promotion.

FINANCIAL IMPLICATIONS:

Activities are carried out within existing budget.
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS

NIL

PREPARED BY:  Brenda Miller, Manager, Infection Control, Rabies, Vector-Borne Diseases, Tobacco Enforcement and Kitchener and Area Team  
Kristy Wright, Manager, Infectious Disease and Tuberculosis Control Program

APPROVED BY:  Dr. Liana Nolan, Commissioner/Medical Officer of Health
TO: Chair Sean Strickland and Members of the Community Services Committee
DATE: October 16, 2012
FILE CODE: P19-20
SUBJECT: PUBLIC HEALTH SECTOR STRATEGIC PLANNING AND COLLABORATION WITH LHINS

RECOMMENDATION:
For information

SUMMARY:
The Chief Medical Officer of Health for Ontario is developing a Public Health Sector Strategic Plan, to be completed by spring 2013. On October 3 leaders from Boards of Health, Health Units, provincial Ministries, Public Health Ontario and LHINS met to explore opportunities for more collaboration and to integrate these ideas into the Public Health Sector Strategic Plan.

Region of Waterloo Public Health has two current specific projects with the Waterloo Wellington LHIN underway. Opportunities for further collaboration were explored.

REPORT:
Public Health Sector Strategic Plan
The Chief Medical Officer of Health for the province of Ontario is leading a Public Health Sector strategic planning exercise. On behalf of the Public Health Sector, the Strategic Plan will be released through a CMOH Special report. It is intended to provide a long term vision based on incremental 3-5 year strategies to improve health outcomes. The release of the report is anticipated in spring 2013.

The plan should articulate the role of public health in achieving the goals set out in the Minister of Health and Long Term Care’s Action Plan for Health Care. It should also achieve a more unified Public Health Sector through the development of a shared plan of action.

On October 3, Board of Health members, Medical Officers of Health, provincial Ministry and Public Health Ontario leaders and LHIN CEOs met to review the draft plan and explore areas for potential collaboration. The Chief Medical Officer of Health will continue to have consultations with stakeholders through a variety of forums over the next several months before the Strategic Plan is finalized.

Public Health and opportunities for collaboration with LHINS
At the October 3 meeting, Public Health Units and the LHINs presented overviews to each other on roles, structure, and accountabilities. Several areas for potential collaboration were identified, particularly as the Minister’s Health Action Plan unfolds. Common areas of interest that were brainstormed included working with primary care, health care worker immunization, falls prevention in the elderly, emergency preparedness, epidemiology, smoking cessation, workplace health (with
health care institutions as work places) and the social determinants of health.

This forum was the first time that Public Health and LHIN leaders from across the province had met together as a group. Hopefully this will be the first of many future forums, and a foundation for enhanced linkages between Public Health and the LHINs.

Region of Waterloo and collaboration with the Waterloo Wellington LHIN

There are two projects that Region of Waterloo Public Health and the Waterloo Wellington LHIN are currently collaborating on. The first is a report on the Social Determinants of Health in our geographic area and the impact on health. The LHIN funded a joint project involving the Waterloo Region Health Unit, the Wellington Dufferin Guelph Health Unit and the Grey Bruce Health Unit (as all three have at least portions of their jurisdiction falling within the Waterloo Wellington LHIN). The results have been shared with community leaders and stakeholders in the hope of inspiring initiatives that will impact on the determinants of health and thereby improve health in the population. A copy of the report as it relates to Waterloo Region data can be found at:


The second collaborative project relates to falls prevention in seniors. Public Health and the LHINs (through leadership representatives) jointly developed a guidance document on a collaborative approach to falls prevention for LHINS and Health Units in Ontario which can be found at http://www.alphaweb.org/docs/lib_014321248.pdf. The LHIN and representatives from Waterloo Region and Wellington Dufferin Guelph have initiated meetings to explore how to implement a shared strategy in this geographic area to reduce the prevalence of falls in the elderly. Falls are a leading cause of morbidity and mortality in seniors. Other jurisdictions have been able to reduce the prevalence of falls by collaborating across the health care sector.

Public Health will report periodically and provide updates on collaborative projects with the LHIN.

CORPORATE STRATEGIC PLAN:

Healthy and Inclusive Communities: Foster healthy, safe and caring communities

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS

NIL

PREPARED BY:  Sharlene Sedgwick Walsh, Director, Healthy Living
               Liana Nolan, Commissioner/Medical Officer of Health

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

DATE: October 16, 2012

FILE CODE: P03-80

SUBJECT: TUBERCULOSIS PROGRAM REPORT

RECOMMENDATION:

For Information

SUMMARY:

The Tuberculosis Program Report provides an overview of tuberculosis (TB) disease in Waterloo Region. This includes local data on the disease, clinical and other services offered by Region of Waterloo Public Health to manage and prevent the spread of TB, partnerships with various community organizations, health promotion programming and future considerations for the TB Program. All programs and services are carried out in accordance with the requirements outlined in the Ontario Public Health Standards.

REPORT:

Background

Tuberculosis (TB) is a curable infectious disease caused by the tuberculosis bacteria. TB disease usually infects the lungs (pulmonary TB) but can also infect other parts of the body such as the kidneys, spine, and brain (non-pulmonary TB)\(^1\). Pulmonary TB is contagious and people who are ill with pulmonary TB spread TB bacteria through the air by coughing, sneezing, and talking. Symptoms of TB disease include a cough that lasts two weeks or more, weight loss, fever, night sweats, and loss of appetite. If healthy people inhale TB bacteria, they may develop inactive TB where the bacteria lay dormant in their body (inactive TB infection or latent TB infection). Latent TB infection is usually non-damaging to the body but may develop into TB disease over time if the body is not able to control the growth of the bacteria. Latent TB infection has no symptoms.

The Ontario Public Health Standards (OPHS) establish requirements for all public health programs and services.\(^2\) The Tuberculosis Program at Region of Waterloo Public Health is responsible to the Board of Health for implementing the ten requirements outlined in the Tuberculosis Prevention and Control Standard. In addition, it adheres to the Tuberculosis Prevention and Control Protocol which outlines how the program should conduct its work. The overall goal of both the standard and protocol is to “prevent or reduce the burden of tuberculosis.”

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\(^1\) The Canadian Lung Association (2012).

TB Report Highlights

Tuberculosis in Canada and Waterloo Region

TB affects more than two billion people worldwide; however, it is less common in Canada. From 2002-2009, the number of reported cases of TB in Canada remained relatively stable (approximately 1,623 cases per year). From 1999 to 2009, the overall incidence rate decreased from 6 per 100,000 population to 4.7 per 100,000 population. In 2009, foreign-born individuals accounted for 63 per cent of all reported TB cases in Canada.

Historically, TB case counts and rates remained relatively stable in Waterloo Region. Between 2006 and 2011, there were 85 reported cases of active TB disease which is an average rate of 2.8 cases per 100,000. In addition, the incidence rate of TB disease from 2006 to 2011 was lower in Waterloo Region than Ontario’s incidence rate. The most significant known risk factor for active TB disease in Waterloo Region was having lived in an endemic area.

Similar to Canadian data, younger adults made up the largest number of reported TB cases. In Waterloo Region, individuals 20 to 29 had the highest incidence rates of TB compared to other age groups.

Tuberculosis Control Program Activities

Active TB cases are provided service through a bi-monthly Public Health clinic at 99 Regina St. South in Waterloo staffed by Public Health nurses and rostered respirologists. Clinic appointments involve a physical assessment, review of medical imaging, provision of treatment medications, assessment of blood work, and other relevant medical information as outlined in the Ministry of Health and Long-Term Care’s Tuberculosis Prevention and Control Protocol. The number of visits to the active TB clinic remained relatively stable from 2008-2011 with approximately 166 appointments per year.

In addition to active TB case management, the TB Program also completes latent TB infection case management as per immigration/medical surveillance requirements. Latent TB infection testing, commonly called TB skin testing, is also offered through the TB Program. The number of visits to the TB skin testing clinic increased from 1,222 visits in 2007 to 2,117 visits in 2011. This increase is partially due to an expansion in clinic hours implemented as part of the 2010 Infectious Diseases, Dental and Sexual Health Division reorganization. The TB program also maintains several partnerships with local health care providers, community partners, and the University of Waterloo.

Health promotion activities are also undertaken by the TB program. World TB Day, falling on March 24th each year, is a global initiative aimed at increasing awareness of TB disease. This world-wide initiative is steered by the Stop TB Partnership (www.stoptb.org). Each year, Public Health receives $2,000 from the Ministry of Health and Long-Term Care in funding to carry out local World TB Day activities. In recent years, World TB Day initiatives have included the provision of resources and support to primary care and other health care providers.

Moving Forward

There are several areas, pertaining to TB disease, that require future consideration. These include:
- Monitoring population growth and immigration from TB endemic countries
- Assisting primary care practitioners to understand their essential role in TB management
- Reviewing programs and services to ensure they are operating as efficiently as possible
ONTARIO PUBLIC HEALTH STANDARDS

The TB Report relates to Ontario Public Health Standard requirements #2 and #3 in the Tuberculosis Prevention and Control Standard:

- The board of health shall conduct surveillance of active tuberculosis as well as individuals with LTBI in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current) and the Tuberculosis Prevention and Control Protocol, 2008 (or as current)
- The board of health shall conduct epidemiological analysis of surveillance data, including monitoring of trends over time, emerging trends, and priority populations, in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current).

The TB Report also relates to the Ontario Public Health Standard requirement #6 in the Foundational Standard:

- The board of health shall conduct surveillance, including the ongoing collection, collation, analysis, and periodic reporting of population health indicators, as required by the Health Protection and Promotion Act and in accordance with the Population Health Assessment and Surveillance Protocol (2008)


CORPORATE STRATEGIC PLAN:

The Tuberculosis Program Report (2012) relates to Strategic Focus Area 4 – Healthy and Inclusive Communities.

FINANCIAL IMPLICATIONS:

Tuberculosis Program activities are carried out with existing resources in Public Health’s budget.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS

NIL

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Region of Waterloo Public Health Tuberculosis Program Report 2012

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Executive Summary

Tuberculosis (TB) is a curable infectious disease caused by the tuberculosis bacteria. The disease usually infects the lungs (pulmonary TB) but can also infect other parts of the body such as the kidneys, spine, and brain (non-pulmonary TB). Symptoms of TB disease include a cough that lasts two weeks or more, weight loss, fever, night sweats, and loss of appetite. This is considered to be the active form of the disease. Left untreated, the disease can be fatal.

Latent TB occurs when an individual inhales TB bacteria which lays dormant in their body. The infection is usually non-damaging to the body but may develop into TB disease over time if the body is not able to control the growth of the bacteria. Latent TB infection has no symptoms.

TB affects millions of people worldwide, but is less common in Canada. In Waterloo Region, TB case counts and rates from 2006 to 2011 remained relatively stable with an average rate of 2.8 cases per 100,000. The incidence rate of TB disease from 2006 to 2011 was lower in Waterloo Region than Ontario’s incidence rate. Locally, individuals 20 to 29 had the highest incidence rates of TB compared to other age groups.

As required by the Ontario Public Health Standards, Region of Waterloo Public Health’s Tuberculosis Program provides an array of TB related services to residents of Waterloo Region including clinical and case management services, health promotion to clients and health care providers, and data surveillance and reporting.

This program report contains information about TB and the TB Program at Region of Waterloo Public Health. This includes local data, clinical services offered at 99 Regina Street South, partnerships with various community organizations, data management processes, health promotion programming around World TB Day, and future considerations for the TB Program moving forward.

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1 The Canadian Lung Association (2012).
1.0 Introduction

The Ontario Public Health Standards (OPHS) establish requirements for all public health programs and services, which include assessment and surveillance, health promotion and policy development, disease and injury prevention and health protection. The Tuberculosis Program at Region of Waterloo Public Health is responsible to the Board of Health for implementing the ten requirements outlined in the Tuberculosis Prevention and Control Standard. In addition, it adheres to the Tuberculosis Prevention and Control Protocol which outlines how the program should conduct its work. The overall goal of both the standard and protocol is to “prevent or reduce the burden of tuberculosis.” The Board of Health expected outcomes as outlined in the TB Standard are listed in Appendix A.

In order to meet the requirements outlined in the Tuberculosis Prevention and Control Standard and Protocol, the Region of Waterloo Public Health’s Tuberculosis Program (herein referred to as Public Health) provides a variety of services to residents and visitors of Waterloo Region. Clinical and case management services include:

- Providing clinics to manage cases of TB disease
- Providing Directly Observed Therapy to appropriate active cases of TB
- Providing clinics for TB skin testing, particularly for high risk clients
- Providing access to TB medication
- Managing contacts of active cases and individuals with latent TB infection

Other services include:

- Conducting surveillance of, and reporting data on, active and latent TB infection
- Engaging in health promotion and policy development activities with community partners, policy-makers, and health care providers that have clients/contacts from priority populations.

This is the first TB program report produced by Public Health. This report includes background information on TB; an overview of Public Health’s TB clinical services; case management activities; health promotion programming; and future considerations for the program.

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3 Directly observed therapy means that the person is observed taking their medication by a trained observer on all business days that treatment is required.
4 Priority populations are populations that are at risk and for whom public health interventions may be reasonably considered to have a substantial impact at the population level. Ontario Public Health Standards (2008). Ministry of Health and Long-Term Care.
2.0 Background

2.1 What is TB?

Tuberculosis is a curable infectious disease caused by the tuberculosis bacteria. TB disease usually infects the lungs (pulmonary TB) but can also infect other parts of the body such as the kidneys, spine, and brain (non-pulmonary TB). Pulmonary TB is contagious and people who are ill with pulmonary TB spread TB bacteria through the air by coughing, sneezing, and talking. Symptoms of TB disease include a cough that lasts two weeks or more, weight loss, fever, night sweats, and loss of appetite.

If healthy people inhale TB bacteria, they may develop inactive TB where the bacteria lay dormant in their body (inactive TB infection or latent TB infection). Latent TB infection is usually non-damaging to the body but may develop into TB disease over time if the body is not able to control the growth of the bacteria. Latent TB infection has no symptoms. People at highest risk of progression from latent to active TB may include recent contacts, the immunocompromised and recent arrivals to Canada.

The Mantoux tuberculin skin test (TST) is used to determine if a person has been infected. If the skin test is positive, a chest x-ray is required to rule out pulmonary TB disease. Persons with TB disease must be treated as the disease may be fatal if left untreated. In addition, treatment will prevent transmission of the disease. Persons with latent TB infection may be assessed for treatment. Treatment for latent TB infection is undertaken to prevent active disease in infected persons with positive skin tests where active diseases has been ruled out. TB treatment is available free of charge from Public Health for both active TB disease and latent TB infection.

2.2 Global/Canadian TB Perspective and Populations at Risk

TB affects more than two billion people worldwide. Ten per cent of these people will become sick with active TB disease at some point in their lives. In 2010, approximately 1.4 million deaths related to TB were reported worldwide.

TB is less common in Canada. From 2002-2009, the number of reported cases of TB in Canada remained relatively stable (approximately 1,623 cases per year). From 1999 to 2009, the overall incidence rate decreased from 6 per 100,000 population to 4.7 per 100,000 population. In 2009, individuals between the ages of 25 and 34 years made up the largest number of reported cases, accounting for 18 per cent of the total. In the same year, foreign-born individuals accounted for 63 per cent of all reported TB cases in Canada. Canadian-born non-Aboriginal and Canadian-born Aboriginal cases made up 15 per cent and 21 per cent of all reported cases respectively. However, the TB rate in the Canadian-born Aboriginal group continues to be the

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5 The Canadian Lung Association (2012).
7 A TB skin test is an injection placed under the skin of the forearm. If the patient has been exposed to TB in the past, they may develop a positive reaction to the skin test which will show up as a raised area at the site of the test. Occasionally a second TB test may be required (The Ontario Lung Association, 2012).
highest of the three groups, being almost six times that of the overall Canadian TB rate of 4.7 per 100,000.\(^\text{10}\)

Other populations at risk include:
- Persons in close contact with an individual infected with pulmonary TB;
- Persons born in or having travelled to a country with a high prevalence of TB;
- Immunosuppressed individuals or individuals with other underlying medical conditions;
- Individuals who received inadequate treatment of a previous TB infection; and
- Priority populations (e.g. homeless, under-housed, persons who use substances).

### 2.3 Incidence of TB in Waterloo Region

Historically, TB case counts and rates have remained relatively stable in Waterloo Region. Between 2006 and 2011, there were 85 reported cases of active TB disease which is an average rate of 2.8 cases per 100,000. In addition, the incidence rate of TB disease from 2006 to 2011 was lower in Waterloo Region than Ontario’s incidence rate (Figure 1).

![Figure 1. Age-standardized active Tuberculosis incidence rates, by year, Waterloo Region and Ontario, 2006-2011.](image)


In 2011, there were 12 confirmed cases of active TB in Waterloo Region. In terms of the epidemiology of the local cases:
- Six were male and six were female
- The average age of the cases at the time of diagnoses was 46.3 years (range of 21.9-73.7 years)
- Ten cases were born outside of Canada. The country of origin of the ten cases not born in Canada were:
  - Asia (six cases)
  - Africa (three cases)
  - Central and South America (one case)

One case demonstrated resistance to one or more TB drugs
Eleven of the twelve cases completed their treatment regimen. One case is still being treated
None of the cases were fatal
The most significant known risk factor for active TB disease was lived in an endemic area. Refer to Table 1 for a full list of risk factors

Table 1. Known risk factors for active TB cases, Waterloo Region, 2011

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Proportion of total risk factors % (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lived in an endemic area</td>
<td>47%</td>
</tr>
<tr>
<td>Low body weight</td>
<td>12%</td>
</tr>
<tr>
<td>Abnormal chest x-ray (granuloma)</td>
<td>6%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>6%</td>
</tr>
<tr>
<td>Organ/tissue transplant</td>
<td>6%</td>
</tr>
<tr>
<td>Smoker</td>
<td>6%</td>
</tr>
<tr>
<td>Substance use</td>
<td>6%</td>
</tr>
<tr>
<td>Underhoused/homeless</td>
<td>6%</td>
</tr>
<tr>
<td>Workplace</td>
<td>6%</td>
</tr>
</tbody>
</table>

Note: Of the 12 cases, two were missing risk factors; cases may have more than one reported risk factor
Source: iPHIS 2006-2011, MOHLTC, extracted April 24, 2012

Similar to Canadian data, younger adults made up the largest number of reported TB cases. In Waterloo Region, individuals 20 to 29 had the highest incidence rates of TB compared to other age groups (Figure 2).

Figure 2. Active Tuberculosis incidence rates, by age group and sex, Waterloo Region, 2006-2011.

3.0 Clinical Services

3.1 Active TB Clinic

The model for case management of TB cases in Waterloo Region changed in 1991 from one practitioner to a group of local respirologists who rotated through a clinic hosted by, and supported by nurses from Region of Waterloo Public Health. The clinic continues to operate under this model and there are currently eight respirologists on the roster. The partnership allows for comprehensive TB case management and offers clients coordinated and expert care in the management of their TB disease.

3.1.1 Overview of Active TB Clinical Services Provided

The active TB clinic at Public Health is held bi-monthly on Tuesday mornings from approximately 9:00 a.m. to 1:00 p.m. at 99 Regina St. South in Waterloo. Appointments range in duration depending on the needs of the client and can be from 20 minutes to one hour. On average, five to seven appointments are booked for each clinic. The cost of the appointment itself is covered by one of three sources:

- the Ontario Health Insurance Program (OHIP);
- a private insurance plan such as the University Health Insurance Plan (UHIP) which is typically utilized by international students; or
- TB Uninsured Persons Program (TB-UP) – a program funded by the Ministry of Health and Long-Term Care that covers the cost of diagnostic tests and treatment for TB. TB-UP is available for persons who are not covered by OHIP, the Interim Federal Health Program, or any other private health insurance plan.

Clients at the clinic are seen on a referral basis from local family physicians. Clinic appointments involve a physical assessment, review of medical imaging, assessment of blood work, and other relevant medical information. The respirologist may recommend treatment for active or inactive TB, or order further investigation to rule out TB. Public Health Nurses also meet with all clients on treatment for active or latent TB requiring follow-up to ensure proper case and contact management and to provide the appropriate health education and referrals.

3.1.2 Active TB Clinic Attendance

The number of visits to the active TB clinic remained relatively stable from 2008-2011 (Figure 3). The higher clinic attendance in 2007 was related to the arrival of several large refugee groups new to Waterloo Region.
3.2 TB Skin Testing Clinic

The TB skin testing clinic at Public Health is held every Tuesday by appointment only. The clinic offers both daytime and evening clinic appointments. Unless required for medical investigation or treatment purposes, the fee for a TB skin test at Public Health is $12.00.

A TB skin test identifies persons infected by the TB bacteria requiring further assessment to rule out active TB disease. One step and two step tests are offered. A one step test uses a single TB skin test to determine a diagnosis. Two step tests involve the administration of two tests, one to four weeks apart, to rule out a false negative test. Two step tests are recommended for persons who:

- Require subsequent (serial) testing (e.g. health care workers);
- Are residents or staff of a long-term care facility;
- Are from countries with a high prevalence of TB; or
- Are undergoing medical investigation.

3.2.1 TB Skin Test Clinic Attendance

The number of visits to the TB skin testing clinic increased between 2007 and 2011 (Refer to Figure 4). This increase is partially due to an expansion in TB skin testing clinic hours implemented as part of the 2010 Infectious Diseases, Dental and Sexual Health Division reorganization (September 2010 implementation date). The reorganization introduced evening appointments to increase and improve client access to clinical services.
3.2.2 Partnership with Local University

In 2002, Public Health assisted the University of Waterloo in the development of a TB screening program. The purpose of this program was to:

- Identify undiagnosed active cases of pulmonary TB in order to ensure adequate treatment and prevent transmission to other individuals; and to
- Identify persons with latent TB infection at high risk of developing active TB in order to provide treatment.

Public Health’s role was to provide education, consultation, and guidance on how to set up the screening program. The program is for newly admitted students who have been living and/or pursuing their education outside of Canada and require a TB skin test before undertaking their studies. Currently, the University of Waterloo functions independently and Public Health provides education, training, and consultation as required.

From 2002 to 2010, the number of TB skin tests completed at the University of Waterloo increased from 335 tests in 2002 to 1,636 tests in 2010. The proportion of positive skin test results, however, remained relatively stable during that time period.

3.2.3 Partnership and Referrals from Local Health Care Providers

Health care providers provide TB skin tests to their patients and are required to report positive skin tests to Public Health. Healthcare providers may also refer their patients to Public Health’s active TB clinic to be further assessed for latent or active infection. Additionally, Public Health is available to local health care providers for consultation around patient specific concerns.

3.3 Clinical Services for Priority Populations

Public Health also provides clinical services to priority populations in partnership with Reception House Waterloo Region, a temporary home for government-assisted refugees. Approximately 280 newly-arrived refugees and about 100 secondary migrants are served each year.11

Most clients of Reception House come from countries with a high incidence of TB, and areas with compromised living conditions (e.g. refugee camps). Public Health partners with Reception House to provide onsite skin testing to their clients. This process facilitates client convenience and timely referrals for further assessment if needed. Reception House staff also provide translation, caseworkers and other supports which make it conducive to serving these new residents onsite rather than Public Health’s clinics.

From 2008 to 2011, 544 TB skin tests were conducted by Public Health nurses at Reception House (Refer to Table 2).

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11 Reception House Waterloo Region (2012).
Table 2. Number of skin tests performed at Reception House, 2008-2011.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Skin Tests Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>105</td>
</tr>
<tr>
<td>2009</td>
<td>135</td>
</tr>
<tr>
<td>2010</td>
<td>182</td>
</tr>
<tr>
<td>2011</td>
<td>121</td>
</tr>
<tr>
<td>Total</td>
<td>543</td>
</tr>
</tbody>
</table>

Source: Region of Waterloo Public Health Tuberculosis Program data

4.0 Case and Contact Management

The Ministry of Health and Long-Term Care (MOHLTC) outlines the basic principles of care for persons with or suspected of having TB. These principles include:

- A diagnosis is established promptly and accurately;
- Standardized treatment regimens of proven efficacy are used with appropriate treatment support and supervision;
- The response to treatment is monitored; and
- The essential public health responsibilities are carried out.

Public Health plays an integral role in the management of TB cases. TB cases are received via physician referral, the Canadian Immigration Canada (CIC) medical surveillance program, or Public Health’s TB skin test clinic. Public Health assumes responsibility for monitoring TB cases and ensuring appropriate follow-up as outlined by the Ministry of Health and Long-Term Care.

4.1 Active Case Management

According to the Tuberculosis Prevention and Control Protocol, responsibilities for active case management (TB disease) include, but are not limited to:

- Ensuring an initial investigation commences within 24 hours of receiving the case report;
- Conducting a contact investigation to identify the source case and possible transmission;
- Educating the patient and family about the disease process, communicability of TB, treatment protocol and public health supervision;
- Recognizing those individuals who may not adhere to medication guidelines (e.g. children, homeless, those with bias against treatment) and placing them on Directly Observed Therapy (DOT);
- Fulfilling the minimum requirements for ongoing follow-up;
- Discharging patients once the prescribed treatment has been completed; and
- Reporting all information to the Ministry of Health and Long-Term Care through the Integrated Public Health Information System\(^\text{12}\) (iPHIS).

Refer to Section 2.3 for local data on the number of active TB cases managed each year.

\(^\text{12}\) iPHIS is an information system for public health reporting and surveillance in Ontario, under the Health Protection and Promotion Act (HPPA). iPHIS is used by front-line public health professionals in Ontario for case and contact follow-up and outbreak management of reportable diseases (MOHLTC, 2012).
4.2 Latent TB Infection Case Management

Latent TB infection is not infectious; however, individuals are at increased risk of developing active TB disease. According to the MOHLTC’s Tuberculosis Prevention and Control Guidance Document, management of latent TB infection cases should include:

- Documenting and reporting the case in iPHIS;
- Ensuring the patient is not infectious;
- Conducting a contact investigation for the possible source case;
- Advising the patient about the side effects of TB medication;
- Assessing the patient’s ability to comply with medication and medical follow-up;
- Assessing the need for Directly Observed Therapy (DOT);
- Connecting with the patient at one month and every two months thereafter until treatment completion; and
- Connecting with the treating physician as required and discharging the patient from iPHIS as appropriate.

Public Health will actively report (yearly) on confirmed latent TB infections in its annual report on infectious diseases starting in 2014 (for infections in the 2013 calendar year).

4.3 Immigration & Medical Surveillance

The purpose of medical surveillance is to identify TB disease and TB infection among new immigrants to Canada in order to prevent the spread of TB in the community. Newcomers are screened for TB using a chest x-ray. Individuals with an abnormal chest x-ray are provided with appropriate medical follow-up and offered TB treatment if required. This information is documented through online reporting with the Ministry of Health and Long-Term Care and forwarded onto Citizenship and Immigration Canada.

Public Health initiates and continues medical surveillance for a period up to two years or until the person has been discharged (active TB in recent arrivals to Canada often develops within the first two to five years of their immigration). When Public Health receives a referral the responsibilities of the health unit include:

- Contacting the person by letter, telephone, or in person;
- Advising the person of the signs and symptoms of active disease, requirements of medical surveillance, instructions on how to obtain Ontario Health Insurance Plan (OHIP) coverage, and the need to inform Public Health of an address change; and
- Ensuring all the appropriate medical information is included on the medical assessment form.

From 2007 to 2011, an average of 104 individuals per year were referred to Region of WaterlooPublic Health for medical surveillance (Refer to Table 3).
Table 3. Number of individuals referred to Public Health for TB medical surveillance, 2007-2011.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Skin Tests Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>121</td>
</tr>
<tr>
<td>2008</td>
<td>105</td>
</tr>
<tr>
<td>2009</td>
<td>86</td>
</tr>
<tr>
<td>2010</td>
<td>123</td>
</tr>
<tr>
<td>2011</td>
<td>87</td>
</tr>
<tr>
<td>Average per year</td>
<td>104</td>
</tr>
</tbody>
</table>

Source: Region of Waterloo Public Health Tuberculosis Program data

5.0 Health Promotion

5.1 Annual World TB Day

World TB Day, falling on March 24th each year, is a global initiative aimed at increasing awareness of TB disease. This world-wide initiative is steered by the Stop TB Partnership (www.stoptb.org). Each year, Public Health receives $2,000 from the Ministry of Health and Long-Term Care in funding to carry out local World TB Day activities.

Public Health contributes to World TB Day differently each year. In 2012, Public Health mailed over 300 World TB Day packages to physicians in Waterloo Region. The physicians’ package was comprised of:

- Primary care provider letter (local TB rates, screening recommendations, TB medication information, TB clinic role, instructions on how to report cases of TB, website and online resources)
- New TB skin test Quick Guide (a resource developed by Public Health for primary care providers)
- TB ruler for measuring/reading skin test results

In 2011, Public Health provided local physicians and pharmacists with TB information packages.
6.0 Future Considerations

6.1 Population Growth

The immigrant population in Waterloo Region continues to grow. The region has the seventh highest per capita immigrant population of all urban areas in Canada\(^\text{13}\) and Statistics Canada reported that immigrants comprised 22 per cent of the Waterloo Region population in 2006, up from 21 per cent in 2001\(^\text{14}\). Statistics Canada predicts that in 2031, the immigrant population is expected to increase to be between 26.6 and 32.2 per cent of the total population in Waterloo Region. The majority of newcomers will come from TB endemic countries. Future immigrant population projections for Waterloo Region and how this will impact our local TB case management will continue to be monitored.

6.2 Maintaining quality TB programs and services

Public Health will continue to update health practitioners with information on local TB patterns and incidence rates. Assisting primary care practitioners to understand their essential role in educating and assessing the need for treatment of their patients with latent TB infection will continue to be an important focus of the TB program activities. The primary means of educating health practitioners will be through physician updates and World TB Day activities.

\(^{13}\) [Link to the source]

\(^{14}\) [Link to the source]
Appendix A

Tuberculosis Prevention and Control Standard Board of Health Outcomes

- The board of health achieves timely and effective detection and identification of TB trends, emerging risks, and associated risk factors.
- The board of health is aware of and uses epidemiology to influence the development of healthy public policy and its programs and services to prevent and reduce the burden of TB.
- The board of health has effective partnerships with committees, advisory bodies, networks, and community organizations to address the prevention and control of TB.
- Public health risks associated with active TB are mitigated.
- Individuals with infectious TB are isolated.
- Individuals with active TB (cases) receive the appropriate medication.
- Individuals with active TB or LTBI are identified.
- Individuals with LTBI are offered appropriate treatment.
Influenza (commonly known as the flu) is a contagious virus that circulates on a seasonal basis, usually from October to April, causing outbreaks of respiratory illness. Public Health programs aim to reduce the incidence, spread and complications from influenza illness through the promotion of annual influenza immunization for all persons six months of age or older, and through the implementation of outbreak control measures and recommendations when influenza illness is detected in a long term care facility, retirement home or hospital.

Region of Waterloo Public Health received confirmation of two influenza A cases in a local retirement home the week of October 1. This is an early start to the season compared to previous years, which typically occurs between November and April.

Immunization is one of the most effective ways to protect against influenza. In response to the early start to the 2012-2013 influenza season, Region of Waterloo Public Health distributed a supply of flu vaccine to all primary care providers, urgent care clinics, hospitals, retirement homes and long-term care facilities from October 3 to 5. Additional vaccine will be sent on a weekly basis throughout the season. Public Health will also provide vaccine for pharmacists to administer this season. This is a new provincial direction.

Public Health is offering a series of community influenza clinics that any member of the public can attend. Fourteen community clinics are planned between November and January (refer to Attachment 1). In addition, Public Health will host a number of additional (by appointment only) influenza clinics at its Waterloo and Cambridge clinic sites the weeks of October 15, 22 and 29.

Future updates on the 2012-2013 influenza season will be provided in Memo format as required.

REPORT:

Introduction
Influenza (commonly known as the flu) is a contagious virus that circulates on a seasonal basis, usually from October to April, causing outbreaks of respiratory illness. People who get the flu may experience several symptoms including: fever, headache, chills, muscle aches, physical exhaustion, cough, sore throat and runny or stuffy nose.
Most healthy individuals are able to recover from the flu, but certain segments of the population, including the elderly and medically vulnerable (individuals more likely to become ill because of other conditions), may experience further complications. In some cases, influenza can be fatal.

Yearly circulation of influenza virus can account for significant illness within the community. Public Health programs aim to reduce the incidence, spread and complications from influenza illness, through the promotion of annual influenza immunization for all persons six months of age or older, and through the implementation of outbreak control measures and recommendations when influenza illness is detected in a long term care facility, retirement home or hospital.

In Waterloo Region, the 2012-2013 influenza season commenced the week of October 1 with confirmation of two influenza A cases in a retirement home in Waterloo. This is an early start to the season compared to previous years, which typically occurs between November and April.

**2012-2013 Influenza Season Response**

Immunization is one of the most effective ways to protect against influenza. The flu viruses are capable of changing every year, so the composition of the vaccine is updated annually. This is why it is necessary to be immunized every year. Region of Waterloo Public Health recommends that all eligible individuals receive their influenza immunization, and continually works to increase the number of local residents that are protected against the virus. Eligible individuals generally include anyone 6 months of age or older.

In response to the early start to the 2012-2012 influenza season, Region of Waterloo Public Health distributed a supply of flu vaccine to all primary care providers, urgent care clinics, hospitals, retirement homes and long-term care facilities from October 3 to 5. Advisories were sent to these health care partners with guidelines on priorities for immunization. Additional vaccine will be sent on a weekly basis throughout the season. Influenza vaccine will be sent to nursing agencies (who administer influenza immunization at workplaces) starting the week of October 15.

In addition, Public Health is offering a series of community influenza clinics that any member of the public can attend. Fourteen community clinics are planned between October and January. Larger scale clinics in venues across Waterloo Region will start on November 5, 2012 (refer to Attachment 1 for a full list). The clinics are currently being advertised on the Region website and in local area newspapers. In addition, thousands of flyers highlighting clinic dates have been circulated to a variety of community settings for distribution to their clients.

To account for the early start to the influenza season and to support health care partners in early efforts to protect against influenza, Region of Waterloo Public Health will host a number of additional (by appointment only) influenza clinics at its Waterloo and Cambridge clinic sites:

<table>
<thead>
<tr>
<th>Waterloo Clinic (99 Regina St. S., Waterloo)</th>
<th>October 15</th>
<th>1 p.m. to 7 p.m.</th>
<th>October 19</th>
<th>9 a.m. to 4 p.m.</th>
<th>October 22</th>
<th>1 p.m. to 7 p.m.</th>
<th>October 26</th>
<th>9 a.m. to 4 p.m.</th>
<th>October 29</th>
<th>1 p.m. to 7 p.m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge Clinic (150 Main St., Cambridge)</td>
<td>October 15</td>
<td>1 p.m. to 7 p.m.</td>
<td>October 22</td>
<td>1 p.m. to 7 p.m.</td>
<td>October 29</td>
<td>1 p.m. to 7 p.m.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A new access point for influenza immunization this season is local pharmacies. While pharmacies traditionally hired nursing agencies to immunize at their various sites recent amendments to legislation (Bill 179 or the *Regulated Health Professions Statute Law*...
Amendment Act, 2009) give pharmacists authority to administer influenza vaccine. Public Health will provide vaccine for pharmacists to administer this season, in an effort to make the vaccine available to a greater number of individuals. In Waterloo Region, 21 pharmacies have prequalified to administer the vaccine.

**Next Steps**
Region of Waterloo Public Health will continue to provide enhanced health promotion and community awareness regarding the benefits of the influenza vaccine. The health unit will continually ship influenza vaccine to health care partners that require additional supply. Another goal is to increase health care professional uptake of influenza vaccine with emphasis on staff working in long-term care homes and acute care settings. As part of this programming, Public Health will promote *The Big Shot Challenge*, which is designed to increase uptake among staff that work in health care.

**ONTARIO PUBLIC HEALTH STANDARDS:**

This CSC report relates to Ontario Public Health Standard requirements #1 and #2 in the Infectious Diseases Prevention and Control Standard and requirement #2 in the Vaccine Preventable Diseases Standard.

**CORPORATE STRATEGIC PLAN:**

This report relates to Focus Area 4: Healthy and Inclusive Communities: Foster healthy, safe, inclusive and caring communities in the 2011-2014 Corporate Strategic Plan.

**FINANCIAL IMPLICATIONS:**

Region of Waterloo Public Health is reimbursed $5 by the Ministry of Health and Long-Term Care for every dose given. The reimbursement does not fully cover the costs (staffing, supplies, etc.) required to operate the program. The remaining costs are covered by existing resources in the program budget.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

NIL

**ATTACHMENTS**

Attachment 1 — Community Influenza Immunization Clinic Schedule

**PREPARED BY:** Linda Black, Manager, Vaccine Preventable Diseases
Chris Harold, Manager, Information and Planning

**APPROVED BY:** Dr. Liana Nolan, Commissioner/Medical Officer of Health
## Attachment 1 — Community Influenza Immunization Clinic Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Community</th>
<th>Public Time</th>
<th>Location</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 5/12</td>
<td>Kitchener</td>
<td>2-8 pm</td>
<td>Kitchener Memorial Auditorium (Viewing Lounge)</td>
<td>400 East Ave., Kitchener</td>
</tr>
<tr>
<td>Nov. 7/12</td>
<td>Cambridge</td>
<td>2-8 pm</td>
<td>Newfoundland Club</td>
<td>1500 Dunbar Rd., Cambridge</td>
</tr>
<tr>
<td>Nov. 8/12</td>
<td>Waterloo</td>
<td>2-8 pm</td>
<td>Waterloo Recreation Centre (Hauser Haus)</td>
<td>101 Father David Bauer Dr., Waterloo</td>
</tr>
<tr>
<td>Nov. 13/12</td>
<td>Kitchener</td>
<td>2-8 pm</td>
<td>Huron Heights Secondary School (cafeteria)</td>
<td>1825 Strasburg Rd., Kitchener</td>
</tr>
<tr>
<td>Nov. 14/12</td>
<td>Waterloo</td>
<td>2-8 pm</td>
<td>St. David High School (Cafeteria)</td>
<td>4 High Street, Waterloo</td>
</tr>
<tr>
<td>Nov. 15/12</td>
<td>Cambridge</td>
<td>2-8 pm</td>
<td>Southwood Secondary School (Cafeteria)</td>
<td>30 Southwood Dr., Cambridge</td>
</tr>
<tr>
<td>Nov. 19/12</td>
<td>Baden</td>
<td>2-8 pm</td>
<td>Wilmot Recreation Complex (Community Hall)</td>
<td>1291 Nafziger Road, Baden</td>
</tr>
<tr>
<td>Nov. 20/12</td>
<td>Elmira</td>
<td>2-8 pm</td>
<td>Elmira District Secondary School (Cafeteria)</td>
<td>4 University Ave., Elmira</td>
</tr>
<tr>
<td>Nov. 22/12</td>
<td>Kitchener</td>
<td>2-8 pm</td>
<td>Kitchener City Hall (Rotunda)</td>
<td>200 King St. W., Kitchener</td>
</tr>
<tr>
<td>Nov. 26/12</td>
<td>Waterloo</td>
<td>2-8 pm</td>
<td>Bluevale C.I. (Cafeteria)</td>
<td>80 Bluevale St. N. Waterloo</td>
</tr>
<tr>
<td>Nov. 27/12</td>
<td>Kitchener</td>
<td>2-8 pm</td>
<td>Forest Heights Collegiate Institute (Cafeteria)</td>
<td>255 Fischer-Hallman Road, Kitchener</td>
</tr>
<tr>
<td>Nov. 29/12</td>
<td>Cambridge</td>
<td>2-8 pm</td>
<td>St. Benedict Secondary School</td>
<td>50 Saginaw Pkwy., Cambridge</td>
</tr>
<tr>
<td>Jan. 3/13</td>
<td>Waterloo</td>
<td>2-8 pm</td>
<td>Public Health - Waterloo - Room 508</td>
<td>99 Regina St. S., Waterloo</td>
</tr>
<tr>
<td>Jan. 10/13</td>
<td>Cambridge</td>
<td>2-8 pm</td>
<td>Public Health - Cambridge - Room 170 Boardroom</td>
<td>150 Main St., Cambridge</td>
</tr>
</tbody>
</table>

For more information call 519-883-2324 or visit our website at: www.regionofwaterloo.ca/ph
TO: Chair Sean Strickland and Members of the Community Services Committee

DATE: October 16, 2012

FILE CODE: P14-20

SUBJECT: 2011-2012 INFLUENZA SEASON SUMMARY

RECOMMENDATION:
For Information

SUMMARY

Influenza (commonly known as the flu) is a contagious virus that circulates on a seasonal basis, usually from October to April, causing outbreaks of respiratory illness. People who get the flu may experience several symptoms including: fever, headache, chills, muscle aches, physical exhaustion, cough, sore throat and runny or stuffy nose.

During the September 1, 2011 to August 31, 2012 influenza season there were 159 laboratory-confirmed cases of influenza, which is lower than the previous season (274 cases) and the six year average (210 cases per year). There were 23 respiratory outbreaks declared in long-term care facilities. Appropriate outbreak control measures were implemented by the affected facilities in consultation with Region of Waterloo Public Health. There were three deaths linked to influenza outbreaks.

Immunization is one of the most effective ways to protect against influenza. The flu viruses are capable of changing every year, so the composition of the vaccine is updated annually. This is why it is necessary to be immunized every year. Since 2000, the Government of Ontario offers an annual influenza immunization program, which offers the vaccine free of charge to all persons in Ontario six months of age or older.

During the 2011-2012 season, Public Health immunized 11,635 people at its community influenza clinics. This is approximately 13 per cent higher than the previous season. However, it should be noted that most members of the community are immunized in other settings (e.g. primary care, urgent care, at workplaces).

Preparations and response efforts for the 2012-2013 influenza season are already underway (refer to Report PH-12-046, dated October 16, 2012).

REPORT:

Background
Influenza (commonly known as the flu) is a contagious virus that circulates on a seasonal basis, usually from October to April, causing outbreaks of respiratory illness. People who get the flu may experience several symptoms including: fever, headache, chills, muscle aches, physical exhaustion, cough, sore throat and runny or stuffy nose.
Most healthy individuals are able to recover from the flu, but certain segments of the population, such as the elderly and medically vulnerable (individuals more likely to become ill because of other conditions), may experience further complications. In some cases the flu can be fatal.

Yearly circulation of influenza virus can account for significant illness within the community. Public Health programs aim to reduce the incidence, spread and complications from influenza illness, through the promotion of annual influenza immunization for all persons six months of age or older, and through the implementation of outbreak control measures and recommendations when influenza illness is detected in a long-term care facility or hospital.

2011-2012 Influenza Season Summary

Table 1 presents the total number of lab confirmed cases in Waterloo Region by influenza season in the past six seasons.

<table>
<thead>
<tr>
<th>Influenza Season</th>
<th>Total number of lab confirmed cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-2007</td>
<td>125</td>
</tr>
<tr>
<td>2007-2008</td>
<td>224</td>
</tr>
<tr>
<td>2008-2009</td>
<td>240</td>
</tr>
<tr>
<td>2009-2010</td>
<td>238</td>
</tr>
<tr>
<td>2010-2011</td>
<td>274</td>
</tr>
<tr>
<td>2011-2012</td>
<td>159</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>210</strong></td>
</tr>
</tbody>
</table>

The most recent influenza season covers the time period from September 1, 2011 to August 31, 2012. During this season, there were 159 laboratory confirmed cases of influenza, which is lower than the previous season (274 cases) and the six year average (210 cases per year). Activity remained low from September 2011 to late January 2012, but continued to increase throughout the months of February and March. Peak activity occurred in mid-March.

During the 2011-2012 flu season a total of 23 respiratory outbreaks were declared in long-term care facilities. One of these was confirmed as an Influenza A outbreak and four were confirmed as Influenza B. Appropriate outbreak control measures were implemented by the affected facilities in consultation with Region of Waterloo Public Health. There were three deaths linked to influenza outbreaks.

Although the number of confirmed cases of influenza is based on the number of laboratory-confirmed cases, actual circulating influenza activity is much higher in the community as most influenza illnesses are not confirmed by laboratory testing. Therefore, the total number of individuals with influenza during any given season is underreported.

Influenza bulletins are available weekly between October and May each year on Region of Waterloo Public Health's website (www.regionofwaterloo.ca/ph, then select Research, Resources & Publications, then select Reports & Data, then select Influenza Bulletins under Table of Contents).

Each year seasonal influenza vaccines are reformulated to account for changes in the circulating strains of the influenza virus. For the 2011-2012 season, strain typing confirmed a good match between the influenza vaccine and the circulating strains of influenza A. Of the circulating strains of influenza B, only 50 per cent were a match with the vaccine.
2011-2012 Influenza Season Immunization Summary

Immunization is one of the most effective ways to protect against influenza. The flu viruses are capable of changing every year, so the composition of the vaccine is updated annually. This is why it is necessary to be immunized every year. Significant illness and societal costs also occur with seasonal influenza in people who may not be considered at high risk of complications (i.e. healthy people aged 5 to 64 years). Therefore, it is recommended that all Canadians six months of age or older be immunized.

Since 2000, the Government of Ontario offers an annual influenza immunization program, Universal Influenza Immunization Program (UIIP), which offers the vaccine free of charge to all persons in Ontario six months of age or older. Vaccine, through the UIIP, is offered at a series of community influenza clinics that any member of the public can attend. In addition, Public Health regularly distributes vaccine to local physicians, walk-in clinics, long-term care and retirement homes, hospitals and workplaces through local nursing agencies.

Table 2 presents the total number of individuals immunized in the Region of Waterloo Public Health community influenza immunization clinics by flu season in the past six years.

Table 2: Number of individuals immunized in Public Health community influenza immunization clinics by influenza season

<table>
<thead>
<tr>
<th>Influenza Season</th>
<th>Number of individuals immunized in Public Health community clinics</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-2007</td>
<td>18,264</td>
</tr>
<tr>
<td>2007-2008</td>
<td>16,184</td>
</tr>
<tr>
<td>2008-2009</td>
<td>15,208</td>
</tr>
<tr>
<td>2009-2010</td>
<td>**</td>
</tr>
<tr>
<td>2010-2011</td>
<td>10,149</td>
</tr>
<tr>
<td>2011-2012</td>
<td>11,635</td>
</tr>
</tbody>
</table>

**H1N1 influenza pandemic. The number of immunizations given this season is not comparable to other seasons and is omitted.

During the 2011-2012 season, Public Health immunized 11,635 people at its community influenza clinics. This is approximately 13 per cent higher than the previous season. However, it should be noted that most members of the community are immunized in other settings (e.g. primary care, urgent care) listed above. Previous analysis indicates that upwards of 75 per cent of flu vaccine received by Public Health is distributed to physicians for patient immunization.

Region of Waterloo Public Health continually works with health care providers to promote influenza immunization for practitioners that work in health care settings (e.g. long-term care homes, hospitals). Since 2000, staff immunization rates within hospitals, nursing homes and homes for the aged have been reportable to the Ministry of Health and Long-Term Care. In Waterloo Region, rest and retirement homes can also voluntarily participate in the promotion of influenza immunization and report their staff and resident immunization rates. In the 2011-2012 season, 34 out of 55 facilities participated in reporting immunization rates. This is consistent with previous years. The average staff immunization rate in the participating homes increased slightly compared to previous years. Nine facilities (as compared to two last season) achieved the local goal of a staff immunization rate of 90 per cent or more. The average rate of influenza immunization for residents of long-term care facilities in Waterloo Region decreased slightly from 94 per cent in 2010-2011 to 92 per cent in 2011-2012.
Next Steps
Report PH-12-046, dated October 16, 2012, provides an update on the current influenza season (2012-2013). Region of Waterloo Public Health will continue to provide enhanced health promotion and community awareness regarding the benefits of the influenza vaccine. The health unit will continually ship influenza vaccine to health care partners that require additional supply. Another goal is to increase health care professional uptake of influenza vaccine with emphasis on staff working in long-term care homes and acute care settings. As part of this programming, Public Health will promote The Big Shot Challenge, which is designed to increase uptake among staff that work in health care.

Finally, Public Health will continue to receive reports of confirmed cases of influenza and work with facilities (e.g. long-term care homes, retirement homes) to monitor and manage respiratory and influenza outbreaks.

ONTARIO PUBLIC HEALTH STANDARDS:
This CSC report relates to Ontario Public Health Standard requirements #1 and #2 in the Infectious Diseases Prevention and Control Standard and requirement #2 in the Vaccine Preventable Diseases Standard.

CORPORATE STRATEGIC PLAN:
This report relates to Focus Area 4: Healthy and Inclusive Communities: Foster healthy, safe, inclusive and caring communities in the 2011-2014 Corporate Strategic Plan.

FINANCIAL IMPLICATIONS:
Region of Waterloo Public Health is reimbursed $5 by the Ministry of Health and Long-Term Care for every dose given. The reimbursement does not fully cover the costs (staffing, supplies, etc.) required to operate the program. The remaining costs are covered by existing resources in the program budget.

ATTACHMENTS
Nil

PREPARED BY:  Linda Black, Manager, Vaccine Preventable Diseases
Kristy Wright, Manager, Infectious Diseases and Tuberculosis Control

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

DATE: October 16, 2012

FILE CODE: D26-40

SUBJECT: WATERLOO REGION’S UPDATED COMMUNITY ACTION PLAN FOR LOW TO MODERATE LEVEL HOUSING

RECOMMENDATION:


SUMMARY:

In June 2005, Waterloo Region in the 21st Century: A Community Action Plan for Housing (the Action Plan), was endorsed by Regional Council (Report P-05-073). The Action Plan was designed to address a broad range of housing issues not yet dealt with in other Regional housing strategies, such as the Affordable Housing Strategy. The Action Plan was developed to determine the state of housing in Waterloo Region, and to provide a community-based strategy to address needs and gaps. A resulting 49 action items were created to address the housing needs identified within the Action Plan. As reported to Council in June 2010 (P-10-042), through the hard work and collaboration with housing stakeholders in our community, the private sector and our senior government partners, 26 of the actions have now been completed, 16 items are ongoing initiatives, and seven items were not completed. The report also identified the need to review and update the Action Plan.

As a growing community, housing needs in Waterloo Region will continue to change. Various factors impact the supply, range and mix of housing required to meet the needs of current and future residents. The Action Plan is intended to be reviewed and updated on a regular basis so that our community can be prepared to address these changing needs. Additionally, the updated Action Plan, along with the Homelessness to Housing Stability Strategy, will help the Region to fulfill new provincial requirements for a 10-year Housing and Homelessness plan, which is due by January 1, 2014.

The update to the Action Plan was purposely delayed to incorporate impending legislative and regulatory requirements of the Housing Services Act, 2011 (HSA), which came into effect in January 2012, and the associated Ontario Housing Policy Statement (OHPS). The HSA has mandated that Service Managers address matters of provincial interest as identified in the HAS in new housing and homelessness plans by January 2014. Matters of provincial interest, including addresses the housing needs of individuals and families in order to help address other challenges they face; providing a role for non-profits, cooperatives and the private sector; providing for partnerships among governments and others in the community; addresses local needs; and ensures accountability. The update will also address Provincial requirements under the Provincial Policy Statement (PPS) to establish affordable housing targets. Specifically, Policy 1.4.3 of the PPS requires municipalities to establish and implement minimum housing targets that are affordable to low and moderate income households.
Since the current PPS was introduced in 2005, and the HSA and the OHPS in 2011, the expected scope of the housing plan has been narrowed to focus on the needs of low and moderate level housing, rather than the full range of housing options. Low to moderate level housing is housing that is affordable to low to moderate income households, defined by the Province as those households at, or under, the 60th income percentile. Low to moderate income homeowner households could afford a home valued at approximately $283,000 and low to moderate income renter households could afford a maximum monthly affordable rent of up to $1,120. Therefore, the scope of this update has been limited to address the housing needs of low to moderate income households to align with the associated Provincial policy and legislation.

The draft updated Action Plan is proposed to be presented to Regional Council for review in 2013, and will include significant public consultation. With input from the consultations, staff will then consider new draft action items and create a work plan to accomplish these actions. The final updated Action Plan is then proposed to be forwarded to Regional Council for consideration in late 2013/early 2014.

The updated Action Plan will produce the following deliverables: provide affordable housing targets for the Region and Area Municipalities, identify actions that may lead to new affordable housing programs or revisions to current programs to better address housing needs in the community, and together with the Region’s Homeless to Housing Stability Strategy, will satisfy the HSA’s requirements for a 10-year housing and homelessness plan. The updated Action Plan will also be the information source for a new Affordable Housing Strategy (AHS) goal, as the current AHS is tied to a goal date of December 31, 2013.

REPORT:

Action Plan 2005

In June 2005, Regional Council endorsed Waterloo Region in the 21st Century: A Community Action Plan for Housing (the Action Plan), the first comprehensive housing plan for Waterloo Region since 1991 (P-05-073). The Action Plan was prepared to determine the state of housing in Waterloo Region, to identify and characterize housing needs, and to provide a community-based strategy to address these housing needs.

With guidance from an advisory committee (consisting of a broad range of housing stakeholders including the Area Municipalities), 49 action items were established to address identified housing needs and to improve the Region’s housing environment. As reported to Council in June 2010 (P-10-042), through the hard work and collaboration with housing stakeholders in our community, the private sector and our senior government partners, 26 of the actions have now been completed, 16 items are ongoing initiatives, and seven items were not completed. Reasons for the incomplete action items include changes to Provincial funding models, which made some requests redundant and emerging research that demonstrated better housing practices.

The successes of the Action Plan and many other initiatives (locally, provincially and nationally), together with market forces, have had a positive impact on the range of housing in Waterloo Region. Examples of these successes include:

- Action Item #14: Ensure the safety and general repair of existing housing stock and properties and improve the quality of our communities. This could be assisted by enhanced funding and programs to assist lower income households. On March 31, 2012, Canada Mortgage and Housing Corporation ended the Residential Rehabilitation Assistance Program, which provided financial assistance to repair and address
accessibility needs of lower income households. However, the Region began delivery of a new assistance program (Ontario Renovates) in August 2012 to ensure that lower income families and seniors can access limited funding to make life-safety repairs or improve accessibility so they can remain in their homes. This program should also assist the local homebuilding industry.

- **Action Item #23:** Ensure Regionally-sponsored housing programs provide accessible units and encourage the inclusion of visitability designs and support housing in proposals. This action item influenced the Region’s 2009 call for Expressions of Interest (EOI 2009-01) for the development of new affordable, accessible and supportive housing units and projects. As a result, several successful supportive housing proposals were developed, including Supportive Housing of Waterloo (SHOW) and the Region’s Sunnyside Supportive Housing in Kitchener. The creation of these units has broadened the range of housing available in the Region, and has created housing stability opportunities for some of the most vulnerable residents of Waterloo Region.

- **Action Item #33:** Review success of the publicly-assisted affordable home ownership pilot project to assist tenants to enter the home ownership market with a view to create a permanent program. The Region’s Affordable Home Ownership (AHO) pilot was successful, with nearly 200 households achieving first-time home ownership (P-10-042). This has lead to the creation of a permanent Affordable Home Ownership Program Revolving Loan Fund, which has helped the Region to not only improve affordability in the home ownership market, but has also increased the range of housing options available for more than 250 households so far.

**Rationale for Updating the Action Plan**

The report to Council in June 2010 identified the need to review and update the Action Plan on a regular basis. Changes to economic and demographic conditions since the initial Action Plan was implemented have generated a need to analyze the housing environment and create actions to ensure the Region continues to have an adequate supply, range and mix of housing to meet the needs of current and future low to moderate income residents. The following preliminary findings highlight some of the more recent changes:

- The number of owner occupied households that spent 30% or more on housing costs rose 33.1% between 2001 and 2006, from 14,715 to 19,590.
- The number of renting households that spent 30% or more on housing costs rose 7.3% between 2001 and 2006, from 18,565 to 19,965.
- Approximately 3,000 to 4,000 households are on the Region’s Community Housing Access Centre waiting for affordable housing, with wait times averaging between six months and six years depending on housing requirements as of the end of 2011. These figures have remained constant since 2006.
- The most recent census population estimate for Waterloo Region is 507,096, a growth of 6.1% from the 2006 estimate of 478,121. The current population estimate at the end of 2011, including students, was 545,000.
- The Region’s population is forecast to grow to 729,000 by 2031.
- The number of households in the Region rose from 177,996 in 2006 to 191,599 in 2011, an 8% increase.
- From 2001 to 2006, the immigrant population in Waterloo Region grew by 13.6%, almost twice the growth seen in the non-immigrant population.
- The number of people aged 65 or older continues to increase, with this segment of the population representing 12% of the population, up from just over 11% in 2001. This segment of the population is forecast to grow by more than 20% by 2031.
Legislation Requiring an Update of the Action Plan and Deliverables

An update of the Action Plan will address Provincial requirements under the Provincial Policy Statement (PPS) to establish affordable housing targets. Specifically, Policy 1.4.3 of the PPS requires municipalities to establish and implement minimum housing targets that are affordable to low and moderate income households, defined as being below the 60th income percentile. Based on the latest information from the Province, low to moderate income home owner households have incomes below $82,000, and the maximum affordable home for these households would be approximately $283,000. Low to moderate income renter households have incomes below $45,000, with the maximum monthly affordable rent for these households at $1,120. Addressing these requirements in the updated Action Plan will include the consideration of such elements as:

- The percentage of households in the Region spending more than 30% of gross income shelter costs;
- The number of households across the Region in core housing need; and,
- The number of households waiting for Community Housing in Waterloo Region.

In addition, an update to the Action Plan will address some of the requirements outlined within the Housing Services Act, 2011 (HSA) and the associated Ontario Housing Policy Statement (OHPS) due by January 2014. The HSA requires that Service Managers prepare local, 10-year housing and homelessness plans that address matters of provincial interest and are consistent with policy statements issued under the HSA. The updated Action Plan, together with the Region’s Homeless to Housing Stability Strategy, will satisfy the HSA’s requirements for a 10-year housing and homelessness plan.

In addition to the 12 matters of provincial interest outlined in Section 4 of the HSA, the HSA provides policy direction in seven areas that must be incorporated in the new housing and homelessness plans, including ‘Coordination with other Community Services’, ‘Environmental Sustainability and Energy Conservation,’ ‘Role for the Private Market’, and ‘Role for Non-Profits and Cooperatives’. The OHPS provides additional policy context and direction to Service Managers to support the development of housing and homelessness plans.

These new matters of provincial interest outlined in Section 4 of the HSA will be incorporated within the updated Action Plan and will also refine the scope of the update to focus on the segments of the housing market that are the most in need. Since the current PPS was introduced in 2005, and the HSA and the OHPS in 2011, the scope of housing plans has been narrowed to focus on the needs of low and moderate level housing. Therefore, the scope of this update has been limited to address the housing needs of low to moderate income households to better align with the associated Provincial policy and legislation. Low to moderate income home owner households could afford a home valued at approximately $283,000 and low to moderate income renter households could afford a maximum monthly affordable rent of up to $1,120. The HSA has mandated that Service Managers have their new housing and homelessness plans prepared by January 2014.

The updated Action Plan will deliver the following: affordable housing targets for the Region and Area Municipalities, identify actions that may lead to new affordable housing programs or refine current programs to better address housing needs in the community, and together with the Region’s Homeless to Housing Stability Strategy, will satisfy the HSA’s requirements for a 10-year housing and homelessness plan. The updated Action Plan will also be the information source for a new Affordable Housing Strategy (AHS) goal, as the current AHS is tied to a goal date of December 31, 2013.
Connection with Other Regional Plans and Strategies

The updated Action Plan would continue to be coordinated with other Regional plans and strategies created to address a wide range of needs across the region’s range of housing. The Regional Official Plan (ROP) contains polices that address such matters as the range and mix of housing available to satisfy the various physical, social, economic and personal support needs of current and future residents.

The Region’s Homelessness to Housing Stability Strategy serves as the Region’s system plan for housing stability. Through a set of inter-related programs, the housing stability system supports people experiencing homelessness or at-risk of housing loss to find, establish and/or retain adequate housing and/or to increase their opportunities for participation in community life. The Homelessness to Housing Stability Strategy and the updated Action Plan will be the primary sources of information used to inform the new legislative requirements outlined in the Province’s Housing Services Act, 2011 for a 10-year housing and homelessness plan to:

- Assess current and future housing program needs and gaps, such as affordable housing, aging population, accessible housing for persons with disabilities;
- Establish objectives and targets and reduce gaps in programs, services and supports;
- Describe actions to meet the objectives and targets; and
- Set methods of measuring progress.

The shorter-term Affordable Housing Strategy (AHS) is focused on addressing the immediate need for permanent affordable housing in the Region. Several of the supportive housing projects created under the AHS (e.g. Supportive Housing of Waterloo, The Bridges, Sunnyside Supportive Housing) were collaborations that had the ‘bricks’ (capital funding) provided through the AHS and the funding for supports provided though a program under the Homelessness to Housing Stability Strategy or by a Provincial ministry.

Process

Regional staff proposes to conduct a comprehensive analysis of the economic, socio-demographic and legislative changes that have occurred since the initial Action Plan. The proposed update process will identify evolving demographics of the Region and address the needs of specific local groups and gaps, as well as new opportunities, trends and emerging issues, with a goal of developing new measurable actions that, once implemented, will help ensure a range of housing choices are available in the Region to address the diverse housing needs of all residents.

The following steps are proposed for the update of the Action Plan, with a goal of having an approved updated plan in place by late 2013/early 2014.

<table>
<thead>
<tr>
<th>Target Dates</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2012</td>
<td>proposed update report to Regional Council</td>
</tr>
<tr>
<td>Fall 2012</td>
<td>comprehensive data analysis</td>
</tr>
<tr>
<td>Fall 2012/Spring 2013</td>
<td>draft updated Action Plan</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>1st review and consultation period</td>
</tr>
<tr>
<td>Summer 2013</td>
<td>draft updated Action Plan to Regional Council</td>
</tr>
<tr>
<td>Summer/Fall 2013</td>
<td>2nd review and consultation period</td>
</tr>
<tr>
<td>Late 2013/Early 2014</td>
<td>final proposed updated Action Plan to Regional Council</td>
</tr>
</tbody>
</table>
Public consultation will occur in two phases allowing for initial input into the draft updated Action Plan in the spring of 2013, followed by an opportunity for input into a final draft later in 2013. The public consultation process will include community forums, opportunities to provide input in writing and on-line, and invitations to meet individually with key housing stakeholders, which include:

- All seven Area Municipalities
- Canada Mortgage and Housing Corporation
- Ministry of Municipal Affairs and Housing
- Community Housing organizations (e.g. HHUG, Waterloo Region Community Housing Advisory Committee)
- Grand River Accessibility Advisory Committee
- Local real estate boards
- Waterloo Region Apartment Managers’ Association
- Waterloo Region Home Builders’ Association

Other key housing stakeholders identified during the development of the updated Action Plan will be provided an opportunity to meet with staff and provide input.

Next Steps

Subject to direction from Regional Council, Regional staff would work through to the spring of 2013 conducting data analysis, identifying and prioritizing actions, and report writing. Following the first of two consultation sessions, staff will present Regional Council with a draft update Action Plan by the summer of 2013.

The results of the second public consultation will be reviewed and incorporated into the Action Plan with a final plan to be considered by Regional Council in late 2013/early 2014. Subject to direction from Regional Council and endorsement of the plan, staff would start implementing the new action items with community stakeholders early in 2014. Annual update reports on the status of the implementation would be presented to Regional Council.

Area Municipal Consultation/Coordination

A copy of this report will be forwarded to each of the Area Municipalities, and all Area Municipalities will be provided the opportunity to provide input during the consultation process and be invited to participate in the development of the affordable housing targets as required by Policy 1.4.3 in the PPS.

CORPORATE STRATEGIC PLAN:

The Community Action Plan for Housing supports the Region’s Strategic Focus Areas, including Focus Area 4: Healthy and Inclusive Communities: Foster healthy, safe, inclusive and caring communities.

FINANCIAL IMPLICATIONS:

The minimal costs associated with undertaking the update of the Action Plan will be covered under the existing program budget.
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from Finance, Legal, Public Health, Social Services and Waterloo Region Crime Prevention Council will be invited to participate in the consultation process for the update of the Action Plan.

ATTACHMENTS:

NIL

PREPARED BY: Carolyn Crozier, Principal Planner
              Jeffrey Schumacher, Supervisor, Housing Supply Initiatives
              Deb Schlichter, Director of Housing

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
TO: Chair Sean Strickland and Members of the Community Services Committee

DATE: October 16, 2012

FILE CODE: R12-01

SUBJECT: WATERLOO REGION MUSEUM – MID YEAR UPDATE

RECOMMENDATION:

For Information

SUMMARY:

This report, providing an update on attendance and revenue for 2012 at the Waterloo Region Museum, has been prepared in response to a request from Regional Council earlier this year. It also describes the many initiatives, including cross-promotional marketing, new education programs and festivals, museum memberships, and group tour promotions, that are being developed to further increase attendance and revenue in 2013.

During the first eight months of 2012, total attendance and facility usage at the Waterloo Region Museum (WRM) has risen by approximately 30% as compared to the same period of time in 2011. Earned revenues from admission, education programs, facility rentals, retail and food service have risen by approximately 60% as compared to the same period of time in 2011. These data are tabulated in Attachment 1.

Attendance figures for 2012 are anticipated to be close to the projections included in the Business Plan prepared in 2007, four years before the museum galleries opened. Earned revenues are below the Business Plan projections, although significantly higher than in 2011. As the initiatives described in this report stabilize and become better known in 2013, earned revenue will come closer to the Business Plan projection, and attendance may exceed the projection.

REPORT:

In planning for the new museum, a Business Plan was prepared in August 2007 by TCI Management Consultants (TCI). This Plan built on the Waterloo Region Museum’s Feasibility Study that was completed in 2006. The Business Plan was a requirement of the Region of Waterloo’s application for funding to Cultural Spaces Canada, which resulted in a Federal grant of $2 million.

Although the Business Plan was written four years before the WRM galleries opened, and required many assumptions such as usage, admission fees, and gift shop sales, it is never-the-less a good benchmark for comparing attendance and revenue to date, now that the museum is in its first full year of operation. Tables in the following sections show attendance and earned revenue actuals for 2010/2011 and targets and actuals to date for 2012, in comparison with the projections from the Business Plan.

Attendance

Attendance at the Waterloo Region Museum, including the living history village, is comprised of three main groups – students and teachers participating in curriculum-based education programs;
casual visitors including people attending special events, workshops and other museum-sponsored activities; and people who attend private functions at the museum such as weddings, receptions and meetings.

Prior to construction of the Waterloo Region Museum, total attendance to Doon Heritage Village was approximately 40,000 people per eight month season. Attendance at the combined museum and living history village in 2010 and 2011 – each of these years was also an eight month season – climbed from approximately 48,000 people in 2010, to 57,000 people in 2011 (see attendance chart in Attachment 1).

The year 2012 marks the first 12 month season for the museum including its exhibit galleries, combined with the eight month season for the living history village. The museum’s attendance target for 2012 is 72,000 visitors, very close to the projection of 73,600 visitors for a “base year” of operations made in the 2007 Business Plan. The Plan also projected an increase of about 5%, or 4,000 people each year for the following five years.

Attendance in November and December 2011, including the official opening of the museum, totalled 17,701, as compared to the previous year’s attendance of 5,795 during the months of November and December. This significant increase of approximately 12,000 people in these two months is part of the bounce effect of a new facility, as identified in the Business Plan.

**Earned Revenues**

Increased attendance has resulted in increased earned revenues from admission, education programs, facility rentals, retail and food service, as shown in Attachment 1.

Prior to construction of the Waterloo Region Museum, earned revenues at Doon Heritage Village were approximately $120,000 annually. Earned revenues in 2011, as compared to 2010, increased by almost 90%. Earned revenue targets for 2012 are based on actual revenues from the first eight months of the year, comparisons to 2011, and projections for the last four months of the year. Earned revenue to the end of September 2012 is $331,000 (see revenue chart in Attachment 1).

Based on the first eight months of the year, earned revenues in 2012 are anticipated to increase by approximately 60% as compared to 2011, and are trending toward the projections in the Business Plan. It has become clear, however, that the Business Plan did overstate the revenue anticipated from admissions, by assuming an average admission of $6 for each visitor. Given the large number of education programs, families, and free events, the average admission per visitor has been much lower this year. Increasing revenue from admissions needs to be carefully balanced against the goal of being a broadly accessible community museum; it is anticipated that this will be further addressed in the Cultural Sites Program Review currently underway.

**Next Steps**

Marketing, advertising and promotion will continue to target audiences identified with potential for growth. The museum regularly monitors attendance and revenue, and will continue to set targets and adjust programs and marketing to reach these newly identified target audiences in upcoming seasons. Preliminary targets for 2013 have been set, and will be further refined early in the new year.

On an ongoing basis, staff review fees charged for programs that generate earned revenues such as admission, education programs, facility rentals, retail and food service, taking into account the local market, competition and industry standards.
Recognizing the importance of the education market, the museum and Joseph Schneider Haus are participating in the American Association for State and Local History 2012/2013 Visitors Count! survey of teachers and students. The survey results, anticipated in the fall of 2013, will establish benchmarks for the Region’s museums and compare our performance to museums across North America. The Region’s museums will use these results to adjust programs and marketing to meet the education audience needs.

The Region has an ongoing process of undertaking reviews of program areas, to ensure that each part of the organization is operating as efficiently and effectively as possible. Regional staff has selected the three museums owned and operated by the Region, collectively being called the Cultural Sites, for a program review in 2012/13. As part of the Cultural Sites Program Review, there will be an objective assessment of the Waterloo Region Museum including the extent to which it is achieving its intended results and the efficiency of the program.

The following sections provide further details of new programs and focus areas for increasing attendance and earned revenues at the Waterloo Region Museum, including new education programs, promoting to the local, Ontario and group tour markets, and increasing use of social media.

### Education Market

The Waterloo Region Museum welcomes more educational program visits than any other museum or cultural facility in Waterloo Region. The museum has developed several new education programs in the exhibit galleries and living history village to meet education attendance and revenue targets.

In May 2012 the museum hosted the Waterloo Region Heritage Fair, in partnership with local educators, museums, and the Ontario Heritage Fair Association. The Fair gave hundreds of school aged children, from Grades 4 to 10, the opportunity to research and display heritage projects at the museum. The fair will be repeated in 2013.

In conjunction with local educators and representatives of various First Nations, the museum hosted a First Peoples’ festival in September and early October 2012. This three-day educational program for Grades 6 to 12, plus a one-day public event, included presentations on Aboriginal culture, music, dance and craft. The educational days were sold out, with 400 students attending each day. Interest in the Festival was very strong and resulted in a waiting list of more than 400 school children who could not be accommodated; the museum is looking at expanding the Festival in 2013.

The museum took the lead role, partnering with the Region’s Community Planning Division, area municipalities, the Grand River Conservation Authority, the Waterloo Stewardship Network, and the Children’s Water Education Council, to host a Forest Festival at the museum early in October. This one-day educational program for Grades 6 and 7 provided hands-on learning opportunities for 500 students about forest ecosystems and habitats, biodiversity and species at risk. The Festival utilized the approximately 30 acres of woodlot on the museum’s property.

### Local Market

The Waterloo Region Museum Feasibility Study identified the local market as the primary market that should be served by the new regional museum. Based on postal code data collected from visitors in 2011, approximately 50% of casual visitors to the Waterloo Region Museum were from Waterloo Region. Local visitation during the first eight months of 2012 increased to 72% of casual visitors.

This growth in visitation from the local market can be credited to several marketing campaigns in Waterloo Region. For example, the museum distributed discount admission coupons to all students
in the Waterloo Region District School Board and the Waterloo Region Catholic School Board at the end of the 2011/12 school year. And the museum has partnered with The Record for various marketing opportunities including print ads and community event sponsorship. The latter results in the museum’s literature being distributed by The Record at dozens of community events across Waterloo Region throughout the year.

The museum is currently developing marketing partnerships with several local corporations to offer reduced admission to their employees. And in 2012, the museum launched *Passport to Play* for a second year – this partnership and cross-promotion with area museums, art galleries and attractions encourages local residents to visit multiple destinations in the community.

The Waterloo Region Museum test marketed an evening event on International Museum Day in May to determine community interest and resources required to host a successful evening event. The museum is now exploring with others in the local arts/culture/heritage community the feasibility of a “first Friday” type of community-wide initiative in 2013. Typically these events extend a museum’s hours into the evening beyond regular daytime hours, with complimentary admission, lectures and tours. The events are held consistently on the same evening each month, e.g. the first Friday.

Museum memberships encourage repeat visitation through the benefit of complimentary museum admission to membership card holders. The museum has developed reciprocal complimentary admission programs with various local museums, and this year added the Bruce County Museum in Southampton as a reciprocal admission partner. Throughout 2012 guest services staff is encouraging visitors to purchase memberships; their efforts have resulted in a more than 30% increase in museum memberships.

One of the goals of the Waterloo Region Museum is to serve as a centre for community gatherings, including private functions such as marriages and wedding receptions. In 2011, 18 ceremonies and receptions were held in the village’s Church and/or the Grand Foyer of the museum. By the end of 2012, 17 ceremonies and/or 28 receptions will have been held on the property. In 2013, during the principal wedding season from May through October, there are 26 Saturdays; 3 of these Saturdays were booked by the museum for public functions, and 16 of the remaining 23 Saturdays are booked for weddings; in addition, one wedding is booked in the off-season in 2013. Staff is investigating increasing the pricing structure for the museum’s Grand Foyer during peak demand months, and implementing discounts for off-peak seasons and days of the week to attract additional rentals. Staff will be attending a local wedding show in January to further promote the museum as a wedding venue for 2013 and beyond.

This spring the Waterloo Region Museum increased the number of preferred caterers from two to four; these local caterers service third-party functions such as receptions, weddings and meetings. The museum’s partnership with these caterers results in complementary promotion and up selling the museum to the caterers’ clients, resulting in increased earned revenues for the museum.

**Ontario Market**

Based on postal code data collected from visitors during the first eight months of 2012, visitation from Ontario residents (outside of Waterloo Region) represents approximately 23% of total museum visitation. The museum relies on its membership in and partnership with Waterloo Region Tourism Marketing Corporation, RTO4 (Regional Tourism Organization 4), Ontario Tourism and Attractions Ontario to promote Waterloo Region and the museum as a destination in the GTA and elsewhere in Ontario for casual visitors.

Specific promotions that the museum has or is participating in include the launch of Ontario Tourism Week in Toronto in June; discount coupon programs; and travel packages available through an online booking system developed by RTO4.
Group Tour Market

The group or bus tour market has specific needs and wants in visiting attractions, e.g. accessible facilities, ample bus parking, food service and retail. Tour operators also look for new venues for their organized tours. The gravel pathways and size of Doon Heritage Village has limited its attractiveness to this market, however the Waterloo Region Museum is now ideally suited to meet the group tour market’s needs.

Working with Waterloo Region Tourism Marketing Corporation, the Waterloo Region Museum is developing marketing strategies for the group tour market including attending the Ontario Motor Coach Association travel trade show this fall in Buffalo and hosting a familiarization tour for bus tour operators. Direct sales calls to group tour companies are also planned.

Social Media

The Waterloo Region Museum is actively engaged in using social media, including Internet, Facebook, and Twitter. In the first eight months of 2012, visits to the museum’s website have equalled the number of visits during all of 2011, and there have been more unique visitors to the website during the same period of time as compared to last year. Access to the museum’s website was at its highest this year at Family Day, March break and Canada Day. Staff anticipate an approximately 40% increase in access of the museum’s website in 2012. In July the museum introduced a monthly e-newsletter, sent to subscribers to inform them about upcoming events and activities; individuals register for newsletter access on the Region’s website.

Joint Marketing Initiatives

As noted, Waterloo Region Museum has initiated, and is participating in several cross-promotional and collaborative joint marketing initiatives. These include:

- Passport to Play: Waterloo Region Museum initiated a strategic alliance to cross promote with 10 other area museums, art galleries and attractions including THEMUSEUM, Joseph Schneider Haus, Cambridge Galleries, Kitchener-Waterloo Art Gallery, Clay and Glass, Homer Watson House and Gallery and City of Waterloo Museum. The program is promoted at each participating attraction and is also promoted with over $10,000 of in-kind advertising by the Waterloo Region Record and the WRTMC. The website for this program is called PassportToPlay.com and is linked to the Waterloo Region Museum website main page.
- RTO4 (Regional Tourism Organization 4) Step Back to a Simpler Time Package: This reciprocal promotional package that can be booked on-line offers various bundles of experiences that include Waterloo Region Museum and Doon Heritage Village, St. Jacobs Farmers Market and horse-drawn wagon rides. Promotion also offers various add-ons that could include Cambridge Butterfly Conservatory, Stone Crock restaurant and Bingemans.
- New strategy to cross promote the Region of Waterloo Museums (Waterloo Region Museum, Doon Heritage Village, Joseph Schneider Haus and McDougall Cottage) with stand up displays designed to create a unified look when set-up together but also work as stand alone displays. These new banners were launched at the International Plowing Match to give the PHCS Department a unified look in the Regional tent.
- Cross promotion of Joseph Schneider Haus (JSH) and McDougall Cottage (McD) has been incorporated into the Waterloo Region Museum website footer with links back to each website. JSH and McD are also promoted in most Waterloo Region Museum ads if ad size allows.
- Reciprocal complimentary admission to local museums and the Bruce County Museum, as an added value of the Region of Waterloo Museums Membership program.
• Travel packages with local hotels, promoted through the Waterloo Region Tourism Marketing Corporation.
• Corporate and Alumni Discounts offering local organizations Conestoga College and Economical Life a discounted rate to the Waterloo Region Museum. These reciprocal alliances are promoted via their Human Resources departments across the organization. There are plans to grow this new reciprocal program and offer it to other organizations in our community.

Future initiatives will include participation in the planned Creative Enterprise Initiative Arts Portal, and further collaboration with area museums and attractions in conjunction with planning and promoting new exhibits and programs.

**Area Municipal Consultation/Coordination**

Area municipal staff is informed of events and activities at the Waterloo Region Museum, and will receive a copy of this report. The Waterloo Region Museum has regular contact with the museums, art galleries and cultural facilities in Waterloo Region, many of them municipally owned and/or operated, to seek opportunities for partnerships and cross-promotion.

The Waterloo Region Museum has initiated an exhibit planning schedule, asking local museums and art galleries to post their exhibits planned for the next three+ years; it is hoped that this long-range schedule may allow for future partnerships to develop around exhibit themes and related programming.

**CORPORATE STRATEGIC PLAN:**

Supporting initiatives that promote and enhance arts, culture and heritage are directly related to Growth Management Focus Area 2, Action 2.4.2: Provide opportunities to optimize the use of Regional cultural facilities, with a focus on the new Waterloo Region Museum.

**FINANCIAL IMPLICATIONS:**

The Waterloo Region Museum is funded through a budget administered by Planning, Housing and Community Services, as approved by Regional Council. No additional operating costs are anticipated to support the Museum, aside from standard annual budget adjustments (e.g. inflation).

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

Collateral marketing material, (e.g. display ads, brochures, flyers) are designed and printed by Corporate Resources. The Cultural Sites Program Review is being overseen by the Region’s Internal Auditor, and the Program Review will consult with staff from various Regional Departments.

**ATTACHMENTS:**

Attachment 1 - Waterloo Region Museum Attendance and Earned Revenue

**PREPARED BY: Tom Reitz, Manager/Curator**

**APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services**
Attachment 1: Waterloo Region Museum Attendance and Earned Revenue

Attendance Actuals and Targets

<table>
<thead>
<tr>
<th></th>
<th>2010 Actuals</th>
<th>2011 Actuals</th>
<th>2012 Target</th>
<th>2013 Target</th>
<th>Business Plan Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>18,816</td>
<td>19,757</td>
<td>25,000</td>
<td>27,000</td>
<td>29,400</td>
</tr>
<tr>
<td>Visitors</td>
<td>19,825</td>
<td>27,421</td>
<td>35,000</td>
<td>40,000</td>
<td>44,200</td>
</tr>
<tr>
<td>Other Clients:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weddings</td>
<td></td>
<td>1,850</td>
<td>4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meetings – External</td>
<td></td>
<td>3,073</td>
<td>3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meetings – Regional</td>
<td></td>
<td>4,594</td>
<td>5,000</td>
<td></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>47,935</strong></td>
<td><strong>56,695</strong></td>
<td><strong>72,000</strong></td>
<td><strong>80,000</strong></td>
<td><strong>73,600</strong></td>
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</tbody>
</table>

Attendance by Month – January 2011 to August 2012

<table>
<thead>
<tr>
<th></th>
<th>2011 Actuals</th>
<th>2012 Actuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>656</td>
<td>2,084</td>
</tr>
<tr>
<td>February</td>
<td>860</td>
<td>4,160</td>
</tr>
<tr>
<td>March</td>
<td>1,472</td>
<td>2,398</td>
</tr>
<tr>
<td>April</td>
<td>1,089</td>
<td>2,541</td>
</tr>
<tr>
<td>May</td>
<td>7,185</td>
<td>11,212</td>
</tr>
<tr>
<td>June</td>
<td>10,760</td>
<td>10,466</td>
</tr>
<tr>
<td>July</td>
<td>6,743</td>
<td>8,042</td>
</tr>
<tr>
<td>August</td>
<td>4,098</td>
<td>6,102</td>
</tr>
<tr>
<td><strong>Total (Jan. to Aug.)</strong></td>
<td><strong>32,863</strong></td>
<td><strong>47,005</strong></td>
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</table>

Earned Revenue Actuals and Targets

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Education</td>
<td>40,899</td>
<td>59,194</td>
<td>90,000</td>
<td>70,944</td>
<td>100,000</td>
<td>441,600</td>
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<tr>
<td>Visitors</td>
<td>42,168</td>
<td>85,021</td>
<td>130,000</td>
<td>113,726</td>
<td>150,000</td>
<td>309,120</td>
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<tr>
<td>Facility rentals</td>
<td>10,495</td>
<td>33,361</td>
<td>84,000</td>
<td>58,064</td>
<td>95,000</td>
<td>30,912</td>
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<tr>
<td>Memberships</td>
<td>6,639</td>
<td>5,546</td>
<td>12,000</td>
<td>10,819</td>
<td>14,000</td>
<td>44,160</td>
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<tr>
<td>Retail</td>
<td>23,832</td>
<td>35,737</td>
<td>40,000</td>
<td>30,241</td>
<td>40,000</td>
<td>110,400</td>
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<tr>
<td>Food service</td>
<td>10,582</td>
<td>32,926</td>
<td>52,000</td>
<td>47,487</td>
<td>52,000</td>
<td></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>134,615</strong></td>
<td><strong>251,785</strong></td>
<td><strong>408,000</strong></td>
<td><strong>331,281</strong></td>
<td><strong>451,000</strong></td>
<td><strong>627,072</strong></td>
</tr>
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### 2012/2013 Admission and Membership Fees

<table>
<thead>
<tr>
<th>Admission</th>
<th>Membership (one year)</th>
<th>Education Programs (per student)</th>
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</thead>
<tbody>
<tr>
<td>Adults - $10</td>
<td>Individual: $35</td>
<td>$5 – half days</td>
</tr>
<tr>
<td>Seniors and Students – $8</td>
<td>Family: $50</td>
<td>$10 – full days</td>
</tr>
<tr>
<td>Children ages 5 to 12 – $5</td>
<td>(2 adults and dependent children)</td>
<td></td>
</tr>
<tr>
<td>Children ages 4 and under – Free</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family (2 adults and 2 dependent children) – $25 (rates plus HST)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: All fees are inclusive of HST.*
TO: Chair Sean Strickland and Members of the Community Services Committee

DATE: October 16, 2012

FILE CODE: D27-80

SUBJECT: HOUSING SERVICES CORPORATION INSURANCE PROGRAM UPDATE

RECOMMENDATION:

For information

SUMMARY:

The former Social Housing Services Corporation (SHSC), now the Housing Services Corporation (HSC), is a provincially created body mandated to provide a group insurance program to prescribed housing providers, including Regionally-owned Waterloo Region Housing. Previously, providers could be exempted from the requirement to obtain insurance through the SHSC approved broker AON Reed Stenhouse Inc. only if the alternate broker could provide equivalent coverage at a premium at least 10 percent below the AON quote. A five percent administration fee was also charged to those using an alternate broker.

The SHSC Board of Directors made a change in policy June 2011 to remove the exemption option, so that all providers would be required to participate in its insurance program on a mandatory basis, effective November 2011 when insurance program renewals would take effect.

Regional Council objected to this policy change and passed a resolution on June 29, 2011 requesting the SHSC Board of Directors reverse their decision and return to previous regular business practice. This, plus similar resolutions from other Service Manager areas across Ontario, led to the SHSC partially changing the policy in August 2011 to allow for one-time exemptions for the 2011/2012 renewal year to only those who had received exemptions the previous year. The HSC also conducted consultations in early 2012 to look at program improvements and potential changes in light of new legislation, the Housing Services Act, 2011 (HSA), which came into effect January 2012.

After a series of consultation sessions with insurance program stakeholders, proposed program refinements and changes were approved by the Housing Services Corporation (HSC) Board (previously SHSC) will take effect for the 2012/2013 renewal year. The key changes are:

- The creation of two streams for housing providers based on the provider’s total insured property values;
- The option for all providers to obtain a quote from an alternate broker rather than on a case-by-case exemption basis;
- Removal of the premium differential of 10 percent; and,
- Reduction of the administration fee for those with alternate brokers to two and a half percent from the previous five percent amount.

These changes better align with Council’s concerns, particularly in allowing more competitive bidding.
REPORT:

The former Social Housing Services Corporation (SHSC) changed its name to the Housing Services Corporation (HSC) in January 2012. It is a non-profit corporation created by the Province in 2002, having responsibility for administering certain programs relating to community housing, including insurance. Since 2003, this organization has administered a group insurance program for prescribed community housing providers.

Prescribed housing providers were required to obtain insurance through the SHSC Group Insurance program via the broker AON Reed Stenhouse Inc. However, providers were given exemptions to this requirement and allowed to secure insurance coverage through an alternate broker, provided that the premium was at least 10 percent below the AON quote for equivalent coverage. An additional five percent administration fee was also charged to those using alternate brokers.

Waterloo Region Housing (WRH) and the previous Region of Waterloo Community Housing Inc. (ROWCHI), both of which are owned by the Regional Municipality of Waterloo, are prescribed housing providers and were able to obtain the best quote through this competitive process with the benefit of this exemption process. For example, in 2010/11, WRH saved approximately $73,000 (fee included), and in 2011/12, WRH saved $50,394, less the fee of $15,625, with a lower quote from the Frank Cowan Company Limited (Council Report No. F-11-072, dated October 26, 2011).

The Board of SHSC issued a decision in a letter dated June 10, 2011, that they would no longer offer providers the option to purchase insurance coverage outside of the SHSC Group Program, and instead would be requiring all prescribed community housing providers in the Province to participate in its insurance program on a mandatory basis, effective November 1, 2011.

Regional Council objected to this policy change and passed a resolution in June 29, 2011 requesting the SHSC Board of Directors reverse their decision and to return to their previous business practice. This, plus similar resolutions from other Service Manager areas across Ontario, led to the SHSC partially changing the policy in August 2011 to allow for one-time exemptions for the 2011/2012 renewal year to only those who had received exemptions the previous year. The SHSC also conducted consultations in early 2012 to look at program improvements and potential changes in light of new legislation, the Housing Services Act, 2011 (HSA), coming into effect January 2012.

Concerns regarding SHSC’s insurance program were also raised in the report to Community Services Committee on November 8, 2011, regarding the new Housing Services Act, 2011 (HSA) and the proposed implementation plan (Report P-11-090/SS-11-048). The exemption to allow an alternate broker process was granted only for the 2011/2012 year, with any potential program changes based on the outcome of this upcoming consultation process. The new Housing Services Act (HSA) and regulations state that local housing corporations (LHCs) such as Waterloo Region Housing are required to participate in the insurance program, unless the Minister gives written consent for the LHC to not participate, and that prescribed HSC members (LHCs, non-profit corporations and co-operative housing providers) are required to participate in the prescribed programs and activities of SHSC, now called Housing Services Corporation (HSC). The SHSC changed its’ name to the Housing Services Corporation effective January 1, 2012.
Update

The HSC conducted the consultation on its insurance program in January and February 2012 with 12 separate sessions for housing providers (those prescribed and others who voluntarily joined the HSC insurance program), local housing corporations, Risk Managers and Service Managers. Regional staff from housing, finance and legal services participated in the relevant sessions. The sessions were hosted and facilitated by an independent, third-party facilitator and the feedback from the sessions became the basis for the HSC Board's redesign of its insurance program to be implemented in time for the 2012-2013 renewal period, effective November 1, 2012.

A letter was also sent by Regional Chair Seiling, to the Chair of the HSC Board of Directors, dated April 10, 2012, outlining concerns with the program and the expectation that, regardless of any program refinements, the Region of Waterloo would be able to continue to procure insurance for its community housing portfolio through a competitive process including alternate brokers.

The HSC recommended insurance program changes were shared with stakeholders throughout April 2012 and the new program rules and guidelines were available in early Fall. The key insurance program change is to split the current group program model into two separate streams, based on the provider's total insured property values: Stream A (approximately 664 providers) with total insured values under $100 million; and Stream B (21 providers) with total insured values over $100 million. Stream A program participants would participate in a group pool, while Stream B would be individually underwritten by the program broker. In either stream, all providers will have the option to solicit a quote from an alternate broker, based on minimum coverage standards and price competitiveness. Waterloo Region Housing would be in Stream B.

The benefits of these changes are that all providers will now have the option to obtain a quote from an alternate broker rather than on a case-by-case exemption basis. For Stream B participants, the premium calculation will be based on the merits of each individual account (building portfolio and claims history), rather than being calculated based on a single group pool, and coverage limits can be tailored to individual needs. The changes also recognize that Stream B participants' service needs may be different than Stream A participants in that they often have in-house risk management capacity.

In either stream, the provider may bind coverage with an alternate broker, where the broker offers equivalent coverage at a lower price, where previously the price differential had to be 10 percent lower. The administration fee to HSC, which is only applicable where a provider binds coverage with an alternate broker, will now be two and a half percent, where previously it was five percent. According to HSC, the fee supports the legislated role that HSC plays in establishing and managing the group insurance program, including a number of services such as publicly procuring for the program broker, third-party claims adjuster and program insurer, and providing customer service and risk management support.

Area Municipal Consultation/Coordination

A copy of this report will be forwarded to each of the Area Municipalities.

CORPORATE STRATEGIC PLAN:

The Region’s Strategic Focus Areas, includes Focus Area 4: Healthy and Inclusive Communities: Foster healthy, safe, inclusive and caring communities; and Focus Area 5: Service Excellence: Ensure Regional programs and services are efficient and effective and demonstrate accountability to the public.
FINANCIAL IMPLICATIONS:

Based on consultations held earlier this year, changes were made to Housing Services Corporation (HSC) insurance program. The insurance program will create two separate streams, based on the provider’s total insured property values. In either stream, all providers will have the option to solicit a quote from an alternate broker, based on minimum coverage standards and price competitiveness.

The premium calculation for Stream B participants, which includes WRH, is to be based on the merits of each individual account (building portfolio and claims history), rather than being calculated based on a single group pool. It also recognizes that Stream B participant’s service needs may be different than Stream A participants in that they often have in-house risk management capacity.

For WRH in 2011/2012, the insurance costs were $312,753 for the coverage with Frank Cowan, and for Region of Waterloo Community Housing Inc. (ROWCHI), the insurance costs were $22,864 for the coverage with AON. Both amounts are net of HST rebates. For the 2012/2013 year, insurance costs for WRH and ROWCHI have been amalgamated, and a report regarding the new premium quotes will be presented to Council in the near future. For our non-profit and co-operative prescribed housing providers, the current cost of insurance is $322,005 for 16 providers with the AON program, and an additional $560,808 for 34 providers with other insurance programs.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Housing staff has consulted with staff from Finance and Legal Services in the preparation of this report.

ATTACHMENTS:

NIL

PREPARED BY:  Deb Schlichter, Director of Housing

APPROVED BY:  Rob Horne, Commissioner of Planning, Housing and Community Services
MEMORANDUM

To: Chair Sean Strickland and Members of Community Services Committee

From: David Dirks, Director, Employment and Income Support

Copies: Gail Kaufman Carlin, Acting Commissioner, Social Services

File No.: S09-80

Subject: ONTARIO WORKS CASELOAD: SEPTEMBER 2012

This memorandum is provided as information for members of Council. Employment & Income Support, Social Services with Finance monitors the Ontario Works (OW) caseload on a monthly basis. Below is a chart summarizing the caseload at the end of September 2012 with comparisons to the months of August 2012 and September 2011 as well as September 2008.

Very briefly,

- The OW caseload at September 2012 was: 8,644
- The OW caseload at August 2012 was: 8,792
- The decrease from August 2012 was: (148) -1.7%
- The decrease from September 2011 was: (121) -1.4%
- The increase from September 2008 was: 2,352 +37%

- Waterloo Region unemployment rate for September 2012 was: 6.4%
- Waterloo Region unemployment rate for September 2011 was: 6.7%

Ontario Works Caseload and Unemployment Rate

<table>
<thead>
<tr>
<th>September 2012</th>
<th>August 2012</th>
<th>September 2011</th>
<th>% Change August to September</th>
<th>% Change Year to Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,644</td>
<td>8,792</td>
<td>8,765</td>
<td>(1.7%)</td>
<td>(1.4%)</td>
</tr>
</tbody>
</table>
Unemployment Rates – Seasonally Adjusted*

<table>
<thead>
<tr>
<th></th>
<th>September 2012</th>
<th>August 2012</th>
<th>September 2011</th>
<th>% Change August to September</th>
<th>% Change Year to Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Province</td>
<td>7.9</td>
<td>8.0</td>
<td>7.6</td>
<td>(1.3%)</td>
<td>3.9%</td>
</tr>
<tr>
<td>Waterloo Region</td>
<td>6.4</td>
<td>6.5</td>
<td>6.7</td>
<td>(1.5%)</td>
<td>(4.5%)</td>
</tr>
</tbody>
</table>

*As revised by Statistics Canada

This report is encouraging as it continues the general decline from the high of 8,905 in May and is the lowest caseload count yet during the year. Staff have noticed also a continued decline of intake calls through the month of September. Still the caseload is 37% higher than at the outset of the recession.

The provision of social assistance supports the Region’s 2011-2014 Corporate Strategic Focus Area 4: Healthy and Inclusive Communities; (to) foster healthy, safe, inclusive and caring communities.

If you have any questions or comments or for further information, please contact David Dirks, Director, Employment and Income Support at 519-883-2179 or ddirks@regionofwaterloo.ca
MEMORANDUM

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

From: Nancy Dickieson, Director, Children’s Services
Andrea Reist, Director, Child and Family Health

Copies: Gail Kaufman Carlin, Acting Commissioner, Social Services
Dr. Liana Nolan, Commissioner/Medical Officer of Health

File No.: S04-20

Subject: UPDATE ON EARLY YEARS SYSTEM PLAN & FORUM INVITATION

This memo provides an update on the actions taken to date in the development of an Early Years System Plan. The Early Years Services System Plan is an identified activity in the Corporate Strategic Plan with Children’s Services and Public Health working in partnership to engage community agencies. Initially, the Region of Waterloo Children and Parent Services Committee (ROWCAPS) was responsible for moving forward on the development of a Best Start plan. In order to support the broader vision and mandate of an Early Years Services System Plan, the decision was made in 2011 to expand ROWCAPS to ensure full community participation. This committee is now called the Children’s Planning Table, and is co chaired by the Children’s Services Director and a community member. Membership has grown to representation from over 40 agencies, professionals and funders. Four meetings were scheduled for 2012 and have had attendance ranging from 60 to 90 participants. The key focus of the 2012 meetings has been to develop common knowledge and understanding about service system integration. The final meeting for 2012 will be held on November 26th and will be a full day forum. The Children’s Planning Table November 26th Forum Invitation is attached for your information.

In 2013 more detailed planning will begin with community partners to develop a more comprehensive service system plan for children (0-12 years). The Early Years Services System Plan will focus on a plan of action to move towards a system of coordinated, integrated early years services that will support developmental health of all children who live in Waterloo Region.

For further information please contact Nancy Dickieson, Director, Children’s Services at 519-883-2177: or ndickieson@regionofwaterloo.ca or Andrea Reist, Director, Child and Family Health, 519-883-2002 ext 5352.
The Children’s Planning Table,  
Invites You To An  
Early Years Services Planning Forum  

Monday, November 26, 2012  
9:00 AM to 3:00 PM  
Holiday Inn, Waterloo Ballroom  
30 Fairway Road South, Kitchener  

Featuring Key Note Speakers:  

Dr. Charles E. Pascal was appointed by Ontario Premier Dalton McGuinty to be his special advisor on early learning in November 2007. Dr. Pascal was asked to recommend the best way to implement full-day learning for four- and five-year-olds. On June 15, 2009, Dr. Pascal presented his report, With Our Best Future in Mind: Implementing Early Learning in Ontario. The report contains 20 recommendations on how to introduce full-day learning to Ontario students, how to improve education for children up to 12 and how to increase supports for young families.  

Kerry McCuaig is the Atkinson Charitable Foundation's Fellow in Early Childhood Policy working with the Atkinson Centre at OISE. She is co-author of Early Years Study 3, Making Decisions, Taking Action with Margaret McCain and Fraser Mustard. The Early Years Study 3 documents the social, economic and scientific rationale for increased investments in early childhood education. It also introduces the Early Childhood Education Report to monitor the funding, policy, access and quality of early education programming.  

Register to attend before November 20th, 2012  
by clicking here or  
call Collette Whelan  
(519-575-4757 ext. 5004)  

Agenda  
Morning Session: Key Note Speakers  
and overview of process to date for the Children’s Planning Table.  
Lunch (provided for those staying for the afternoon).  
Afternoon Session: Round Table discussions on directions for early years service system integration and determining outcomes and key directions.
To: Chair Sean Strickland and Members of the Community Services Committee

From: Leslie Perry, Project Manager
      David Dirks, Director, Employment and Income Support

Copies: Gail Kaufman Carlin, Acting Commissioner, Social Services

File No.: S09-80

Subject: REPLACEMENT OF TECHNOLOGY: SOCIAL SERVICES SOLUTIONS MODERNIZATION PROJECT

Provincial Initiative

As outlined in previous memoranda to Committee (September 28, 2010, January 11, 2011, and March 8, 2011), the Province has initiated a project to replace the Service Delivery Model Technology (SDMT) which supports the delivery of social assistance (Ontario Works, Temporary Care Assistance, Ontario Disability Support Program, Assistance for Children with Severe Disabilities) in Ontario. The initiative known as the Social Services Solutions Modernization Project is part of a broader modernization effort by the Province to enhance service delivery and customer service. The project will be implemented in two phases: Online Application for Social Assistance (Spring 2011), full replacement of the SDMT (Fall 2013).

Online Application Implemented

On May 16, 2011, the Online Application for Social Assistance was implemented across Ontario except Toronto, which was added in September 2011. The Province designed the Online Application as another avenue for individuals to apply for social assistance. The availability of the Online Application acknowledges those individuals who do not wish to apply through the telephone. Implementation within the Region of Waterloo has been successful (see Information Memorandum September 11, 2012).

Planning Structure

In preparation for the replacement for the Service Delivery Model Technology, a planning structure has been developed within Employment and Income Support to guide planning activities. The Executive Steering Committee is responsible for overall guidance and support of the Project. Members of the Executive Steering Committee are the Employment and Income Support management team and representatives from Corporate Finance, Human Resources and Information and Technology Services. A Business Transformation Team is responsible for planning decisions and implementation recommendations. Members of the Business
Transformation Team include Employment and Income Support supervisors as well as representatives from Corporate Finance, Human Resources and Information and Technology Services. Staff of Employment and Income Support will contribute to planning and implementation activities through participation in work groups beginning in October 2012.

Site Readiness Plan

The current Service Delivery Model Technology (SDMT) will be replaced by what has been named the Social Assistance Management System (SAMS) technology. As part of the implementation, service delivery agents, such as the Region of Waterloo, are required to submit a comprehensive Site Readiness Plan indicating activities that will occur in the months leading to implementation. The objective of the Site Readiness Plan is to ensure delivery agents are prepared and supported to successfully implement the Social Assistance Management System technology. In September 2012, the Province hosted a meeting for municipal site leads in which they launched the Site Readiness approach and expectations. Staff is currently reviewing the information and supporting material provided.

Next steps and Potential Impact

In addition to the Site Readiness Plan, the Province has a number of critical phases currently at various stages of development/completion. Activities such as user acceptance testing, parallel pilots and user training will occur from the Fall of 2012 through the Summer of 2013 in preparation for implementation in Fall of 2013. Staff will be challenged to maintain service levels and standards given the extent of this initiative and the impact on existing resources. This will form a critical part of planning. Council will be kept informed of progress as the project proceeds.

The delivery of social assistance addresses the Region’s Corporate Strategic Plan, Focus Area 4: Healthy and Inclusive Communities; (to) to foster healthy, safe, inclusive and caring communities.

For further information, contact Leslie Perry, Project Manager, Social Services Solutions Modernization Project at Phone: 519 883-2317 or lperry@regionofwaterloo.ca or David Dirks, Director, Employment and Income Support at Phone: 519 883-2179 or ddirks@regionofwaterloo.ca.
MEMORANDUM

To: Chair Sean Strickland and Members of the Community Services Committee
From: David Dirks, Director, Employment and Income Support
Copies: Gail Kaufman Carlin, Acting Commissioner, Social Services
File No.: S09-01
Subject: COMMUNICATION WITH ONTARIO WORKS PARTICIPANTS

Background

In the report of May 8, 2012 (SS-12-019) staff reviewed the implications of the 2012 Provincial Budget for the delivery of social assistance. Effective July 1, 2012 the Province capped its share of funding for discretionary benefits under Ontario Works. Council has agreed to provide 100% municipal funding to maintain the current program for the remainder of 2012. As well, effective January 1, 2013 the Community Start Up and Maintenance Benefit (CSUMB) will no longer be available through Ontario Works or the Ontario Disability Support Program.

In an Information Memorandum of September 11, 2012 and the subsequent Report of Sept 25, 2012 (SS-12-044), staff provided an update on the Community Homelessness Prevention Initiative into which the Province has invested up to 50% of its share of CSUMB funding. As requested, staff in Employment and Income Support has been consulting key stakeholders (participants, staff and community partners) concerning the discretionary benefits program in preparation for a follow-up report to Council in anticipation of the 2013 Budget.

Request for Information

At its meeting of September 21, 2012, staff asked members of the Employment and Income Support Community Advisory Committee (EISCAC) about the need to communicate with Ontario Works participants about the status of these programs. The EISCAC is comprised of Ontario Works and Ontario Disability Support Program participants, funders, and community agencies such as Lutherwood, The Working Centre, the House of Friendship and the Cambridge Self Help Food Bank. This request stemmed from feedback at community forums during the consultation around discretionary benefits. To date there has been no direct communication to participants of which staff is aware. There is concern that individuals with very limited resources may make financial decisions in the next months on the assumption that current supports will be in place.
Strategy

The general strategy is a result of the EISCAC discussion of September 21st. Attached is a cheque insert for November and December, which would be provided to all individuals and families receiving Ontario Works at the beginning of the month. It was suggested as well that the insert be printed on red paper to draw attention to it and a notice be affixed on the front of the envelope indicating that there was important information inside. This would be complemented by posters within our offices and those of key community partners and the use of social media such as our website. Staff within Employment and Income Support would be provided a script to respond to questions that are expected to arise. If new information should become available it would be communicated and the information updated.

The provision of such information is consistent with Focus Area 5; Service Excellence; Strategic objective 5.5 (to) improve awareness of regional services and facilitate processes for public input and involvement.

For further information please contact David Dirks, Director, Employment and Income Support at 519-883-2179: or ddirks@regionofwaterloo.ca
ATTACHMENT

IMPORTANT: TRANSLATE THIS FOR SOMEONE IF THEY DO NOT SPEAK ENGLISH

Two things are changing
As a result of the 2012 Provincial budget:

• Starting January 1st, 2013, the Community Start-Up and Maintenance Benefit (CSUMB) will no longer be available through Ontario Works.
• Benefits are being reviewed:
  - heat/hydro/water cut-off payments
  - dental work for adults
  - eviction payments
  - food hampers
  - last month’s rent

More information will be coming throughout the fall of 2012.

For more information please call 519-883-2100 - option 6.
MEMORANDUM

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

From: Christiane Sadeler, Executive Director

Date: October 16, 2012

Subject: ROOT CAUSE OF CRIME - RAP SHEET

File No.: C11-50

The Waterloo Region Crime Prevention Council creates Research and Planning Sheets (or RAP Sheets for short) as a tool to disseminate information to resident within Waterloo Region. The most recent RAP Sheet provides information about the root causes of crime.

The Waterloo Region Crime Prevention Council is committed to evidence based approaches to addressing crime, victimization and fear of crime. Concentrating on the root causes of crime is central to this approach. This RAP Sheet represents a tool which will aid in helping the public understand the complex causes of crime.

A copy of the RAP sheet is available online at:

www.preventingcrime.ca/documents/rootcauses.pdf
When several risk factors are combined, there is a higher probability for someone coming into conflict with the law. For example, a person who comes from a low income home and socializes in peer groups where drug and alcohol use is tolerated is more likely to engage in criminal activity.

While we are all responsible for our own behaviour, attention to root causes does provide a critical starting point for designing social and community interventions that reduce risks and in turn reduce crime.

**What is Crime Prevention?**

“Crime prevention” is any initiative or policy which reduces or eliminates victimization by crime or violence. Organizations like the Waterloo Region Crime Prevention Council work collaboratively to address the many risk factors known to be at the roots of crime. Extensive research has allowed us to categorize these risk factors – or ‘root causes of crime’ — into four broad areas: Individual; Family; Social/Community; and Economic.

“It is easier to build strong children than to mend broken adults.”

**Risk Factors**

There is no single risk factor which leads to criminal behaviour. However, the more risk factors present in a person’s life, the greater their risk of becoming criminally involved and/or a victim of crime. Risk factors may include:

**Individual**
- Age*
- Gender*
- Problematic drug and alcohol use
- Poor social skills
- Low sense of self-worth
- Low educational attainment

**Family structures**
- Experiences of abuse and neglect
- Exposure to violence in the home
- Lack of parental supervision
- Inconsistent or overly permissive or punitive parenting

**Social/Community**
- Isolation or exclusion
- Belonging to a delinquent peer group
- Experience of being bullied
- Stigmatization

**Economic**
- Low family income
- Inadequate housing
- Persistent unemployment/underemployment

* males between the ages of 15 and 24 tend to engage in more risk taking behavior than females and other age groups.

When several risk factors are combined, there is a higher probability for someone coming into conflict with the law. For example, a person who comes from a low income home and socializes in peer groups where drug and alcohol use is tolerated is more likely to engage in criminal activity.

While we are all responsible for our own behaviour, attention to root causes does provide a critical starting point for designing social and community interventions that reduce risks and in turn reduce crime.

**Trends**

**Risk Factors of Offenders Entering Prison**

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did Not Complete High School</td>
<td>70%+</td>
</tr>
<tr>
<td>Unstable Employment History</td>
<td>70%</td>
</tr>
<tr>
<td>Problematic Substance Use</td>
<td>80%</td>
</tr>
<tr>
<td>Serious Mental Health Issues (Men)</td>
<td>12%</td>
</tr>
<tr>
<td>Serious Mental Health Issues (Women)</td>
<td>26%</td>
</tr>
</tbody>
</table>

Source: www.mooddisorderscanada.ca

www.preventingcrime.ca
Crime Prevention

While risk factors describe negative influences on a person or community, protective factors speak to positive influences and opportunities to improve the lives of individuals and community safety overall. These protective factors include:

- Schools that work for success of all students
- Good parenting
- Strong social supports
- Positive peer group/friends
- Positive relationship with an adult role model
- Healthy prenatal and early childhood development
- Stable housing
- Steady employment
- Strategic poverty reduction
- Opportunities for community engagement

These protective factors, also known as “primary prevention efforts”, focus on the health of a community as a whole and seek to stop negative social and community conditions from developing in the first place. Primary prevention efforts are universally accessible and are the most cost-effective approach over time. Social determinants of health and root causes of crime often call for the same type of intervention approaches.

Secondary prevention efforts attempt to reduce crime after certain warning signs have emerged. Such signs might include anti-social or delinquent behaviour, persistent mistrust of persons in authority or disregard for other’s property (graffiti). Secondary prevention programs focus on a specific problem, population or geographic area and have an equally important role to play in preventing more serious crime in the long term.

Tertiary prevention efforts usually involve law enforcement, justice methods and corrections. By this point, an offender has already been identified to the community and he/she is prevented from committing further crimes. This is an example of crime prevention “after the fact”. It is most commonly confused with crime prevention overall when in fact it is just part of the continuum of prevention.

Prevention that works...

- Is intensive not ad hoc
- Happens in natural settings
- Is long term focused
- Starts as early as possible
- Places a high value on future generations
- Is multi disciplinary
- Encourages citizen engagement and leadership
- Is based in good research and community wisdom

What Can You Do?

Based on an understanding of risk factors, communities can set priorities in pursuit of a healthier environment and improved quality of life. Communities can undertake measures that:

- Reduce poverty
- Reduce school dropout rates
- Invest in comprehensive childhood development initiatives
- Provide affordable housing
- Increase access to rehabilitative programs
- Support literacy
To: Chair Sean Strickland and Members of the Community Services Committee

From: Christiane Sadeler, Executive Director

Date: October 16, 2012

Subject: BETWEEN LIFE AND DEATH: THE BARRIERS TO CALLING 9-1-1 DURING AN OVERDOSE EMERGENCY

File No.: C11-50

This Report examines barriers to calling 9-1-1 during an overdose emergency through a survey of 450 participants across the Waterloo Wellington Health Integration Network (WWLHIN) area and a detailed literature review. In 2007, accidental overdoses were the third leading cause of accidental death both locally and in Ontario, just behind motor vehicle collisions.

This full report can be viewed at http://www.preventingcrime.ca/documents/911Report.pdf

The Report follows recommendations and issues identified in the WRCPC report “A First Portrait of Drug-Related Overdoses in Waterloo Region” (WRCPC 2008), the Waterloo Region Public Health Report “Baseline Study of People Who Use Substances Excluding Alcohol (Centre for Community Based Research, 2008) and recommendation #75 in the Waterloo Region Integrated Drugs Strategy (WRCPC, 2011) to “review the regional emergency response tiered protocol in overdose incidences”. In March 2012, citizens and service providers raised the issue again (Wellington Guelph Drug Strategy and Waterloo Region Crime Prevention Council, Oxy to Oxy: Impact and Recommendations, 2012).

The Report, likely the first of its kind in Canada, was approved in principle by the Waterloo Region Crime Prevention Council in September. Media were present at the meeting and we anticipate on-going interest in this Report.

WRCPC passed the following motion on September 14:

THAT the Waterloo Region Crime Prevention Council receive and approve the report in principle and further, establish an ad hoc working group of the Crime Prevention Council to review the research results and policy options for reducing barriers, including local best practices and report back with progress by December 2012.
Between Life and Death

The Barriers to Calling 9-1-1 During an Overdose Emergency
Between Life and Death:  
The Barriers to Calling 9-1-1 During an Overdose Emergency

Kayla Follett  Researcher, Waterloo Region Crime Prevention Council  
Anthony Piscitelli  Supervisor Planning & Research, Waterloo Region Crime Prevention Council  
Felix Munger  PhD candidate, Wilfrid Laurier University  
Michael Parkinson  Community Engagement Coordinator, Waterloo Region Crime Prevention Council  

We extend a sincere thank you to the 450 people who generously gave their time and experience to the survey team. We are grateful for their participation, without which this study would not exist.

With Support from:  
AGORE Committee  The Advisory Group on Research & Evaluation of WRCPC  
Nadine Bengert  Bachelor of Social Work Student, University of Waterloo  
Estera Brudek  Support Coordinator, Sanguen Health Centre  
Gary Cameron  Professor, Wilfrid Laurier University  
Rhonda Daiter  Ontario Addiction Treatment Centre  
Paul Field  Outreach Worker, InReach  
Thomas Kerr  Co-Director, Addiction and Urban Health Research Initiative  
Lindsay Klassen  Master of Social Work Student (2009), Wilfrid Laurier University  
Mike Matte  Outreach Worker, 40 Baker Street  
Dianne McLeod  Program Coordinator, Cambridge Self-Help Foodbank  
Keely Phillips  Master of Social Work Student, Wilfrid Laurier University  
Carolyn Plater  Ontario Addiction Treatment Centre  
Michael Varenbut  Ontario Addiction Treatment Centre  
Region of Waterloo Public Health  
St. John's Kitchen  

We extend a sincere thank you to the 450 people who generously gave their time and experience to the survey team. We are grateful for their participation, without which this study would not exist.

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September 2012  

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Accessible formats available upon request.

Region of Waterloo Document Number 1278374  
For more information please contact:  
Michael Parkinson,  
Waterloo Region Crime Prevention Council  
mparkinson@regionofwaterloo.ca  
519-883-2304
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Executive Summary

In Ontario and Waterloo Region, accidental poisoning, of which unintentional drug overdoses are the leading component, are the third leading cause of accidental death (Ontario Mortality Data, 2007). In Ontario, opioid-related deaths doubled from 1991 to 2004 from 13.7 per million to 27.2 per million (Dhalla et al., 2009). Fatal and non-fatal overdoses have significant social, health and economic impacts, including loss of productivity and direct costs to health care and law enforcement (Rehm et al., 2006). The societal burden of opioid-related mortality and morbidity in Canada is substantial (Dhalla et al., 2009).

Overdose deaths, and related harms, can be prevented through interventions such as prompt emergency medical attention, but for people who use drugs there are barriers to calling 9-1-1 during these emergencies. Locally, and in most of Canada, a 9-1-1 emergency call triggers a response from police, fire and ambulance.

This research confirms barriers exist to calling 9-1-1 during an accidental overdose in the Waterloo Region, Wellington County and Guelph area. Fear of the criminal justice system is the number one reason people would not call. The research also revealed that populations more likely to witness an overdose are less likely to call 9-1-1 than others in the survey sample. For example, younger individuals are significantly less likely to call 9-1-1 and wait for help to arrive. They are also significantly more likely to cite fearing arrest as a reason they would not make the call.

The barriers to calling 9-1-1 during an accidental drug overdose represent both challenges and opportunities for Waterloo Region to implement mechanisms that will preserve and protect life. While finding a way to appropriately reach individuals at risk of an accidental overdose can be challenging, from a community policing and service provider perspective, addressing issues related to overdoses can provide windows of opportunity to build connections (Cunningham, Sobell, Sobell & Gaskin, 1994). For a population that is traditionally hard-to-reach and serve, lowering the threshold to calling 9-1-1 may forge the path to improved health care and access to resources (Kerr & Palepu, 2001).
Introduction

Described by the Waterloo Region Record as a clean-cut biochemistry student and aspiring pharmacist, Maxim Vasilieva recently plead guilty to a charge of methadone trafficking. Vasilieva received an 18-month conditional sentence, probation for a year, and 50 hours of community service for supplying his girlfriend with a dose of methadone that almost killed her. With a history of recreational-drug experimentation, the couple decided to celebrate their one-year anniversary by trying this prescription painkiller. Over the next two days, the young woman experienced difficulty breathing, walking and talking. Her heart stopped for 30 to 40 minutes and she was placed in a medically induced coma; while in hospital, she became at risk of having her arm amputated due to an infection.

Interestingly, neither Maxim, nor the overdose victim told anyone that the symptoms were due to drugs she had taken, even though she was at high risk of brain damage and death. “Vasilieva had several chances during the crisis to tell people about their drug use, but didn’t admit it until methadone was found in her system and he was confronted by police” (p. B2). Justice Sharon Nicklas explained “this is a prime example of what can go wrong” (Caldwell, 2012, August 25).

Overdose: A Potentially Fatal Loss of Nervous System Functioning

An overdose occurs when a person takes more of a substance or combination of substances than their body can handle. Consequently, the central nervous system is not able to function properly and the person loses control of basic functioning. An opioid overdose will manifest as respiratory failure as the brain fails to keep the lungs breathing while a stimulant overdose can trigger cardiac arrest.

Overdoses can be unintentional and accidental, wherein the person does not realize the quantity, quality, or mixture of substances would cause an overdose, or they can be intentional, thus being an attempt to end their life (Darke, 2011; Wagner et al., 2010; Coffin, Sherman & Curtis, n.d.; Bell & Parkinson, 2008; Tracy et al., 2005). The focus of this study is on accidental overdoses.

Overdoses can be fatal, but typically they are not (Darke, Mattick & Degenhardt, 2003). That some substances are legal or illegal makes no difference to the body. In gauging the acute fatal reaction of psychoactive substances, researchers conclude many illegal substances are “considerably safer than alcohol” (Gable, 2006, p.208).

There are several factors affecting one’s probability of an accidental overdose beyond just amount and type of substance ingested, including ingesting multiple substances, any period of abstinence, mood, setting and more. Substances which can lead to overdose can be categorized into three types: downers (such as alcohol and opioid), stimulants (such as speed and cocaine), and hallucinogen (such as magic mushrooms and LSD). The overdose victim may pass out, have shallow breathing or stop breathing, and they may not respond to loud noises or react to pain. The person’s lips or fingernails may turn blue and their eyes may roll back; they may have heart failure or experience seizures. Table 1 details the different types, common symptoms, and recognizable behaviours of overdoses (Preventing Overdose Waterloo-Wellington, 2012).  

1 For this report, an overdose does not include drug-attributable suicide or attempts.  
2 The current study is primarily concerned with opioid overdoses.
Research based on medical examiner data, ambulance and emergency room records, and surveys of individuals who use drugs (Coffin, Sherman & Curtis, n.d.) indicates several overdose risk factors are fairly consistent across studies. The most notable risk factors for overdose are: mixing drugs\(^3\) (Darke, 2011; Darke & Hall, 2003; Davidson et al., 2003) prior overdose (Stoove et al., 2009), a history of injection (Kinner et al., 2012), a recent period of abstinence such as after treatment or prison (Baca & Grant, 2007; Darke & Hall, 2003), HIV-positive status (Wang et al., 2009); moderately related to overdosing are drug potency and impurities (Darke & Hall, 2003; Coffin et al., n.d.).

\(^3\) Mixing benzodiazepines and alcohol is particularly dangerous (Darke, 2011).

### Table 1: Types of Overdoses

<table>
<thead>
<tr>
<th>Downer</th>
<th>Stimulant</th>
<th>Hallucinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Examples</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>Amphetamine (speed)</td>
<td>Magic mushrooms</td>
</tr>
<tr>
<td>Opioids, such as:</td>
<td>Methamphetamine (crystal meth)</td>
<td>LSD</td>
</tr>
<tr>
<td>• OxyConitn, OxyNeo,</td>
<td>• Cocaine</td>
<td>Ketamine (‘Special K’)</td>
</tr>
<tr>
<td>• Heroin</td>
<td>• Crack cocaine</td>
<td>Peyote</td>
</tr>
<tr>
<td>• Fentanyl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Morphine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Hyrdomorphone,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Dilaudid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Percocet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Diazepam/Valium</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Feels Like</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can’t stay awake</td>
<td>Short of breath</td>
<td>Gasping for air</td>
</tr>
<tr>
<td>No energy or strength</td>
<td>Very hot, sweaty, shaky</td>
<td>Hot, Sweaty</td>
</tr>
<tr>
<td>Can’t walk or talk</td>
<td>Heartbeat is fast</td>
<td>Fidgety</td>
</tr>
<tr>
<td>Clammy skin</td>
<td>Faintness, nausea, chest pain</td>
<td>Rapid, pounding pulse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Irregular heart beat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sense of dread/fear</td>
</tr>
<tr>
<td><strong>Looks Like</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breathing is slow, erratic or has stopped</td>
<td>Tremors, Convulsions, Seizures</td>
<td>Emotional crises</td>
</tr>
<tr>
<td>Snoring or gurgling sounds</td>
<td>Fast or no breathing/pulse</td>
<td>Confusion, anxiety, panic, paranoia, psychosis</td>
</tr>
<tr>
<td>Lips or fingernails are blue, purple</td>
<td>Hot/sweaty skin, overheating</td>
<td>Unwanted hallucinations</td>
</tr>
<tr>
<td>Non-responsive to shouting, rubbing knuckles between nose and upper lip</td>
<td>Confusion, anxiety, panic, paranoia, psychosis</td>
<td>Short or long-term psychosis</td>
</tr>
<tr>
<td></td>
<td>Vomiting/nausea/foaming at mouth</td>
<td></td>
</tr>
</tbody>
</table>
Death from overdose is rarely immediate and the prognosis is usually positive if appropriate interventions are undertaken quickly (Davidson, Ochoa, Hahn, Evans & Moss, 2002). Non-fatal overdoses (NFOD) are still of serious concern as they can lead to significant and long-term health problems, particularly if the person is not treated by medical personnel in a timely manner. For example, NFOD can lead to peripheral neuropathy (numbing of the extremities), rhabdomyolysis (rapid break down of muscle tissue), pulmonary edema (fluid in the lungs), temporary paralysis of the limbs, chest infections, and pneumonia. Treating an overdose victim with serious injuries can cost up to $100,000 (Butler, 2011).

The Likelihood of Overdose Victimization is Influenced by Demographics

Opioid overdose is affecting all sectors of society regardless of class, ethnicity or geography (Beletsky, Burris & Kral, 2009). However, studies show populations who carry a higher burden of overdose can have similar demographic characteristics and are influenced by similar structural forces and systemic inequalities, such as local drug availability (Babor et al, 2010), poverty, and homelessness (Kinner et al., 2012; Wagner et al., 2010; Hall et al., 2008). People who use substances in problematic ways are marginalized by beliefs that drug abuse is self-inflicted and that it is a criminal issue, instead of a health or social issue (Fulton, 2001; Ritson, 1999). Other notable risk factors are the individual’s pattern of consumption and their overdose history (Kinner et al., 2012; Darke, 2011; Stoove, Dietze & Jolley, 2009).

Demographically, males are more likely to die from overdose, while there is reportedly no gender difference for the likelihood of non-fatal overdoses (Marshall et al., 2012; Stoove et al., 2009; Hall et al., 2008; Fischer et al., 2004; Darke et al., 1996). Similarly, in Waterloo Region (2006), 75% of overdose deaths were male and for every one male who experienced a non-fatal overdose emergency and was seen at a local hospital, there were 1.6 females (Bell & Parkinson, 2008). The age of people who overdose is usually 30’s or 40’s (Marshall et al., 2012; Bohnert et al., 2011b; Darke & Hall, 2003) with non-fatal overdoses typically during early thirty’s and fatal overdoses happening later in life (Stoove et al., 2009; Darke & Hall, 2003). Aboriginal people in Canada have highly elevated overdose death rates and premature mortality rates in comparison to the general population (Marshall et al., 2012; Milloy et al., 2010).

Homelessness is associated with higher overdose risks (Kinner et al., 2012; Wagner et al., 2010; Hall et al., 2008; Fischer et al., 2004); poverty, quality of the built environment, and social under-investment are shown to increase the likelihood of overdosing and the likelihood that an overdose will be fatal (Hall et al., 2008). Participation in a methadone treatment program is a protective factor (Kinner et al., 2012; Kerr et al., 2007; Darke & Hall, 2003) as it reduces both non-fatal (Stewart, Gossop & Marsden, 2002) and fatal (Capplehorn, Dalton, Cluff & Petrenas, 1994) overdoses.

The seriousness of overdoses has not received the public attention, or response, it needs (Burris et al., 2009). The stigma of problematic drug use can render overdoses invisible. It casts a veil of silence over the true nature of overdose, namely that prescription drugs are currently a major part of the problem (Burris et al., 2009; Fulton, 2001). Interestingly, in Waterloo Region 88% of people believe the best way to address substance abuse and addiction is through a combination of health and criminal justice approaches (Piscitelli, 2011).
Overdoses the Third Leading Cause of Accidental Death

Overdose is a leading cause of death in Canada. In Ontario, opioid-related deaths doubled from 1991 to 2004 from 13.7 per million to 27.2 per million (Dhalla et al., 2009). In 2007, accidental overdoses or undetermined intent poisonings were the third leading cause of death in Ontario (Ontario Mortality Data, 2007). In the Wellington-Waterloo Local Health Integration Network (LHIN) there were 366 reported emergency room visits related to overdoses in 2010 (See Table 2: Overdose deaths, overdose emergency room visits, and overdose hospitalizations in Waterloo Region, Wellington-Waterloo LHIN, and Ontario). For community members who use legal or illegal drugs for recreational purposes, overdose continues to be the leading cause of premature death (Darke, 2011).

Table 2: Overdose deaths, overdose emergency room visits, and overdose hospitalizations in Waterloo Region, Wellington-Waterloo LHIN, and Ontario

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Rate Per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overdose Deaths Waterloo Region (2007)</td>
<td>17</td>
<td>3.11</td>
</tr>
<tr>
<td>Overdose Deaths Wellington-Waterloo LHIN (2007)</td>
<td>22</td>
<td>2.82</td>
</tr>
<tr>
<td>Overdose Deaths Ontario (2007)</td>
<td>410</td>
<td>2.99</td>
</tr>
<tr>
<td>Emergency Dept Visits Waterloo Region (2010)</td>
<td>273</td>
<td>51.68</td>
</tr>
<tr>
<td>Emergency Dept Visits Ontario (2010)</td>
<td>8282</td>
<td>63.26</td>
</tr>
<tr>
<td>Hospitalizations Waterloo Region (2010)</td>
<td>95</td>
<td>17.73</td>
</tr>
<tr>
<td>Hospitalizations Wellington-Waterloo LHIN (2010)</td>
<td>137</td>
<td>17.97</td>
</tr>
<tr>
<td>Hospitalizations Ontario (2010)</td>
<td>2700</td>
<td>18.98</td>
</tr>
</tbody>
</table>

Of note, there is limited data on the number of overdoses in Canada as a whole and Ontario is no exception. Statistics need to be read with caution as overdose deaths are often underestimated due to recording difficulties and the lack of a standardized nation-wide data collection system (Bell & Parkinson, 2008). Furthermore, different methods of collecting overdose data give a range of total overdoses. Although the data may differ from one source to the next, the extent of accidental overdose continues to stand out as a significant public health concern in Ontario, behind falls and on the heels of motor vehicle collisions; in Peterborough, accidental overdoses are on par with motor vehicle collisions (Peand, 2012); in the U.S.A., among people 25 to 64 years old, unintentional poisoning caused more deaths than motor vehicle crashes (Centers for Disease Control and Prevention, 2012).

Opportunities to Intervene Exist During Overdoses

Drug overdoses frequently happen in the presence of others (Bohnert, Tracy, & Galea, 2012; Baca & Grant, 2007; Hickman et al., 2006; Tracy et al., 2005; Davidson et al., 2002; Strange, Best, Man, Noble & Gossop, 2000; Powis et al., 1999; Darke et al, 1996). In an audit of 148 drug overdose deaths subjected to a Coroner’s investigation during 2003, a witness was present in 61% of the cases. Evidence suggested that death occurred in these cases because the overdoses continued for too long, thus inhibiting effective intervention (Hickman et al., 2006). Tracy and colleagues (2005) show there is a significant likelihood that people who use drugs habitually have an opportunity to save an overdose victim from brain damage or death.

Accidental drug overdoses frequently happen in the presence of others.
Canada Has Been Overlooked When Examining Calling 9-1-1 During an Overdose

Much of the current research on overdoses has taken place in the United States, Europe, and Australia. No research has been found in a Canadian context which examines the barriers to calling 9-1-1 during an overdose. While understanding the local context is important when developing policy, representative local findings can help inform broader policy considerations. It is therefore important to have a Canadian case study to help inform policy decisions that aim to preserve and protect the lives of citizens across Canada. This study will partially address this gap in the literature, using Waterloo Region, Guelph and Wellington County (Ontario) as such a case study exploring barriers to calling 9-1-1 during an accidental overdose emergency.

In Conclusion

Overdose is a significant and complex social, health, and economic issue. There has been a great deal of research done to understand overdoses; that overdose causes death and brain damage; and those most at risk are those who are already largely considered marginalized. There also exists major opportunities to intervene. Overdoses can be prevented and lives can be saved.

Still, the Canadian context is not fully understood. This research seeks to fill a gap by exploring the possible barriers and issues to calling 9-1-1 during overdose situations in a Canadian context. Before examining such barriers, it is important to examine what existing research already tells us about calling 9-1-1 during an overdose.

Literature Review

The majority of research on overdose typically focuses on illicit opioids, specifically the use of drugs by injection, primarily heroin. In recent years, researchers have begun to look at prescription opioids prescribed for acute or chronic pain but are also widely available on the black market for narcotics. Pain experts generally agree opioids are the most effective analgesics (painkiller) available (Cheatle & Savage, 2012). However, in a study examining West Virginia, which experienced the largest increase in drug overdose mortality in the United States from 1999 to 2004 (Hall et al., 2008), opioid analgesics contributed to 93% of the 295 overdose deaths in the state in 2006. Only 44% of the victims had ever been prescribed the drugs. Studies further suggest that increased opioid prescribing is associated with increased opioid-related deaths (Bohnert et al., 2011b; Dhalla, Mamdani, Gomes & Juurlink, 2011; Gomes et al., 2011a; Gomes et al., 2011b; Hall et al., 2008). In the U.S.A., prescription opioids are the substances most often implicated in overdose fatalities (Centers for Disease Control and Prevention, 2011). Indications are that the re-formulation of OxyContin in the U.S.A. in 2010, similar to the policy change in Ontario and other provinces in 2012, has not lead to a decrease in opioid use. In a study of 2,566 people surveyed throughout 2009-2012, almost one-fourth of participants were able to use a reformulated OxyContin, and 66 percent had switched to heroin (Cicero, Ellis & Surratt, 2012).

“In Ontario, from 1991 to 2004, Oxycodone prescriptions rose faster than any other opioid and was accompanied by a five fold rise in Oxycodon related deaths.”

(Dhalla et al., 2009)
Research shows that someone can experience an overdose for one to three hours (Drug Policy Alliance, 2012; Davidson et al., 2002), but the more time that passes before medical help is received, the higher the risk of permanent damage or death (Darke, 2011; Darke, Ross, Zador & Sunjic, 2000; Sporer, Firestone & Isaacs, 1996). Overdose victims need medical attention immediately. Unfortunately, research also shows that rates of calling 9-1-1 during an overdose are low (Tobin, Davey & Latkin, 2005; Darke et al., 2000) or delayed (Pollini et al., 2006a; Tracy et al., 2005), particularly in comparison to rates during other medical emergencies such as heart attacks (Brown et al., 2000). The characteristics and behaviours of people who witness overdoses have been examined; many factors come into play when someone is faced with an overdose emergency (Bohnert et al., 2012; Tracy et al., 2005; Davidson et al., 2002; Darke et al., 1996). One of these factors is the fear of police involvement and subsequent arrest, which stands to be the most prevalent reason people hesitate, or do not call, 9-1-1 (Bohnert et al., 2011a; Baca & Grant, 2007; Tobin et al., 2005; Tracy et al., 2005; Davidson et al., 2002; McGregor, Darke, Ali & Christie, 1998).

**Overdose Victims Need Medical Help Immediately**

Across Waterloo Region, in 2005 there was one overdose 9-1-1 call for every 1.7 hospital admission related to overdose (Bell & Parkinson, 2008). In 2005, there were 411 calls for overdose-related Emergency Medical Services, yet 715 people were admitted into hospital emergency rooms for drug overdose, suggesting that rather than call 9-1-1, victims were dropped at the hospital and the witnesses left (Bell & Parkinson, 2008). This raises concerns about the amount of time before an overdose victim receives medical attention. More specifically, an overdose is a medical emergency, time is of the essence and any delay in treatment can put a person at risk of death or brain damage. For example, Sporer and colleagues (1996), in a San Francisco based study found overdose victims who received emergency medical care while they still had a pulse and blood pressure have survival rates greater than 90% but most overdose cases resulting in death (101 of 117) were reported only after the victim had advanced signs of death.

**Rates of Calling 9-1-1 During an Overdose are Low**

Although people who use drugs can often identify signs and symptoms of overdose (Sherman et al., 2008; McGregor et al., 1998; Powis et al., 1999), sometimes bystanders may not recognize the symptoms as life threatening (Beletsky et al., 2009) and typically rates of calling 9-1-1 during an overdose are low (Bradvik, Hulenvik, Frank, Medvedeo & Berglund, 2007; Tobin et al., 2005; Darke et al., 2000) or delayed (Pollini et al., 2006a; Tracy et al., 2005).

In reviewing 953 coroner files, Darke and colleagues (2000) found that in only 15% of the cases an ambulance was called and in 79% of cases no intervention occurred. Using a cross-sectional survey, Tobin et al. (2005) found that an ambulance was called in only 23% of overdose cases. Pollini et al. (2006a) surveyed 924 people who use and found that 63.4% called but more than half delayed calling by five minutes. Tracy and colleagues (2005) showed similar results, wherein 67.7% of their sample called for medical assistance but 21.2% delayed making the call. Research has also shown people are usually with friends or partners at the time of overdosing and that these bystanders are usually aware of the type(s) of drugs the victim has taken (Strange et al., 2000; Strange et al., 1999).

Studies consistently show that although bystanders are usually aware of the victim’s circumstances, people hesitate to call 9-1-1 when witnessing an overdose and too often the call is never made.
Who the Bystander is Changes the Likelihood of 9-1-1 Being Called

The presence of a female bystander increases the odds of calling 9-1-1 and males report taking longer to call than females. Darke et al. (1996) suggest this difference may be due to gender-defined social norms. Indeed, Tracy and colleagues (2005) showed 70.6% of women called for medical help, while 66.7% of males called. Darke et al. (1996) also suggest that people between the ages of 35 to 44 were most likely to witness an overdose, followed by 25 to 34. Yet, the 35 to 44 age range were not the most likely to have made a 9-1-1 call, instead 25 to 34 year olds were. In other words, people who were more likely to witness an overdose were not the most likely to call 9-1-1.

If a bystander had previously personally overdosed, they are less likely to call 9-1-1 when witnessing an overdose in the future. However, if bystanders were taken to the hospital during their last overdose, they are more likely to call in comparison to people who had not been taken (Tracy et al., 2005). Bohnert et al. (2012) found the more overdoses people witness, the less likely they are to have called 9-1-1 at the last overdose. There is also evidence that “individuals who had witnessed more overdoses were more likely to report potentially dangerous or counterproductive actions at the last overdose they witnessed” (p.170) such as injecting the victim with water, salt, speed or bleach. Such mythical remedies can have detrimental effects on the victim's health (Davidson et al., 2002). For participants who witnessed eleven or more overdoses and delayed or did not call 9-1-1, the main reason for not calling was the belief that the victim could be helped without medical assistance. However, despite having more experience witnessing overdoses, they were no more likely to report that the overdose victim lived (Bohnert et al., 2012).

People who witness overdoses may have greater overdose risk themselves (Bohnert et al., 2012; Tracy et al., 2005). Typically bystander and victim belong to similar social networks and have similar risk characteristics. Tracy and colleagues (2005) looked at the circumstances of 672 people who use heroin, crack, and cocaine, and had witnessed an overdose. They found people who were more likely to witness an overdose were more likely to have overdose risk characteristics, such as previous incarceration, currently injecting, and to have ever overdosed her or himself. Bohnert and colleagues (2012) administered 1,184 structured interviews to people who had recently used heroin and/or cocaine. They found that males, who had experienced homelessness, used heroin, and had overdosed themselves, were more likely to witness an overdose.

Fear of Police Involvement is the Most Common Barrier to Calling 9-1-1

American (Bohnert et al., 2011a; Baca & Grant, 2007; Pollini et al. 2006a; Tobin et al., 2005; Tracy et al., 2005), Australian, (Darke, 2011; McGregor et al.1998; Darke et al., 1996) and European (Togia et al., 2008; Sergeev, Karpets, Sarang & Tikhonov, 2003) research demonstrates there are barriers to calling 9-1-1 during accidental drug overdoses.

The most prevalent reasons for not calling 9-1-1 are fear of police involvement and subsequent arrest (Bohnert et al., 2011a; Baca & Grant 2007; Tobin et al., 2005; Tracy et al., 2005; Davidson et al., 2002; McGregor et al., 1998), as well as having inaccurate information, such as believing they are in control of the situation and can revive the individual (Bohnert et al., 2012; Pollini et al., 2006a; Tracy et al., 2005). Another barrier to calling 9-1-1 is the illegality of certain substances (Health Officers Council of British Columbia, 2005; Kerr, Small & Wood, 2005). Community members are also concerned they will be labeled a “drug user” suggesting stigma can make people less willing to call 9-1-1 (Beletsky et al., 2009). Other common reasons for not calling 9-1-1 are that the bystander may not have access to a phone (Tracy et al., 2005; Davidson et al., 2002) or the person regained consciousness before seeking medical assistance (Davidson et al., 2002).
Surveying Individuals Who Use Substances Problematically is a Challenge

In general, studies on overdoses are limited by several factors. First, convenience samples are usually used because people who use substances illicitly are stigmatized, “hidden”, and difficult to reach for random sampling. This limits a study’s ability to be generalizable. Second, many studies are based on coroner files, however these data sources may be significant underestimations of the problem because autopsies are conducted on only a fraction of people who die, and only a fraction of those have toxicology reports. A cocaine overdose, for example, could be recorded as a cardiac arrest. These methodological issues go beyond the scope of this current report as the research team is focusing solely on the perceived barriers to calling 9-1-1 during an accidental overdose for people who use or used substances. Indeed, research shows us the complexities of overdose emergencies and people who witness them, wherein a “hidden” population live with various risk factors and barriers (Bohnert et al., 2011a; Beletsky et al., 2009; Baca & Grant 2007; Pollini et al., 2006a; Tobin et al., 2005; Tracy et al., 2005; Davidson et al., 2002). This report, of course, does not deal with all methodological and pragmatic issues. What this report does do however, is fill a gap in research by identifying barriers to calling 9-1-1 in a Canadian context and by providing specific policy options for Canadian jurisdictions. Ideally this work will help inform Canada-wide policy discussions that aim to preserve and protect the lives of Canadians.

Study Methodology

It is important to understand the local context, to effectively inform evidence-based interventions, as overdose risks and contextual factors are not entirely comparable between regions and countries (Marshall et al., 2012). This makes finding a representative area for a Canadian case study important for aiding in policy development. The area covered by the Waterloo-Wellington Local Health Integration Network (LHIN)6 is a suitable location to study barriers to calling 9-1-1 during an overdose because it is a geographic area relatively representative of Ontario and Canada in several ways.

The Waterloo-Wellington LHIN is made up of a mix of urban and rural areas with four cities, Kitchener, Waterloo, Cambridge and Guelph, and five rural townships, Wellington, Wilmot, Wellesley, Woolwich and North Dumfries, and Grey County (Local Health Integration Network, 2012b). For the purposes of this study Grey County was largely excluded and minimal responses were received from the other townships. Socio-demographically (see Table 3: Socio-Demographic Profile of Wellington-Waterloo LHIN, Ontario, and Canada) the area covered by the Waterloo-Wellington LHIN, had a labour force participation rate of 71.8% in 2004, while Ontario was 67.3%, and Canada was 67.4% in 2007. In terms of education, 47% of the Waterloo-Wellington population (age 20+) had completed post-secondary education, with 48.7% of Ontarians (2004) and 53% of Canadians (2011). The percentage of people with incomes below the low income cut off (LICO) was 10.2% in Waterloo-Wellington, 14.4% in Ontario (2004) and 9% in Canada (2010).

The age-standardized hospitalization rate per 100,000 due to injury and poisoning was 611 in Waterloo-Wellington and 578.6 in Ontario, meaning that Waterloo-Wellington’s rate of hospitalization due to injury and accidental poisoning is 10% higher than the provincial percentage. In Waterloo-Wellington, 20.6% of deaths occur before the age of 65 and 40.5% occur before the age of 75. In Ontario, percentages are 21.3% and 41.2% respectively. Wellington-Waterloo has a lower percentage of Aboriginal identified people, with 0.7% in 2006 compared to 3.8% in Canada. This is noteworthy as Aboriginal people in Canada are at higher risk of overdosing than non-Aboriginal Canadians (Human Resources and Skills Development Canada, 2012a; Human Resources and Skills Development Canada, 2012a).
Between Life and Death The Barriers to Calling 9-1-1

Canada, 2012b; Human Resources and Skills Development Canada, 2012c; Statistics Canada, 2012; Canadian Institute for Health Information, 2011; Milloy et al., 2010; Health System Intelligence Project, 2004; Region of Waterloo, n.d.). In conclusion, the Waterloo-Wellington LHIN is a relatively good representation of Ontario and Canada because of its geography and socio-demographic characteristics.

Table 3: Socio-Demographic Profile of Wellington-Waterloo, Ontario, and Canada

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour Force Participation (age 15+)</td>
<td>71.8%</td>
<td>67.3%</td>
<td>67.4% (2007)</td>
</tr>
<tr>
<td>Population (age 20+), completed post-secondary education</td>
<td>47%</td>
<td>48.7%</td>
<td>53% (2011)</td>
</tr>
<tr>
<td>Percentage of people in low income</td>
<td>10.2%</td>
<td>14.4%</td>
<td>9% (2010)</td>
</tr>
<tr>
<td>Age-standardized hospitalization rate per 100,000 due to injury and poisoning</td>
<td>611</td>
<td>578.6</td>
<td>534 (2009)</td>
</tr>
<tr>
<td>Population of Aboriginal Identified</td>
<td>0.7%</td>
<td>1.7%</td>
<td>3.8% (2006)</td>
</tr>
</tbody>
</table>

Waterloo Region, a sub-geography within the Waterloo-Wellington LHIN has had a substantial amount of previous research conducted. The Waterloo Region Crime Prevention Council published the “Waterloo Region Integrated Drugs Strategy” (2011), which marks a local attempt at creating and implementing a comprehensive strategy that includes integration, prevention, harm reduction, recovery and criminal justice initiatives. In relation to overdoses, it recommends a review on the regional emergency response protocol during overdoses, enhanced local data on drug-overdose related emergencies, and overdose prevention strategies. “A First Portrait of Drug-Related Overdoses in Waterloo Region” (Bell & Parkinson, 2008) examines the extent of drug-related overdose emergencies and deaths in Waterloo Region. “Saving lives: Overdose prevention and intervention projects in select North American cities” (Weisser & Parkinson, 2008) identifies key elements of programs that prevent and reduce drug-related overdoses. “Baseline Study of Substance Use, Excluding Alcohol in Waterloo Region” (Centre for Community Based Research, 2008) indicates that local community members are reluctant to call 9-1-1 during an overdose. Half of the 32 participants believed the people in their social network that used drugs would be unlikely to seek medical help on their behalf.

“They believed that their friends would either try to help them themselves or would simply flee the scene. The remaining half of the PWUD [People Who Use Drugs] felt confident that members of their social network would contact health providers. In some situations, a friend would then stay with them until the medical response arrived, while others would flee the scene once a call to emergency had been made.” (p.31).

The Baseline Study of Substance Use Excluding Alcohol findings are consistent with the findings of the current study. This cross-study validation shows one of the benefits of conducting research in a region that has been studying accidental overdoses as it provides a firm understanding of local challenges and opportunities.

7 Hospitalization due to poisoning is not included in this number.
Survey Administration Designed to Reach a Large Sample of People

This research specifically seeks to understand if there are issues or barriers to calling 9-1-1 during emergencies of suspected accidental overdoses in the Waterloo-Wellington LHIN area. The project has been reviewed by the Wilfrid Laurier University, Research Ethics Board in Waterloo, Ontario. Two populations were surveyed: clients of Ontario Addiction Treatment Centres (OATC) and people who access local outreach services.

Staff and students at the Waterloo Region Crime Prevention Council administered a survey to the clientele of the “Ontario Addiction Treatment Centres” (OATC) in Kitchener, Cambridge, and Guelph on four separate days from April 19 to May 10, 2012. The OATC is the primary provider of methadone locally, a substitution therapy used to treat opioid addiction. The surveys were also administered by outreach workers across the WYLHIN, and Waterloo Region Public Health Staff in Cambridge and Waterloo. A poster to advertise the study and the survey was placed in the OATC’s and emailed to the outreach workers a week before the administration began.

Each person who participated was given an information letter explaining the survey, a card with the local Mental Health Crisis line phone number on it, and an information card from Public Health regarding calling 9-1-1 during drug overdoses. Once the surveys were administered at OATC, they were placed anonymously in a box and brought to the Crime Prevention Council Office immediately after daily survey administration, and locked in a secure cabinet. For the outreach workers, participants placed their surveys in envelops, sealed them, and marked the seal. These processes ensured anonymity.

The Survey was Revised to Ensure Accurate Results

After administering the surveys for the first time, Crime Prevention Council staff and students noticed there was a disconnection within survey responses. In the original survey (n= 159) 91 people indicated they had witnessed an overdose. Among these respondents 44% (n=40) indicated 9-1-1 was called at the most recent overdose, 51% (n = 46) indicated 9-1-1 was not called and 5% (n=5) indicated they did not know if 9-1-1 was called. Among those who did not call or did not know if 9-1-1 was called 72% (n=33) thought they would call 9-1-1 if they were to witness an overdose in the future. This result seems unlikely as past practice is one of the best predictors of future behaviour (Ajzen, 2002).

It is plausible some respondents who did not call 9-1-1 in the past would call in future. Since the original survey was only conducted at two OATC locations, some respondent’s life circumstances would have significantly changed, in other cases it is possible respondents witnessed individuals die as a result of an overdose and this changed their propensity to call. However, it seems unlikely that so many respondents who had not called 9-1-1 in the past when witnessing an overdose would call in the future. The survey team therefore modified the survey slightly (see Appendices A & B).

The revised edition of the survey had some other minor additions. Retirement was added as an option for personal circumstances. Retirement was handwritten by a few respondents on the original survey. These results were coded as retirement. In addition, “including OW/ODSP” (Ontario Works/ Ontario Disability Support Program, Ontario’s terms for social assistance programs) was added as an explanation below social assistance. This change was a result of questions from some survey respondents. Once the surveys were complete, results were coded. During the coding if a response was inputted despite a previous question result suggesting the question should be skipped it was coded as missing. In addition, if a respondent checked off two options when only one option was allowed this was also coded as a missing variable.
The final results were explored using frequency tables and then compared using crosstabulations. Frequency tables allow the ranking of results. Crosstabulations places data in a table to show relationships between variables. These techniques illuminated the barriers to calling 9-1-1 in the area covered by the Waterloo-Wellington LHIN.

**Results**

The Overdose Response Survey was administered to individuals who use or have used illicit drugs and/or alcohol and/or prescription drugs for recreational purposes. The demographics of this population as a whole are not known; therefore it is not possible to assess how well the demographics of respondents are representative of all people who use illicit drugs problematically and people who use prescription drugs for recreational purposes.

The survey was conducted from April 19, 2012 to July 15, 2012 inclusively. During this time a total of 450 surveys were completed. Among these 159 were completed before the survey was revised, which were all completed at methadone clinics. The revised survey had 291 respondents of which 180 were completed at methadone clinics and 111 through outreach workers or at public health needle exchange clinics.

**High Response Rates**

Response rates were tracked at the methadone clinics. The results showed 71% of individuals approached completed the original survey. The response rate was higher on the revised survey at 76%. Response rates were also higher among females for both surveys.

**Table 4: Response Rates of Methadone Participants**

<table>
<thead>
<tr>
<th>Survey</th>
<th>Total (%)</th>
<th>Males (%)</th>
<th>Females (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Survey Kitchener</td>
<td>67.6</td>
<td>62.9</td>
<td>73.2</td>
</tr>
<tr>
<td>Original Survey Cambridge</td>
<td>65.5</td>
<td>57.1</td>
<td>75.0</td>
</tr>
<tr>
<td>Revised Survey Cambridge</td>
<td>78.1</td>
<td>70.9</td>
<td>89.1</td>
</tr>
<tr>
<td>Revised Survey Guelph</td>
<td>72.7</td>
<td>67.7</td>
<td>78.6</td>
</tr>
<tr>
<td>Original Survey Total</td>
<td>67.1</td>
<td>61.6</td>
<td>73.7</td>
</tr>
<tr>
<td>Revised Survey Total</td>
<td>75.6</td>
<td>69.4</td>
<td>84.1</td>
</tr>
<tr>
<td>All Survey Total</td>
<td>71.4</td>
<td>65.4</td>
<td>79.3</td>
</tr>
</tbody>
</table>

**Survey Demographic Suggest the Target Population was Reached**

The 450 survey respondents were 62% male and 38% female, not including respondents who identified as ‘other’. Only a small number of people identified as ‘other’ therefore these individuals were excluded from reporting to protect their confidentiality. These percentages were the same for the original survey and the revised survey. Examining only the revised survey results shows a slight different between males and females when comparing outreach clients to methadone clinic clients. The methadone clinic showed 40% of respondents as female and 60% as male whereas among outreach clients the breakdown was 31% to 69%.
Table 5(a): Demographics Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Original Survey</th>
<th>Revised Survey</th>
<th>Total Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>62%</td>
<td>62%</td>
<td>62%</td>
</tr>
<tr>
<td>Female</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
</tr>
</tbody>
</table>

Thirty six per cent of survey respondents were between 16 and 29 years of age, 42% between 30 and 45 and 22% above 46. Survey respondents were slightly younger in the revised survey. Examining the revised survey comparing outreach to methadone clinic shows some minor but non-statistically significant differences. In fact, the breakdown of the outreach clients was 43% among 16-29 year olds, 33% among 30-45 year olds and 24% were 46 or older. In comparison the methadone clients were 34% 16-29, 44% 30-45 and 22% were 46 or older.

Table 5(b): Demographics Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Original Survey</th>
<th>Revised Survey</th>
<th>Total Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-29</td>
<td>29%</td>
<td>40%</td>
<td>36%</td>
</tr>
<tr>
<td>30-45</td>
<td>48%</td>
<td>38%</td>
<td>42%</td>
</tr>
<tr>
<td>46+</td>
<td>23%</td>
<td>22%</td>
<td>22%</td>
</tr>
</tbody>
</table>

The participant-identified residence for respondents varies considerably between the original and revised survey, likely because of the location of the methadone clinics. Overall one third of respondents came from Kitchener, 31% from Cambridge, 24% from Guelph, 6% from Waterloo and 6% from area classified as ‘other’. The areas included in the ‘Other’ category represented a township within the Waterloo-Wellington LHIN boundaries, or a city or township outside of the Waterloo-Wellington LHIN boundaries.

Table 5(c): Demographics City of Residence

<table>
<thead>
<tr>
<th>City</th>
<th>Original Survey</th>
<th>Revised Survey</th>
<th>Total Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterloo</td>
<td>10%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Kitchener</td>
<td>59%</td>
<td>18%</td>
<td>33%</td>
</tr>
<tr>
<td>Cambridge</td>
<td>24%</td>
<td>35%</td>
<td>31%</td>
</tr>
<tr>
<td>Guelph</td>
<td>0%</td>
<td>38%</td>
<td>24%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
<td>5%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Other demographics were relatively similar between the original and revised survey. A total of 24% of respondents indicated they were on probation or parole at the time of the survey. Thirty-eight per cent of respondents had children under 17. Finally, and perhaps most importantly, 65% of our sample indicated they have used illicit drugs in the past year and 59% had used prescription drugs for recreational purposes in the past year. A total of 71% had used illicit drugs or prescription drugs for recreational purposes in the past year. This clearly indicates that the research team reached the target population as individuals who use illicit drugs and drugs for recreational purposes are more likely to witness an overdose (Tracy et al., 2005).
Most of the Survey Respondents Have Experience with Overdoses

The majority of respondents, 59%, had witnessed at least one overdose. Among those who said they saw an overdose, 76% had witnessed between one and four overdoses. Among those who had witnessed an overdose, 46% said the last time they witnessed an overdose someone called 9-1-1. This means that in slightly more than half the cases 9-1-1 was not called or the respondents did not know if it was called. This low calling rate is consistent with the findings in the literature (Tobin et al., 2005; Darke et al., 2000).

Approximately 1 in 5 Respondents Have Had Overdose Prevention Training

Survey respondents were also asked if they had received any training on how to prevent overdoses. Approximately one in five indicated they had received such training.
Table 7: Received Training on Overdose Prevention

<table>
<thead>
<tr>
<th></th>
<th>Original Survey</th>
<th>Revised Survey</th>
<th>Total Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overdose Training</td>
<td>23%</td>
<td>17%</td>
<td>19%</td>
</tr>
</tbody>
</table>

However, the kind of training varied from CPR/First Aid training with 19 respondents. The second most common response was Self Taught with 8 respondents. Third was POWW (Preventing Overdose Waterloo Wellington, a local group of individuals active in training service providers and individuals in overdose prevention and intervention) training with 5 responses. In addition 21 respondents indicated some other type of training and 7 respondents made a comment not related to training. Self taught as the second most common answer is a concern as street remedies can often be dangerous for overdose victims (Warner-Smith et al., 2000).

Received Training on Overdose Prevention and Intervention

What to do and what not to do during an Overdose

Street remedies during an overdose can often be dangerous for the victim, causing injuries such as burns, bruises, broken bones & hypertension (Warner-Smith, Darke & Day, 2002). Common street responses include slapping the victim, inflicting painful stimuli, walking them around, injecting them with saline, milk or other drugs, placing ice on them, or putting them in a cold shower (Baca & Grant, 2007; Pollini et al., 2006a; Tracy et al., 2005). Bystanders do these things more often than one may hope. Pollini et al. (2006a) showed bystanders typically walked the victim (71%), shook them (65%), inflicted pain (63%) & injected with salt water (26%). These responses and percentages vary of course, and in comparison to other studies, Tracy et al. (2005) demonstrated a higher percentage (19.3%) of respondents who injected the victim with water, salt, bleach, or speed. Ultimately, street remedies can delay appropriate responses and can cause further harm. Examples of appropriate responses include calling 9-1-1, administering first aid measures such as cardiopulmonary resuscitation (CPR), placing the victim in a recovery position or providing Naloxone (Centers for Disease Control and Prevention, 2012).
Two Thirds of Respondents Would Call 9-1-1 in a Future Overdose Situation

Just over half (54%) of respondents to the revised survey indicated that if in future they saw an overdose they would call 9-1-1 and wait for help to arrive.

Among those that would not call and wait, 25% indicated they would call but not wait for help to arrive. This means approximately 2/3 of respondents thought they would call 9-1-1 if they witness an overdose in future. This study found no statistically significant difference between males and females with respect to if 9-1-1 was called during the most recent overdose that they witnessed. This is in contrast to previous studies that found that females were more likely to call 9-1-1 in comparison to males (Tracy et al., 2005).

Fear of Arrest the Most Common Barrier to Calling 9-1-1

The most common concern cited by respondents was fear of being arrested. This was stated by 28% of all respondents and 53% of respondents who would not call 9-1-1 and wait. The second most common concern was breaching probation or parole at 16% or 30% of those who would not call and wait. This numbers jumps significantly to 53% if only respondents on probation or parole are included. The third most common response among those that would not call 9-1-1 was fear of losing custody of children. This was stated by 24% of respondents who would not call 9-1-1 and wait. It was cited as a concern by 43% of respondents with children and 73% of women with children. This last percentage should be used with caution as only 15 women with children answered the revised surveyed. Next was fear of damaging relationship with employer or losing one’s job which was cited by 24% of those who would not call 9-1-1 and wait. This number increases to 38% if only those who indicated they were employed are included. Other common barriers for respondents (10-15%) were: getting drugs confiscated; friends and/or family finding out; cost of ambulance; don’t have access to a phone; and relationship with landlord. The final four responses were each identified by less than 14% of those who would not call 9-1-1 and wait. They include: dislike paramedics or hospital personnel; I can take care of it; don’t believe 9-1-1 would help; and I have Narcan/Naloxone and would administer it (see Table 8: Barriers to Calling 9-1-1 During an Overdose).

Diagram 1: Summary of Survey Responses
Table 8: Barriers to Calling 9-1-1 During an Overdose

<table>
<thead>
<tr>
<th>Response</th>
<th>All Respondents</th>
<th>Excluding Would Call and Wait</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would call and wait until help arrived</td>
<td>54%</td>
<td>-</td>
</tr>
<tr>
<td>(n=243)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Would call and leave</td>
<td>14%</td>
<td>25%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>Getting arrested</td>
<td>28%</td>
<td>53%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>Breaching probation/parole</td>
<td>16%</td>
<td>30%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>On parole/probation</td>
<td>43%</td>
<td>53%</td>
</tr>
<tr>
<td>(n=63)</td>
<td>(n=40)</td>
<td></td>
</tr>
<tr>
<td>Losing custody of children</td>
<td>14%</td>
<td>24%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>With children</td>
<td>22%</td>
<td>43%</td>
</tr>
<tr>
<td>(n=91)</td>
<td>(n=35)</td>
<td></td>
</tr>
<tr>
<td>Women with children</td>
<td>28%</td>
<td>73%</td>
</tr>
<tr>
<td>(n=46)</td>
<td>(n=15)</td>
<td></td>
</tr>
<tr>
<td>Employer Relationships</td>
<td>13%</td>
<td>24%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>18%</td>
<td>38%</td>
</tr>
<tr>
<td>(n=71)</td>
<td>(n=29)</td>
<td></td>
</tr>
<tr>
<td>Getting drugs confiscated</td>
<td>14%</td>
<td>23%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>Friends, family finding out</td>
<td>14%</td>
<td>22%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>Cost of ambulance</td>
<td>12%</td>
<td>22%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>Don't have phone access</td>
<td>15%</td>
<td>21%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>Relationship with landlord</td>
<td>10%</td>
<td>19%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>Dislike paramedics/hospital</td>
<td>7%</td>
<td>14%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>I can take care of it</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>Don't Believe 9-1-1 will help</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
<tr>
<td>Have Narcan/Naloxone</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>(n=243)</td>
<td>(n=112)</td>
<td></td>
</tr>
</tbody>
</table>

8 Percentages do not add up to 100 as respondents were asked to choose more than one if applicable (see Appendices A & B).
Discussion

A pproximately two thirds of survey respondents said if they saw an overdose in the future they would call 9-1-1 and half of the sample would call and wait for help to arrive. This is promising, however, it is not ideal. It compares poorly with bystander responses to other medical emergencies such as heart attacks, where “community members intending to use EMS during a witnessed cardiac event was 89%” (Brown et al., 2000, p.173). The results look even worse when asking people about the last overdose they had witnessed. In these circumstances only 46% of respondents indicated that they knew 9-1-1 had been called. This is significantly lower than other related studies which indicate that during the last witnessed heroin overdose, 9-1-1 was called 67.7% of the time (Tracy et al., 2005). Note, the question in both studies asked if 9-1-1 was called, not if the respondent called it. So in some of these circumstances it is likely that someone other than the respondent called 9-1-1. While 43% of respondents indicated 9-1-1 was not called and another 11% did not know if 9-1-1 was called or not. Comparing these results to the 2/3 of respondents who said they would call 9-1-1 in the future suggests either the respondents are being overly optimistic about if they will call 9-1-1 in future and/or the sample captures a number of individuals who are unlikely to witness an overdose but would call 9-1-1 if they did see one. There is some evidence, as will be shown shortly, to suggest both of these issues cause the discrepancy in results.

In the revised survey 60% of those who called 9-1-1 in the past indicated they would call and wait for help to arrive, this compares to only 33% in the did not call or do not know group. This still means almost half (49%) of the respondents who did not call in the past believe they would call in the future. While this number is more plausible, it still seems high.

Considering the results from the original survey and the revised survey suggest that it is plausible that some individuals are being overly optimistic about the likelihood they will call 9-1-1 in future should they witness an overdose. Since past behaviour is often a good predictor of future behaviour (Ajzen, 2002) it is likely that some of the participants who did not call 9-1-1 at the most recent overdose they witnessed are overestimating the likelihood they will call 9-1-1 in future overdose situations.

Witnesses to a Past Overdose More Likely to Fear Calling 9-1-1

A crosstabulation was conducted to compare the likelihood of calling 9-1-1 among individuals who have witnessed an overdose to those who have not. Those who had not witnessed an overdose were significantly more likely to believe they would call 9-1-1 and wait for help to arrive. This holds true when comparing these individuals to those who would not call and wait and when separating those who would call and run. The number of overdoses witnessed also predicts the likelihood of calling 9-1-1 during an overdose.
The likelihood of calling 9-1-1 decreases as the number of overdoses witnessed increases up until someone has witnessed four overdoses. Individuals who have witnessed more than four overdoses are about as likely to call 9-1-1 as those who have not witnessed an overdose. This is an interesting contrast to previous studies (Bohnert et al., 2012; Tracy et al., 2005; Davidson et al., 2002). Tracy et al. (2005) found that when participants witnessed 1 to 2 overdoses, there was a 73% chance they would call 9-1-1 in the future; the chance that someone would call continuously decreased the more overdoses one witnessed. Likewise Bohnert et al. (2012) examined the association between number of overdoses ever witnessed and the likelihood that 9-1-1 was called. They found participants who witnessed 11 or more overdoses were significantly less likely to call in comparison to people who had witnessed 1 or 2. They also found the more overdoses participants witnessed, the more likely they were to engage in street remedies. Similarly, this study found a positive relationship between a respondent indicating “I can take care of it” and number of overdoses witnessed. However, this result was not statistically significant.

A crosstabulation exploring fear of arrest compared individuals who witnessed an overdose to those that have not witnessed one. These results showed witnessing an overdose is significantly related to a respondent citing fear of being arrested being a barrier to calling 9-1-1. Unfortunately the research team does not know how often overdose bystanders are arrested locally, however, previous studies indicate that police presence is common, but arrests are not (Tobin et al., 2005). “Little research has been conducted that examines police and bystander interactions during overdose. It is possible that exposure to police contradicts the perception that arrest is common, thus minimizing its effect as a barrier to calling 911” (p. 403). Interestingly, Zakrison, Hamel & Hwang (2004) examined the possible health effects of a lack of trust in police and paramedics, specifically amongst the homeless population in Toronto. The study found that amongst 160 people who use emergency shelters, 61% had interacted with the police in the last 12 months and 37% interacted with paramedics. In an emergency situation, 92% of participants expressed willingness to call paramedics, but only 69% of participants expressed willingness to call police. Only 7% of participants in this study said they do not trust hospital personnel. This is fortunate as levels of trust may have health consequences such as the avoidance or delay in seeking help in emergency situations.

Overall the crosstabulations suggest that individuals who have witnessed an overdose are more likely to fear being arrested and less likely to call 9-1-1. Results show those who are more likely to witness an overdose are less likely to call 9-1-1. The results suggesting 9-1-1 would be called by respondents in approximately 2/3 of overdose cases may therefore overestimate the likelihood of calling occurring during an actual overdose emergency. Using the individuals who witnessed an overdose in the past as proxies for those who are likely to witness an overdose in the future means those who would call 9-1-1 are less likely to witness an overdose.
Fear of Criminal Justice Response is the Most Significant Barrier to Calling 9-1-1

The overall results clearly indicate fear of being arrested is a significant barrier to calling 9-1-1 during an overdose. This was the most common reason people cited as a concern. The second most common answer, fear of breaching probation or parole is a very similar type of answer lending further credence to the argument that fear of criminal justice is a barrier to calling 9-1-1 during an overdose. When delving deeper into the results, this barrier becomes even more evident.

Amongst the 63 individuals on probation and parole, just 37% indicated they would call and wait for help to arrive. This is significantly less than other respondents. Those on probation and parole are afraid of breaching their conditions (for example, conditions related to not being in the company of people who use substances, not engaging in personal substance use etc.), as previously noted. They are also more likely to be afraid of being arrested than other respondents. For participants who were on probation, 43% said breaching their condition was a concern.

People who Use Illicit Drugs and Younger People are Less Likely to Call 9-1-1

Individuals who have used illicit drugs in the past year are significantly less likely to call 9-1-1 and wait for help to arrive. They are also significantly more likely to call and run.

Younger individuals are significantly less likely to call 9-1-1 and wait for help to arrive. They are also significantly more likely to cite fearing arrest as a reason they would not call 9-1-1.

Methadone Clients Have Some Differences Compared to Outreach Clients

Comparing individuals surveyed at methadone clinics to outreach clients reveals a number of significant differences. These results are generally not surprising as individuals in a methadone clinic are more likely to be in, or on the road to, recovery than outreach clients.

Methadone clients were more likely to be employed, a student or be retired whereas outreach clients were more likely to have no income or be on social assistance. Methadone clients were more likely to have used prescription drugs in the past year for recreational purposes. Outreach clients were more likely to have witnessed an overdose. This makes intuitive sense as it is likely that a number of methadone clinic clients became addicted to opioid-based painkillers. Interestingly, outreach clients were also more likely to state 9-1-1 was called the last time they witnessed an overdose. Methadone clients, however, were more likely to say that if they saw an overdose in future they would call 9-1-1 and wait for help to arrive. This is an interesting contrast which suggests multiple possibilities. For methadone clinic clients it suggests their life circumstances may have changed and they now have less to fear about calling 9-1-1 during an overdose. It could also suggest that methadone clients are more likely to overdose in private with fewer witnesses who will call 9-1-1. With regard to outreach clients it could be that some outreach clients would not call 9-1-1 in an overdose but at the most recent overdose they witnessed someone else did call 9-1-1. This would be more likely if outreach clients witnessed their overdoses in group settings. It could also suggest that some individuals previously have called 9-1-1 but had poor experiences and would not call again in the future. Finally, outreach clients were more likely to cite not having a phone as a reason they would not be able to call 9-1-1 if they witnessed an overdose in future.
### Table 9: Differences in demographics, substance use trends, and witness behaviour of methadone and outreach participants

<table>
<thead>
<tr>
<th>Methadone Clients (n= 180)</th>
<th>Outreach Clients (n= 111)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
</tr>
<tr>
<td>More likely to be employed, a student, or retired</td>
<td>More likely to have no income or be on social assistance</td>
</tr>
<tr>
<td><strong>Substance Use</strong></td>
<td></td>
</tr>
<tr>
<td>More likely to use prescription drugs in the past year for recreational purposes</td>
<td>Less likely to use prescription drugs in the past year for recreational purposes</td>
</tr>
<tr>
<td><strong>Witnessing Overdoses</strong></td>
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<tr>
<td>More likely to say they will call 9-1-1 and wait for help to arrive, should they witness an overdose in the future</td>
<td>More likely to witness an overdose</td>
</tr>
<tr>
<td>More likely to say 9-1-1 was called the last time they witnessed an overdose</td>
<td></td>
</tr>
</tbody>
</table>

### This Study Faces Some Limitations

There are several limitations to this study. First, participant responses are subject to error and bias in recall, mainly due to the time that transpired between the last witnessed overdose and when they completed the survey. Second, a participant’s responses were likely affected by positivity bias, meaning they could have overestimated the probability that they would call 9-1-1 as this is the most socially desirable thing to do. Third, the environment of the methadone clinic may have affected responses. For example participants may have been in a rush, may have been frustrated by delays in waiting for service, or may be skeptical of why such information was being collected. Fourth, participants were not asked about their ethnic or cultural identity, specifically regarding Aboriginal or non-Aboriginal identity. This is important as Aboriginal identified people are at higher risk of overdosing (Marshall et al., 2012; Milloy et al., 2010). Still, only 0.7% of the population in Wellington-Waterloo LHIN identified as Aboriginal during a Health System Intelligence Project (2004), therefore it is unlikely the survey reached a significant proportion of Aboriginal people. Fifth, the results are based on a convenience sample therefore generalizing these numbers to describe other populations’ needs to be done cautiously. Lastly, the outreach participant recruitment method did not allow the research team to access a refusal rate.

This research project will conclude by exploring policy options to reduce death and injury by increasing the likelihood of a witness calling 9-1-1 during an overdose emergency. Recommendations from previous local reports will be summarized together with findings from this report. Policies, which are in place in Canada and the United States that aim to increase calls to 9-1-1 during an overdose emergency will be reviewed.
Policy Options

Understanding the local context is essential for policy development. Community size (Wardman & Quantz, 2006), population density, distribution of populations who are considered at-risk (Marshall et al., 2012), access to health and financial resources, social environment, availability of research infrastructure (Buxton, Preston, Mak, Harvard, Barley, & BC Harm Reduction Strategies and Services Committee, 2008; Wardman & Quantz, 2006), attitudes toward harm reduction strategies and cultural differences (Wardman & Quantz, 2006) each have implications for policy and programming related to the preservation and protection of life for those at risk of an accidental overdose.

For Waterloo Region, significant research has explored problematic substance use within the local context, putting the area in a unique position to craft policies and programs that save lives and reduce harm. Accidental overdoses have been the subject of inquiry since 2008, and an overdose prevention group, Preventing Overdose Waterloo-Wellington (POWW), began training locally and in Southern Ontario in 2009.

Existing Recommendations from Local Research

Several recent local studies have made recommendations relating specifically to accidental overdoses. These recommendations include interventions such as: Naloxone provision; training and education; ongoing local data collection; reviewing emergency protocol; and future research.

Table 10: Waterloo Region Reports with Recommendations on Accidental Overdoses

<table>
<thead>
<tr>
<th>Source</th>
<th>Harm Reduction Programs</th>
<th>Naloxone Provision</th>
<th>Education</th>
<th>Local Data Collection</th>
<th>Review Emerg. Protocol</th>
<th>Future Research</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRCPC(^2) (2011)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>- Introduce a local warning system(^4)</td>
<td></td>
</tr>
<tr>
<td>Bell &amp; Parkinson (2008)(^3)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>- Peer-based cascade training(^6)</td>
<td></td>
</tr>
<tr>
<td>Weisser &amp; Parkinson (2008)(^5)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centre for Community Based Research(^7) (2008)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>WG Drug Strategy &amp; WRCPC (2012)(^17)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comprehensive programming provides holistic approaches to overdose prevention and intervention. It can include treatment programs, educational interventions, take-home Naloxone programs, and structural interventions such as providing supportive housing for people who are at risk of overdosing (Marshall et al., 2012; Albert et al., 2011).

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1. Harm reduction involves a range of non-judgmental interventions which provide enhanced resources, supports, and skills for individuals, families, and communities. These interventions reduce the potentially adverse health, social and economic consequences of problematic substance use. It can include, but does not require, abstinence (Waterloo Region Crime Prevention Council, 2011)
2. “Integrated Drugs Strategy”
3. A first portrait of drug-related overdoses in Waterloo Region
4. A local warning system would let people know when bad or lethal drugs become available.
5. “Saving lives: Overdose prevention and intervention projects in select North American cities”
6. See Appendix D
7. “Baseline study of substance use, excluding alcohol”
Naloxone Saves Lives

Naloxone, also known as Narcan, is the “treatment of choice to reverse the potentially fatal respiratory depression cause by overdose of heroin and other opioids” (Centers for Disease Control and Prevention, 2012, p.1). Naloxone is most effective as part of a comprehensive program. One successful and comprehensive program using Naloxone is “Project Lazarus”. Developed in North Carolina, the program includes components such as education for prescribers and people “at risk”, monitoring, and harm reduction interventions (Albert et al., 2011). The program’s “principle efforts include education of primary care providers in managing chronic pain and safe opioid prescribing, largely through the creation of a tool kit and face-to-face meetings” (p.577). Preliminary evaluations show fatal overdose rates dropped from 46.6 per 100,000 in 2009 to 29.0 per 100,000 in 2010 (Albert et al., 2011). An important intervention within comprehensive programming is take-home Naloxone and the training on how to use it. These programs are widely regarded as the soundest evidence-based intervention to prevent overdoses from becoming fatal (Centers for Disease Control and Prevention, 2012; Wagner et al., 2010; Kim, Irwin & Khoshnood, 2009; Maxwell, Bigg, Stanczykiewicz & Carlberg-Racich, 2006; Davidson et al., 2002).

In 2012, Naloxone was made available free of charge in Ontario by the Ontario Harm Reduction Distribution Program to organizations with an interest in reducing opioid overdose fatalities and injuries. Kits can be individually prescribed by a medical doctor and/or a medical directive (e.g. from medical officer of health or other medical doctor at, for example, a Community Health Centre) that can allow medical and/or non-medical staff to dispense Naloxone as set out in the directive. (Ontario Harm Reduction Distribution Program, 2012; Deeth, 2012, September 3).

Policy Can Influence How Strongly Drug Use is Associated with Drug-Related Harms

Drug overdose is often thought to be caused by the drug itself or by the person using the drug. However, Babor et al. (2010) point out that on a deeper level, the incident may have been determined by contextual factors, such as the availability of the drug in the community or whether local policies support Naloxone availability. In Marshall et al.’s (2012) study, where fatal overdoses were highest in rural areas close to the U.S.-Canada border, the authors point out that during the time of their study (2001-2005) Canada Border Services Agency reported a tripling in the amount of cocaine seized; they speculate those changes in trafficking routes, in combination with a marked increase in cocaine purity, may explain the geographic variations they observed. Conceptually, the harms that can result from the political and social responses to local drug use can be separated from the harms caused by the drug itself. Policymakers can influence how strongly drug use is associated with drug-related harms (Babor et al., 2010).

Local law enforcement policy determines the degree to which police are likely to arrest during an overdose. These policies are often influenced by the “Broken Windows Theory” which posits that minor criminal activity and disorder cause fear in community members, which decreases cohesiveness and ultimately results in a decrease of informal control over unacceptable behaviours. Decreased informal control leads to more serious crime; aggressive enforcement against minor violations circumvents the fear-crime cycle (Hinkle & Weisburd, 2008). Although this theory may work in some enforcement contexts, research shows the relationship between misdemeanor arrests and drug overdose is considerably more complicated (Bohnert et al., 2011a; Hinkle & Weisburd, 2008).

17 “Threshold” refers to “the eligibility criteria for program entrance and the state of readiness to participate and meet program demands” (Kerr & Palepu, 2001, p.436).
In examining the link between disorder and individual fear of crime, Hinkle and Weisburd (2008) compared two areas: one area that received increased enforcement for drug activity and prostitution to a second “control” area, which did not receive the intervention. The results showed that the police intervention itself increased the probability of feeling unsafe. “Accordingly, any fear reduction benefits gained by reducing disorder may be offset by the fact that the policing strategies employed simultaneously increase fear of crime” (p. 503). Bohnert et al. (2011a) looked at the misdemeanor arrest rate (independent variable) and the overdose rate (dependant variable), and reported that the rates of accidental drug overdose were significantly higher in police precincts with higher misdemeanor arrest rates, independent of several confounding variables, such as age and socioeconomic status. This is somewhat counterintuitive, as one may assume that misdemeanor arrests reduce levels of drug use. However, the researchers explain that the unintended consequence of this police involvement is fear and fear impedes making a 9-1-1 call during an overdose.

Although increased levels of misdemeanor policing may decrease the rate of drug overdose mortality in a precinct both directly, by reducing levels of drug use, and indirectly, by strengthening the community capacity to maintain informal control over drug use and associated risk behaviors, it may also engender an environment in which drug users are increasingly fearful of police arrest for minor infractions. Fear of arrest may promote behaviors, such as not calling for medical help when witnessing an overdose… (p. 66).

For overdose emergencies, broken windows policies and programs need to be implemented with caution as fear of arrest may be a determinant of drug overdose mortality (Bohnert et al., 2011a). Indeed, as this current study found, fear of arrest is a barrier to calling 9-1-1 during an overdose.

In the following section we briefly highlight two policy options that exist in North America and were created to improve calls to 9-1-1 during overdose emergencies. To the best of the research team’s knowledge, these are the only two policy responses currently in place and receiving wide support where they exist.

### Limiting Police Involvement during “Routine” Overdoses

Regulations that limit police involvement during “routine” overdoses (Vancouver Police Department, 2006) may encourage people to call 9-1-1 during an overdose emergency.

The Vancouver Police Department (VPD) is, to the best of the research team’s knowledge, the only police force in Canada to have such regulations (see Appendix E). In December 2003, the VPD approved an interim overdose response policy. Their intent was “to reduce deaths by not having police regularly attend all overdose incidents with Emergency Health Services (EHS). [However] police still attend all fatal overdoses and incidents where there is a safety risk to EHS personnel and/or the public” (Vancouver Police Department, 2006, p.2). By the end of 2004, “police non-attendance at “routine” overdose calls was an established practice and procedure” (p.2). The policy explains that:

There is little value in police attendance at a routine, non-fatal overdose. It would be a rare circumstance for criminal charges to arise from attendance at a routine overdose call. In order to encourage a witness to a drug overdose to access emergency medical aid without delay, it is necessary to establish policy with respect to police attendance at overdose calls. Policy should tend to restrict police attendance to drug overdose calls only in the event there is a specific need for public safety (p.3).
In practice, this has several procedural implications. During non-fatal or “routine” overdose calls the police will not attend unless emergency services request their assistance. For a fatal overdose, the member will investigate fully according to the “Sudden Death” and “Drugs-Handling” procedures.

“Risk of criminal prosecution or civil litigation can deter medical professionals, drug users and bystanders from aiding overdose victims. Well-crafted legislation can provide simple protections to alleviate these fears, improve emergency overdose responses, and save lives.”

(Drug Policy Alliance, 2012)

People from arrest for other offenses, such as selling or trafficking drugs. This policy protects only the caller and overdose victim from arrest and prosecution for simple drug possession, possession of paraphernalia, and/or being under the influence (p.2).

Preliminary evaluation of Good Samaritan laws from the United States reveals that 88% of surveyed opiate users indicated that now that they were aware of the law they would be more likely to call 911 during future overdoses. In addition, concerns about negative consequences of these laws, such as prosecutions being impeded, have not been substantiated (Banta-Green, Kuszler, Coffin & Schoeppe, 2011).

**Conclusion**

This study examined the barriers to calling 9-1-1 during an overdose in the Wellington-Watertown-LHIN area and found that fear of the criminal justice system is a barrier. When fear of criminal justice was cited as a concern, respondents believed they would either call 9-1-1 and leave the victim, or they would not call. The research also revealed that populations who are considered most “at risk” are those who are less likely to call 9-1-1 during an overdose. For example, younger individuals are significantly less likely to call 9-1-1 and wait for help to arrive. They are also significantly more likely to cite fearing arrest as a reason they would not make the call. Furthermore, individuals who have used illicit drugs in the past year, are on probation or parole, or outreach clients, are also less likely to call 9-1-1.

Finding a way to appropriately reach individuals who overdose is difficult however, from a community policing and service provider perspective, overdoses can provide windows of opportunity to build connections (Cunningham et al., 1994). When people experience medical emergencies, they are more willing to reach out to emergency personnel (Tracy et al., 2005). Indeed, although Tracy et al. (2005) found overdose victims feared criminal justice involvement, they also found that people who had been taken to the hospital were more likely to call for help in the future. They suggest “it is possible that uncertainties and fears about medical care and potential police involvement at overdose events,

18 Good Samaritan Laws are of provincial jurisdiction in Canada. In Ontario they provide legal immunity for emergency aid, by emergency personnel or an individual, unless there is gross negligence. The law states that anyone “who voluntarily and without reasonable expectation of compensation or reward provides the services described... is not liable for damages that result from the person's negligence in acting or failing to act while providing the services, unless it is established that the damages were caused by the gross negligence of the person” (Good Samaritan Act, 2001).

which commonly dissuade drug users from seeking help, were less acute among those who had already experienced an overdose and subsequent hospitalization themselves” (p.187). Instituting policies such as Good Samaritan Laws, and limiting police involvement during “routine” overdoses, may not only help to lower the threshold to access emergency services, but may also help to reduce uncertainties against police services in general. For a population that is traditionally hard-to-reach and serve, lowering the threshold to 9-1-1 may forge the path to improved health care and access to resources (Kerr & Palepu, 2001). Ultimately, and most importantly, lives can be saved.

References


Ambulatory Emergency External Cause (2010), Ontario Ministry of Health and Long Term Care, IntelliHEALTH ONTARIO. Extracted: March 16, 2012


Inpatient Discharges External Cause (2010), Ontario Ministry of Health and Long Term Care, IntelliHEALTH ONTARIO. Extracted March 16, 2012


Appendix A: Original Overdose Response Survey

1. What is your gender?  A. Male   B. Female   C. Other

2. Accidental overdoses do not include attempted suicides. Have you ever witnessed an accidental overdose?  Yes   No
   A. If YES, how many accidentally overdose incidents have you witnessed in your lifetime? ____________
   B. If NO, please skip to question #4

3. Think about the most recent time you witnessed someone experiencing an accidental overdose. Was 9-1-1 called?  Yes   No   Don’t Know

4. If you were to witness an accidental overdose in the future, do you think you will call 9-1-1?  Probably   Probably Not
   A. If PROBABLY, please skip to question #5
   B. If PROBABLY NOT, what are you concerned about? (Please check all the concerns that would apply to you or the overdose victim)

- Friends, family, or partner finding out
- Usually don’t have access to a phone
- Cost of ambulance
- Getting drugs confiscated
- Damaging relationship with employer and/or losing job
- Dislike emergency response paramedics and/or hospital personnel
- I have Narcan/Naloxone and would administer (reverses opiate overdose)
- Losing custody of children
- I can take care of it
- Getting arrested
- Breaching parole or probation
- Damage relationship with landlord
- Don’t believe 911 would help
- Other (explain):

5. If the police showed up during an accidental overdose, in your opinion how likely is it that a person present would be charged with any offense?  No chance   Maybe   Probably

6. Are you on probation or parole?  Yes   No
7. Excluding marijuana have you used any illegal drugs in the past year?  

8. Have you used any prescription drugs in the past year for recreational purposes?  

9. Do you have children 17 years of age or under?  

10. Have you ever received training on how to prevent overdose?  

   A. If YES, what was the training called?  

11. What is your age range?  

12. What BEST describes your circumstances (choose one):  

13. In which area do you live?  

<table>
<thead>
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<tr>
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<td>9.</td>
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<thead>
<tr>
<th>Age Range</th>
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<td>30-45</td>
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<td>46-59</td>
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<th>Area</th>
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<td>Guelph</td>
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<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
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</tr>
</tbody>
</table>
Appendix B: Revised Overdose Response Survey

1. What is your gender?  
   A. Male  
   B. Female  
   C. Other

2. Accidental overdoses do not include attempted suicides.  
   Have you ever witnessed an accidental overdose?  
   Yes  
   No

   A. If YES, how many accidentally overdose incidents have you witnessed in your lifetime?
   B. If NO, please skip to question #4

3. Think about the most recent time you witnessed someone experiencing an accidental overdose.  
   Yes  
   No  
   Don’t Know

4. If you were to witness an accidental overdose in the future, would any of the following keep you from calling 9-1-1?  
   (Please check all that apply to you or the overdose victim).

   □ Friends, family, or partner finding out
   □ Usually don’t have access to a phone
   □ Cost of ambulance
   □ Getting drugs confiscated
   □ Damaging relationship with employer and/or losing job
   □ Dislike emergency response paramedics and/or hospital personnel
   □ I have Narcan/Naloxone and would administer (reverses opiate overdose)
   □ Losing custody of my children

   □ I can take care of it
   □ Getting arrested
   □ Breaching parole or probation
   □ Damage relationship with landlord
   □ Don’t believe 911 would help
   □ I would call, but I would make sure I wasn’t with the person when help arrived
   □ Nothing would concern me, I would call and wait until help arrived
   □ Other (explain):

5. If the police showed up during an accidental overdose, in your opinion how likely is it that a person present would be charged with any offense?

   No chance  
   Maybe  
   Probably
6. Are you on probation or parole? Yes  No

7. Excluding marijuana have you used any illegal drugs in the past year? Yes  No

8. Have you used any prescription drugs in the past year for recreational purposes? Yes  No

9. Do you have children 17 years of age or under? Yes  No

10. Have you ever received training on how to prevent overdose? Yes  No

   B. If YES, what was the training called?

   ____________________________________________

11. What is your age range? 16-29  30-45  46-59  +60

12. What BEST describes your circumstances (choose one):

   No Income  Social Assistance (including OW/ODSP)  Employed  Student  Retired

13. In which area do you live?

   Waterloo  Kitchener  Cambridge  Guelph  Other
### Appendix C: Statistically Significant Crosstabulations

<table>
<thead>
<tr>
<th>Did not call or Don't know</th>
<th>Call and Wait</th>
<th>Would Not</th>
<th>9-1-1 was called</th>
<th>Call and Wait</th>
<th>Would Not</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33% (n = 23)</td>
<td>67% (n = 46)</td>
<td>60% (n = 51)</td>
<td>40% (n = 34)</td>
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</tr>
</tbody>
</table>

\[ n = 154 \chi^2 = 10.849 \text{ df } = 1, \ p < .001 \]

<table>
<thead>
<tr>
<th>Did not call or Don't know</th>
<th>Would Call 9-1-1(^{20})</th>
<th>Call and Run</th>
<th>Would Not Call</th>
<th>9-1-1 was called</th>
<th>Call and Run</th>
<th>Would Not Call</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33% (n = 23)</td>
<td>16% (n = 11)</td>
<td>51% (n = 35)</td>
<td>60% (n = 51)</td>
<td>9% (n = 8)</td>
<td>31% (n = 26)</td>
</tr>
</tbody>
</table>

\[ n = 154 \chi^2 = 10.851 \text{ df } = 2, \ p < .01 \]

<table>
<thead>
<tr>
<th>Witnessed an overdose</th>
<th>Call and Wait</th>
<th>Would Not Call and Wait</th>
<th>Has not witnessed an overdose</th>
<th>Call and Wait</th>
<th>Would Not Call and Wait</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>47% (n = 74)</td>
<td>53% (n = 82)</td>
<td>66% (n = 56)</td>
<td>34% (n = 29)</td>
<td></td>
</tr>
</tbody>
</table>

\[ n = 241 \chi^2 = 7.536 \text{ df } = 1, \ p < .01 \]

<table>
<thead>
<tr>
<th>Witnessed an overdose</th>
<th>Would Call 9-1-1(^{13})</th>
<th>Call and Run</th>
<th>Would Not Call</th>
<th>Has not witnessed an overdose</th>
<th>Call and Run</th>
<th>Would Not Call</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>47% (n = 74)</td>
<td>12% (n = 19)</td>
<td>40% (n = 63)</td>
<td>66% (n = 56)</td>
<td>11% (n = 9)</td>
<td>23% (n = 20)</td>
</tr>
</tbody>
</table>

\[ n = 241 \chi^2 = 8.129 \text{ df } = 1, \ p < .05 \]

<table>
<thead>
<tr>
<th>No Overdoses witnessed</th>
<th>Call and Wait</th>
<th>Would Not Call and Wait</th>
<th>One overdose witnessed</th>
<th>Call and Wait</th>
<th>Would Not Call and Wait</th>
<th>Two overdose witnessed</th>
<th>Call and Wait</th>
<th>Would Not Call and Wait</th>
<th>Three or four overdoses witnessed</th>
<th>Call and Wait</th>
<th>Would Not Call and Wait</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>66% (n = 56)</td>
<td>34% (n = 29)</td>
<td>49% (n = 19)</td>
<td>51% (n = 20)</td>
<td>41% (n = 15)</td>
<td>59% (n = 22)</td>
<td>35% (n = 11)</td>
<td>65% (n = 20)</td>
<td>61% (n = 22)</td>
<td>39% (n = 14)</td>
<td></td>
</tr>
</tbody>
</table>

\[ n = 228 \chi^2 = 12.977 \text{ df } = 4, \ p < .02 \]

---

\(^{20}\) Includes those who said they would call 9-1-1 and wait but also said they would call and run

\(^{13}\) Includes those who said they would call 9-1-1 and wait but also said they would call and run
### Table 1: Influences on the Decision to Call 9-1-1

<table>
<thead>
<tr>
<th></th>
<th>Would Call 9-1-1</th>
<th>Call and Run</th>
<th>Would Not Call</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Overdoses witnessed</td>
<td>65% (n = 56)</td>
<td>11% (n = 9)</td>
<td>23% (n = 20)</td>
</tr>
<tr>
<td>One overdose witnessed</td>
<td>49% (n = 19)</td>
<td>13% (n = 5)</td>
<td>38% (n = 15)</td>
</tr>
<tr>
<td>Two overdose witnessed</td>
<td>41% (n = 15)</td>
<td>13% (n = 5)</td>
<td>46% (n = 17)</td>
</tr>
<tr>
<td>Three or four overdoses witnessed</td>
<td>36% (n = 11)</td>
<td>6% (n = 2)</td>
<td>58% (n = 18)</td>
</tr>
<tr>
<td>More than four overdoses witnessed</td>
<td>61% (n = 22)</td>
<td>14% (n = 5)</td>
<td>25% (n = 9)</td>
</tr>
</tbody>
</table>

n = 228 \( \chi^2 = 17.533 \) df = 8,  \( p < .05 \)

<table>
<thead>
<tr>
<th>Witnessed an overdose</th>
<th>Fear Arrest</th>
<th>No Fear Arrest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has not witnessed an overdose</td>
<td>33% (n = 51)</td>
<td>67% (n = 105)</td>
</tr>
<tr>
<td></td>
<td>20% (n = 17)</td>
<td>80% (n = 68)</td>
</tr>
</tbody>
</table>

n = 241 \( \chi^2 = 7.536 \) df = 1,  \( p < .01 \)

<table>
<thead>
<tr>
<th>Call and Wait</th>
<th>Would Not Call</th>
</tr>
</thead>
<tbody>
<tr>
<td>On probation/parole</td>
<td>37% (n = 23)</td>
</tr>
<tr>
<td>Not on probation/parole</td>
<td>61% (n = 106)</td>
</tr>
</tbody>
</table>

n = 238 \( \chi^2 = 10.806 \) df = 1,  \( p < .001 \)

<table>
<thead>
<tr>
<th>Fear Arrest</th>
<th>No Fear Arrest</th>
</tr>
</thead>
<tbody>
<tr>
<td>On probation/parole</td>
<td>48% (n = 30)</td>
</tr>
<tr>
<td>Not on probation/parole</td>
<td>22% (n = 38)</td>
</tr>
</tbody>
</table>

n = 238 \( \chi^2 = 15.232 \) df = 1,  \( p < .001 \)

<table>
<thead>
<tr>
<th>Call and Wait</th>
<th>Would Not Call</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used illicit drugs</td>
<td>49% (n = 78)</td>
</tr>
<tr>
<td>Has not used illicit drugs</td>
<td>65% (n = 51)</td>
</tr>
</tbody>
</table>

n = 236 \( \chi^2 = 5.406 \) df = 1,  \( p < .05 \)

<table>
<thead>
<tr>
<th>Would Call 9-1-1</th>
<th>Call and Run</th>
<th>Would Not Call</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used illicit drugs</td>
<td>49% (n = 78)</td>
<td>15% (n = 24)</td>
</tr>
<tr>
<td>Has not used illicit drugs</td>
<td>65% (n = 51)</td>
<td>4% (n = 3)</td>
</tr>
</tbody>
</table>

n = 236 \( \chi^2 = 8.66 \) df = 2,  \( p < .05 \)

---

21 Includes those who said they would call 9-1-1 and wait but also said they would call and run.
### Between Life and Death: The Barriers to Calling 9-1-1

<table>
<thead>
<tr>
<th></th>
<th>Call and Run</th>
<th>Would Not Call</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used illicit drugs</td>
<td>30% (n = 24)</td>
<td>70% (n = 56)</td>
</tr>
<tr>
<td>Has not used illicit drugs</td>
<td>11% (n = 3)</td>
<td>89% (n = 24)</td>
</tr>
</tbody>
</table>

n = 107  $\chi^2 = 3.818$ df = 1,  $p = .05$

<table>
<thead>
<tr>
<th></th>
<th>Call and Wait</th>
<th>Would Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-29</td>
<td>42% (n = 40)</td>
<td>58% (n = 55)</td>
</tr>
<tr>
<td>30-45</td>
<td>57% (n = 51)</td>
<td>42% (n = 38)</td>
</tr>
<tr>
<td>46 plus</td>
<td>70% (n = 40)</td>
<td>30% (n = 17)</td>
</tr>
</tbody>
</table>

n = 241  $\chi^2 = 11.808$ df = 2,  $p < .01$

<table>
<thead>
<tr>
<th></th>
<th>Would Call 9-1-1</th>
<th>Call and Run</th>
<th>Would Not Call</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-29</td>
<td>42% (n = 40)</td>
<td>12% (n = 11)</td>
<td>46% (n = 44)</td>
</tr>
<tr>
<td>30-45</td>
<td>57% (n = 51)</td>
<td>12% (n = 11)</td>
<td>30% (n = 27)</td>
</tr>
<tr>
<td>46 plus</td>
<td>70% (n = 40)</td>
<td>9% (n = 5)</td>
<td>21% (n = 12)</td>
</tr>
</tbody>
</table>

n = 241  $\chi^2 = 13.100$ df = 4,  $p < .05$

<table>
<thead>
<tr>
<th></th>
<th>Fear Arrest</th>
<th>No Fear Arrest</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-29</td>
<td>36% (n = 34)</td>
<td>64% (n = 61)</td>
</tr>
<tr>
<td>30-45</td>
<td>27% (n = 24)</td>
<td>73% (n = 65)</td>
</tr>
<tr>
<td>46 plus</td>
<td>18% (n = 10)</td>
<td>82% (n = 47)</td>
</tr>
</tbody>
</table>

n = 241  $\chi^2 = 5.964$ df = 2,  $p = .051$

<table>
<thead>
<tr>
<th></th>
<th>Employed Student/Retired</th>
<th>No Income/Social Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone Clinic (Revised)</td>
<td>45% (n = 76)</td>
<td>55% (n = 94)</td>
</tr>
<tr>
<td>Outreach</td>
<td>27% (n = 28)</td>
<td>73% (n = 76)</td>
</tr>
</tbody>
</table>

n = 274  $\chi^2 = 8.665$ df = 1,  $p < .01$

<table>
<thead>
<tr>
<th></th>
<th>Prescription Drugs Used</th>
<th>Prescription Drugs Not Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone Clinic (Revised)</td>
<td>66% (n = 115)</td>
<td>34% (n = 58)</td>
</tr>
<tr>
<td>Outreach</td>
<td>50% (n = 54)</td>
<td>50% (n = 55)</td>
</tr>
</tbody>
</table>

n = 282  $\chi^2 = 7.984$ df = 1,  $p < .01$

<table>
<thead>
<tr>
<th></th>
<th>Witnessed OD</th>
<th>Not Witnessed OD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone Clinic (Revised)</td>
<td>53% (n = 93)</td>
<td>47% (n = 84)</td>
</tr>
<tr>
<td>Outreach</td>
<td>68% (n = 75)</td>
<td>32% (n = 36)</td>
</tr>
</tbody>
</table>

n = 288  $\chi^2 = 6.336$ df = 1,  $p < .05$

---

22 Includes those who said they would call 9-1-1 and wait but also said they would call and run
<table>
<thead>
<tr>
<th></th>
<th>9-1-1 Called</th>
<th>No/Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone Clinic (Revised)</td>
<td>38% (n = 45)</td>
<td>62% (n = 72)</td>
</tr>
<tr>
<td>Outreach</td>
<td>65% (n = 51)</td>
<td>35% (n = 28)</td>
</tr>
</tbody>
</table>

n = 196 \chi^2 = 12.851 \text{ df } = 1, \ p < .001

<table>
<thead>
<tr>
<th></th>
<th>Call and Wait</th>
<th>Would Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone Clinic (Revised)</td>
<td>60% (n = 84)</td>
<td>40% (n = 57)</td>
</tr>
<tr>
<td>Outreach</td>
<td>46% (n = 47)</td>
<td>54% (n = 55)</td>
</tr>
</tbody>
</table>

n = 243 \chi^2 = 4.339 \text{ df } = 1, \ p < .05

<table>
<thead>
<tr>
<th></th>
<th>Phone Access</th>
<th>Not a Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone Clinic (Revised) 23</td>
<td>7% (n = 4)</td>
<td>93% (n = 53)</td>
</tr>
<tr>
<td>Outreach</td>
<td>36% (n = 20)</td>
<td>64% (n = 35)</td>
</tr>
</tbody>
</table>

n = 112 \chi^2 = 14.317 \text{ df } = 1, \ p < .001

<table>
<thead>
<tr>
<th></th>
<th>Call and Wait</th>
<th>Would Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>61% (n = 57)</td>
<td>49% (n = 37)</td>
</tr>
<tr>
<td>Males</td>
<td>49% (n = 70)</td>
<td>51% (n = 72)</td>
</tr>
</tbody>
</table>

n = 236 \chi^2 = 2.928 \text{ df } = 1, \ p < .1

---

23 Table excludes those who said they would call 9-1-1 and wait for help to arrive.
Appendix D: Peer-Based Cascade Training Model (Weisser & Parkinson, 2008)

Phase One: Train the Trainers
An appropriate service provider(s) and a person(s) who uses drugs (PWUD) are identified and work together to develop a curriculum that will be used to train their respective peers. Two curricula are developed in this phase: one tailored to the service providers and one tailored to PWUD. Both trainers jointly deliver the training. Each trainer supports the other to ensure that information is real, relevant and understandable.

Caution: The curriculum that is developed needs to be basic so that the when the content is funneled down the branches, the main points remain intact.

Phase Two: Spread the word.
After the above training sessions the service provider and PWUD will be able to run subsequent training sessions with their peers. In these sessions the trainers will be asked to identify “leaders” and ask them to inform others in their peer group about what they have learnt, perhaps in a group setting themselves and/or by arranging opportunities for the trainers. This process can be repeated.

Phase Three: Common Knowledge
After a number of the above sessions have been facilitated, a threshold of people will be reached. From there, the message will be passed on through word of mouth, peers acting in a particular way when they are faced with an OD and the second hand distribution of training materials. It is expected that approaches to intervention and prevention of drug overdoses will change from the current knowledge and practice base. At this stage it is expected that the initial message conveyed in phase one will be muddled. If the original message is simple, there a greater chance it will be effective at this phase. Also, by phase three there will be a significant number of peers (both service providers and drug users) who have been through the training sessions multiple times.

Rationale
Premise One: If a Service Provider (SP) works together with a PWUD, they will develop a curriculum that is knowledge based and practical, based on experience and expertise.
Assumption: SP and PWUD will be willing to work together or see the value in working together.
Assumption: The service provider has the necessary skills, the DU has the practical experience; both are “experts in their field.”
Assumption: There is a difference between the SP and the PWUD in their ability to understand and communicate with their peer group.

Premise Two: Peer training establishes trust early and the message are more likely to be absorbed.
Assumption: Peers will be willing to train others
Assumption: SPs are more likely to trust other SPs than PWUD and, PWUD are more likely to trust other PWUD than SPs.
Assumption: An understanding of the material can be enhanced depending on presentation style or presenter.
Assumption: An understanding of the material can be enhanced depending on presentation style or presenter.
**Premise Three:** If peers train numerous SP and PWUD then the message will also reach community members.
*Assumption:* The SP and PWUD who go through the training will discuss the training with friends and/or family and/or other SPs etc..
*Assumption:* The main messages of the training will get passed on.
*Assumption:* Being trained by your peer is more of a motivation to share what you know than being trained by a “professional”

**Premise Four:** If the majority of people in the community receive pertinent information then it could re-define how ODs are treated and improve the effectiveness of prevention-intervention.
*Assumption:* Through a word of mouth transfer people will begin to change their perceptions and practices.
*Assumption:* The key points from the original curriculum will be repeated to SP and PWUD from many different peers.
*Assumption:* Receiving a message multiple times can change ones perception and practice.

**Conclusion**
A branched peer-training model has the potential to effectively communicate relevant information that will prevent overdose incidents and deaths.
Appendix E: Vancouver Police Department Overdose Policy - Guidelines for Police Attending Illicit Drug Overdoses

VANCOUVER POLICE DEPARTMENT
PLANNING AND RESEARCH SECTION

POLICY REPORT

REPORT DATE: June 13, 2006
BOARD MEETING: June 14, 2006
BOARD REPORT #: 0648

TO: Sam Sullivan, Chair, Vancouver Police Board
    Vancouver Police Board Members
    Vancouver Police Union

FROM: Daryl Wiebe, Inspector 1162
      i/c Planning and Research Section

SUBJECT: Amendments to the Regulations and Procedures Manual (RPM)

RECOMMENDATION(S):

THAT, as presented in Report #0648, the Vancouver Police Board approve the following amendments to the Regulations and Procedures Manual:

Overdose Policy

- 11.04 Guidelines for Police Attending Illicit Drug Overdoses

POLICY:

THAT, the Vancouver Police Board approve the amendments to the Regulations and Procedures Manual pursuant to Section 28 of the Police Act.

PURPOSE:

THAT, the following amendments to the Regulations and Procedures Manual be submitted to the Vancouver Police Board for their consideration and approval, and subsequent forwarding to Police Services as required by Section 28 of the Police Act.
DISCUSSION/ IMPLICATIONS/ ALTERNATIVES

Overdose Policy

In December 2003, the Vancouver Police Department (VPD) approved an interim overdose response policy, to be reviewed and evaluated after a one-year trial period. This response policy was based on research from Australia, and recognized the occurrence of drug overdoses as medical emergencies. It showed that the incidents of drug overdose deaths can decrease if the police do not lay charges for the drug use.

The intent of the VPD procedure was to reduce deaths by not having police regularly attend all overdose incidents with Emergency Health Services (EHS). Police still attend all fatal overdoses and incidents where there is a safety risk to EHS personnel and/or the public. Orientation/information sessions were conducted with front-line police members, E-Comm, EHS, community stakeholders and drug user groups. Eventually police non-attendance at “routine” overdose calls became an established practice and procedure by the end of 2004.

It is recommended that the interim overdose response policy under Section 11.04 of the RPM be amended and adopted as the regular procedure/policy for the Vancouver Police Department.

CONCLUSION:

The Executive Committee of the Vancouver Police Department has approved the proposed amendments outlined in this report and request that the Vancouver Police Board approve and adopt these procedures.

Author: Insp. Daryl Wiebe Telephone: 604-717-2682 Date: June 13, 2006

Submitting Executive Member (signature):

Concurring:

This report has been prepared in consultation with the Sections/Divisions listed below, and they concur with its contents.
APPENDIX 1

EXISTING/PROPOSED PROCEDURE

11.04 Guidelines for Police Attending Illicit Drug Overdoses

Policy

Recent research has shown that though many drug overdose cases are witnessed, there is often reluctance in calling for emergency medical assistance for fear that police will also attend, resulting in prosecution. A drug overdose is by its very nature a medical emergency requiring rapid medical intervention to preserve life.

There is little value in police attendance at a routine, non-fatal overdose. It would be a rare circumstance for criminal charges to arise from attendance at a routine overdose call. In order to encourage a witness to a drug overdose to access emergency medical aid without delay, it is necessary to establish policy with respect to police attendance at overdose calls. Policy should tend to restrict police attendance to drug overdose calls only in the event there is a specific need for public safety.

The primary reason for police attendance at a non-fatal drug overdose call is to assist with life saving measures, and to assist with public safety.

Procedure

Non Fatal Drug Overdose Calls

1. When a member is advised of a drug overdose while in the performance of their duties, they shall immediately notify EHS through ECOMM and attend to the location of the victim until EHS arrives.

2. When EHS receives a call of "a possible drug overdose" EHS dispatch will notify Police Dispatch, through ECOMM, who shall, by way of a general broadcast, advise District Units that "EHS is responding to a possible drug overdose", the location and "assistance not requested."

3. Police will not normally attend EHS calls for a routine drug overdose unless EHS has advised ECOMM that "Assistance is Requested", for any or all of the reasons below:

   a) Death of a person from an overdose is likely; or
   b) EHS personnel request police attendance to assist with public safety; or
   c) EHS personnel request police attendance because there is something suspicious about the incident; and
   d) In each instance when police assistance is requested, the reason for the request will be broadcast to police units by the district dispatcher.

Fatal Drug Overdose Calls

4. In the case of a drug overdose death, the member will fully investigate the incident as a sudden or suspicious death (refer to: Section 15.09- Sudden Death; Section
26.13-Drugs-Handling Procedures and Section 18.02-Crime Scene Responsibilities).

5. The assigned unit shall notify their Supervisor of the fatal overdose, and record the details of the incident in the District Overnight Book for discussion at the Daily Operations Management Meeting. The assigned patrol unit will ensure that a copy of the General Occurrence Report is routed to the Inspector i/c of the Drug Squad for follow up consideration.
MEMORANDUM

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

From: Liana Nolan, Commissioner/Medical Officer of Health

File Code: C05-40

Subject: STAFF RECOGNITION

John Prno, Chief of EMS has recently been given two awards that recognize his outstanding service. On September 26, 2012 he was honoured by the Governor General’s Chancellery of Honours with the EMS Exemplary Service Medal. This medal recognizes a career of exemplary service and was presented at the Ontario Association of Paramedic Chiefs’ (formerly AMEMSO) conference in Ottawa. John joins twenty other Region of Waterloo paramedics similarly honoured in the past.

He has also been informed by Steven Woodworth MP, that he has been awarded one of 30 Queen Elizabeth II Diamond Jubilee Medals in the Kitchener Centre riding, to honour his significant contribution and achievement as a Canadian. The Diamond Jubilee medal will be presented at date yet to be announced.
MEMORANDUM

To: Chair Sean Strickland and Community Services Committee
From: John Prno, Chief, Emergency Medical Services
File Code: C05-40
Subject: INFORMATION REQUESTS

Further to two requests received at the September 25, 2012 Community Services Committee meeting, I am pleased to provide the following additional information:

EMS Operating Cost Comparison

Of the OMBI municipalities shown below, the Region spends the least on EMS per 1,000 population. EMS operating cost however, is largely dependent on call volume generated in each given community, so the best comparators are municipalities with similar call volumes per 1,000 population. In our case, York, Halton and Waterloo all have very similar call volumes, i.e., 66.4, 68.7, and 69.6 per 1,000 population respectively.

<table>
<thead>
<tr>
<th>Municipality</th>
<th>2011 EMS Actual Operating Cost per 1,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sud</td>
<td>106.3</td>
</tr>
<tr>
<td>Musk</td>
<td>91.7</td>
</tr>
<tr>
<td>Th Bay</td>
<td>77.7</td>
</tr>
<tr>
<td>Wind</td>
<td>74.1</td>
</tr>
<tr>
<td>Ott</td>
<td>72.3</td>
</tr>
<tr>
<td>Nia</td>
<td>65.9</td>
</tr>
<tr>
<td>Ham</td>
<td>61.8</td>
</tr>
<tr>
<td>Tor</td>
<td>58.7</td>
</tr>
<tr>
<td>Dur</td>
<td>55.3</td>
</tr>
<tr>
<td>Lon</td>
<td>55.3</td>
</tr>
<tr>
<td>York</td>
<td>45.2</td>
</tr>
<tr>
<td>Hltn</td>
<td>45.2</td>
</tr>
<tr>
<td>Wlooo</td>
<td>33.5</td>
</tr>
</tbody>
</table>

2011 EMS Actual Operating Cost per 1,000 Population

$ Thousands
Municipal Response Time Comparison

Similar to the Rural Response Time Comparison provided on September 25th, the 2009-2012 YTD (Jan-Oct) 90th percentile Emergency Response Times for each local municipality are provided below. Comparison is also provided to the All Urban, All Rural, and Region-wide Response Time year over year.

### 90th Percentile Emergency Response Times by Municipality

<table>
<thead>
<tr>
<th>Municipality</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012 YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge</td>
<td>11:00</td>
<td>11:21</td>
<td>11:45</td>
<td>11:47</td>
</tr>
<tr>
<td>Kitchener</td>
<td>10:48</td>
<td>10:53</td>
<td>11:10</td>
<td>10:45</td>
</tr>
<tr>
<td>Waterloo</td>
<td>10:49</td>
<td>10:49</td>
<td>10:57</td>
<td>10:54</td>
</tr>
<tr>
<td>North Dumfries</td>
<td>18:08</td>
<td>17:56</td>
<td>18:23</td>
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</tr>
<tr>
<td>Wilmot</td>
<td>18:36</td>
<td>18:28</td>
<td>19:30</td>
<td>19:08</td>
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<tr>
<td>Woolwich</td>
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<td>15:57</td>
<td>16:43</td>
<td>16:13</td>
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</tbody>
</table>

### 90th Percentile Emergency Response Time Summary

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012 YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Rural</td>
<td>18:07</td>
<td>17:55</td>
<td>18:39</td>
<td>18:11</td>
</tr>
<tr>
<td>All Urban</td>
<td>10:51</td>
<td>11:01</td>
<td>11:16</td>
<td>11:04</td>
</tr>
<tr>
<td>Region</td>
<td>11:45</td>
<td>11:58</td>
<td>12:24</td>
<td>12:09</td>
</tr>
<tr>
<td>Meeting date</td>
<td>Requestor</td>
<td>Request</td>
<td>Assigned Department</td>
<td>Anticipated Response Date</td>
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<tr>
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<td>-----------</td>
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<tr>
<td>16-May-12</td>
<td>Council</td>
<td>Staff were directed to provide Council with a prioritized list of discretionary benefits and financial impacts prior to or as part of the 2013 Budget process, as required.</td>
<td>Social Services</td>
<td>Fall 2012</td>
</tr>
</tbody>
</table>