THE BOARD OF HEALTH PRESENTS REPORT 10-005 AND RESPECTFULLY RECOMMENDS:

1. **Child and Adolescent Services Budget BOH10007 - (City Wide) (Item 5.2)**

That the 2010/2011 budget submission for Child and Adolescent Services, which is 100% funded by the Ministry of Children and Youth Services, The Youth Justice sector and the Ministry of the Attorney General, be approved.
2. **H1N1 Policy 10 Emergency Purchases BOH10014 - (City Wide) (Item 5.3)**

That Report BOH10014 entitled H1N1 Policy 10 Emergency Purchases be received.

3. **Alcohol, Drug & Gambling Services Budget BOH10009 - (City Wide) (Item 5.4)**

That the 2010/2011 budget submissions for Alcohol, Drug & Gambling Services, which is 100% funded by the Hamilton Niagara Haldimand Brant, Local Health Integration Network (HNHB - LHIN), Ministry of Children and Youth Services, Children’s Aid Society, and Remedial Measures – cost recovery program, which will include a reduction of 0.45 FTE, be approved.

4. **2009 Annual Report to the Community and 2009 Research & Evaluation Report BOH10016 - (City Wide) - (City Wide) (Item 5.5)**

   (a) That the 2009 Report to the Community (Annual Report) hereto attached as Appendix A be endorsed.

   (b) That the 2009 Research & Evaluation Report hereto attached as Appendix B be endorsed.

5. **Smoking and Second-hand Smoke in Outdoor Municipal Recreational Areas in Hamilton BOH07034(d) - (City Wide) (Outstanding Business List Item) (Item 7.1)**

That Report BOH07034(d) respecting Smoking and Second-hand Smoke in Outdoor Municipal Recreational Areas in Hamilton be received.

6. **Low Income Dental Program BOH10002(a) - (City Wide) (Item 8.1)**

   (a) That the revised application for new 100% Ministry of Health and Long-Term Care funding through the Low Income Dental Program hereto attached as Appendix C be endorsed;

   (b) That staff be directed to implement whatever components of the Low Income Dental Program application are approved by the Ministry of Health and Long-Term Care, up to a one-time maximum of $500,000 (gross)/$0 (net), and an annual maximum of $1,450,144 (gross)/$0 (net), and 9.04 FTEs.
7. **Correspondence (Item 11.1)**

That the dispositions for the following Items of communication be approved, as amended:

(a) Resolution from Timiskaming respecting Smoke-Free Ontario Charges

Recommendation: Be received, and staff be directed to report back to the Board of Health on the Smoke Free Ontario review upon its completion.

(b) 2010 alPHa Annual Conference entitled The New Essentials: Public Health Communications Today.

Recommendation: Be received and an invitation to attend the 2010 alPHa Annual Conference on June 20 to 22, 2010 in Cornwall, Ontario be extended to Members of the Board of Health.

(c) Resolution from North Bay Parry Sound District Health Unit respecting Harmful Effects of Artificial Tanning and In Particular for Youth Who is Most Susceptible to the Damaging Effects of UV Radiation

Recommendation: Be endorsed.

(d) Copy of letter to the Minister of Children and Youth Services from Beth Pater, Chair of the Kingston, Frontenac and Lennox & Addington Board of Health respecting the Ministry of Children and Youth Services Funded Budgets.

Recommendation: Be received.

(e) Copy of letter to the Minister of Children and Youth Services from Dennis Roughley, Chair of the Simcoe Muskoka District Board of Health respecting insufficient funding of the Simcoe Muskoka District Health Unit’s Healthy Babies Healthy Children Program.

Recommendation: Be received.

---

**FOR THE INFORMATION OF COUNCIL:**

(a) **ANNOUNCEMENTS**

Deputy Mayors for the Month of May 2010 (Item 2)

Mayor Eisenberger introduced and provided certificates to the Deputy Mayors for the Month of May 2010 – Erin McKay and Danielle Boers

Council – May 26, 2010
(b) CHANGES TO THE AGENDA (Item 1)

The Clerk advised the following:

(i) Added communication Item 11.1(f) (1) from Linda Stewart, Executive Director of alPHa answering some question respecting the Public Sector Compensation Restraint to Protect Public Services Act, 2010, which had third reading on May 18, 2010 and also added Item 11.1(f)(2) from the Deputy Minister of Health and Long-Term Care and Acting Minister of Health Promotion respecting the same issue. Copies were distributed.

Recommendation Be received.

(ii) Delegation Items 6.1 and 6.2 will be heard following the staff presentation in Item 7.1

The agenda was approved as amended.

(c) DECLARATIONS OF INTEREST (Item 2)

There were no declarations of interest.

(d) Child and Adolescent Services Budget BOH10007 – (City Wide) (Item 5.2)

Councilor Clark requested that when the Child & Adolescent Services Situational Assessment is completed, Public Heath Services prepare a report to the Board of Health outlining the results.

(e) MINUTES (Item 3)

The Minutes of the April 26, 2010 meeting were approved as presented.

(f) SUB-COMMITTEE MINUTES

The Community Food Security Stakeholder Advisory Committee Minutes of April 7, 2010 were received. (Item 5.1)

(g) PRESENTATIONS

(i) Smoking and Second-hand Smoke in Outdoor Municipal Recreational Areas in Hamilton BOH07034(d) - (City Wide) (Outstanding Business List Item) (Item 7.1)

Council – May 26, 2010
Doctor Chris Mackie presented the following topics with the aid of a PowerPoint presentation:

- Board of Health Direction of March 25, 2008
- City of Hamilton Outdoor Recreational Areas
- Why Smoke-Free Outdoor Areas
- Smoking Rates/Exposure to Second Hand Smoke Outdoors
- Jurisdictional Scan of Local By-laws Governing Smoking in Outdoor Areas
- Local Consultation (2009)
- Residents Support for Regulating Smoking in Outdoor Spaces
- Sports Association Support
- Experience from Other Ontario Municipalities
- Experience from Other Areas with Smoke-Free By-laws or Policies
- Next Steps

Hard copies of the presentation were distributed.

A discussion followed which included but was not limited to the following points:

- What approach have the other municipalities taken in selecting smoke free parks?
- Could a pilot project be launched this summer as residents have expressed interest in banning smoking in children’s play areas?
- When will the draft by-law be prepared?
- Concerns about smoking outdoors have not been strongly expressed in all Wards;
- Many complaints have been received concerning litter from discarded cigarette butts;
- Prohibiting smoking in parks may result in smoking on sidewalks;
- Let the public debate the issue and suggest solutions;
- The weather affects the degree of harm posed by outdoor second hand smoke;
- The Province should take the lead on this issue;
- Is there a correlation between regulating outdoor areas that allow smoking and a decrease in smoking?
- Why permit smoking on golf courses? Children play golf too.

The Board thanked staff for their work respecting this matter.

1 Ryan David Kennedy, University of Waterloo, respecting a study of the City of Woodstock’s comprehensive outdoor smoking by-law (Approved March 29, 2010) (Item 6.1)

Ryan Kennedy addressed the Board with the aid of a PowerPoint
presentation. He advised that he is a graduate student at the University of Waterloo and he has conducted air quality studies and examined the process and evaluation of the City of Waterloo's outdoor smoking by-law.

He outlined the following details with respect to the study:

The research team and survey methods;
The team partnered with the City and the local health unit;
Conducted random telephone and also face to face surveys;
The by-law was passed in June, 2008;
The by-law came into effect September 1, 2008;
There have been no negative incidents;
The Woodstock study timeline – first wave August 2008, second wave August 2009;
The Woodstock by-law regulates smoking by providing set-backs for smoking areas near transit facilities and doorways to buildings and prohibits smoking in outdoor restaurant patios. It also provides for set backs for smoking areas in parks.
Sample of no smoking sign next to playground equipment;

Evaluation of outdoor smoke-free policy:
Results of survey – measured support of smokers and non smokers with respect to the restrictions prior to the enactment of the by-law and after the enactment;
Resulting change in use of parks;
Resulting change in smoking behaviour.

Conclusions
• Support for by-law is higher – even among smokers;
• Support for smoking restrictions went up after the by-law was passed;
• No negative impact on the use of facilities;
• By-law is associated with reductions in smoking, helping smokers who have quit stay quit and increasing quit intentions
• There is national and international interest in the study.

A discussion followed on what is a higher air quality risk, pollution from vehicles or from smoking outdoors? As an example, Mr. Kennedy provided details of his findings with respect to the effects of smoking on the air quality in an outdoor patio setting.

On a motion (Pasuta/Merulla) the Board received Mr. Kennedy’s delegation.

Duane Dahl addressed the Board and indicated that he is representing the members of the Boys and Girls Clubs of Hamilton. The organization represents mostly the lower east end of the City. His intention is to offer qualified support for the staff Report.

Duane Dahl advised that the parents and coaches have demonstrated voluntary compliance to not smoke near the children who are participating in outdoor sports in order to safeguard their health and to not encourage them to start smoking by being a good role model. Everyone has agreed that there is no smoking around the baseball diamonds. These measures have been positively received and there has not been a single objection in this regard. The only concerns expressed have been with respect to the discarded cigarette butts from other users of the parks.

Mr. Dahl indicated that he is asking the City and the Board of Health to support the initiatives pioneered by the parents and youths involved with the Clubs. In his opinion, this proposal is as a tremendous opportunity for the City to gain support from the public.

Duane Dahl explained that he is offering qualified support for the Report as the proposal to match the percentage of smokers with the same percentage of smoking areas will be difficult in mixed use spaces. He emphasized the importance of liaising with the sports and community associations and with continuing to have them engaged in the process.

The Board thanked Mr. Dahl for his delegation.

On a motion (Pearson/Merulla) the Board received Mr. Dahl’s delegation.

The Board discussed the following points:

- Challenge of picking and choosing what parks should be smoke free;
- Best to let the voters decide at the time of the elections;
- Banning smoking in restaurants has resulted in a boom in business;
- Its easier when everyone follows the same rules;
- Educating the public is very important.

Council – May 26, 2010
On a motion (Ferguson/Collins) the Board received the staff report.

(ii) Public Health Services – Organization Structure Review Update (No copy) (Item 7.2)

Staff responded to a few questions confirming that the organizational changes will have no impact to the budget and it will not be necessary to hire any additional full time employees (FTE’s). The Board expressed support for the new structure.

On a motion (Merulla/Collins) the Board deemed that the presentation was unnecessary and received the distributed hand outs.

(h) COMMUNICATIONS (Item 11.1)

The recommendations of the following Items of communication were approved at the May 26, 2010 Council meeting as the issue was time sensitive:

(i) E-mail from Linda Stewart, Executive Director of alPHa responding to some questions respecting the Public Sector Compensation Restraint to Protect Public Services Act, 2010, which had third reading on May 18, 2010.

Recommendation Be received.

(ii) Memorandum from the Deputy Minister of Health and Long-Term Care and the Acting Deputy Minister of Health Promotion respecting Public Sector Compensation Restraint to Protect Public Services Act, 2010.

Recommendation Be received.

(i) Adjournment

There being no further business, the meeting adjourned at 11:16 a.m.

Respectfully submitted,

Councillor R. Powers, Vice Chair
Board of Health

Ida Bedioui
Legislative Assistant
Board of Health
May 25, 2010
General Contact Information

Alcohol, Drug and Gambling Program 905-546-3606
Child and Adolescent Services 905-570-8888
Dental Clinic 905-546-2424, ext. 3789
Environmental Health Inspection Duty Line 905-546-3570
Health Connections 905-546-3550
Community Mental Health Program 905-528-0683
Nutrition and Physical Activity Promotion 905-546-3630
Reportable Diseases Line 905-546-2063
Safe Water Program 905-546-2189
STD and Sexual Health Hotline 905-528-5894
Tobacco Hotline 905-540-5566
Tuberculosis (TB) Information and Reporting 905-546-2424, ext. 6636
Vaccine Information Line 905-540-5250
West Nile Virus Information 905-546-3575
Workplace Health 905-546-2424, ext. 3065

For clinic locations and information, and for all other inquiries please visit our website: www.hamilton.ca/publichealth

Or e-mail us at publichealth@hamilton.ca

City of Hamilton Information Line: (905) 546-CITY

Mailing Address:
Office of the Medical Officer of Health
1 Hughson Street North, 4th Floor
Hamilton, Ontario L8R 3L5
**REPORT TO THE COMMUNITY**

**Letter from the Mayor/Chair, Board of Health**

I am always pleased to present the amazing accomplishments and stories of service provision from Hamilton’s Public Health Services – and this Report to the Community is no exception.

The vision of Public Health Services is to be an effective, innovative and efficient organization that is recognized as essential to the health and well-being of people in Hamilton. The driven and passionate professionals providing these programs and services are guided by these principles and endeavor to improve upon them wherever they can.

The stories enclosed within this Report are wonderful examples of what PHS does on a daily basis and gives great insight as to what they are capable of. I want to congratulate PHS for all of their hard work in 2009, as they work towards Hamilton being the best place in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities.

Sincerely,

Fred Eisenberger
Mayor – City of Hamilton

---

**Children are Precious Cargo**

Motor vehicle collisions are the leading cause of injury-related deaths of Canadian children, aged one to 14 years. A major contributing factor is that 70 per cent of car seats are not installed correctly, if used at all.

Seeing the need and wanting to address the Ontario Public Health Standards of community partnership and enforcement of current Legislation, the Family Health Division partnered with Hamilton Police Services to conduct child passenger safety checks.

On September 21, 2009, 74 per cent of the 136 car seats inspected were found to be incorrectly used or installed. In such cases, car seat technicians made installation corrections or police issued tickets for infractions of the Ontario Highway Traffic Act.

Constable Claus Wagner of the Hamilton Police Services Traffic Safety Branch was “…pleased to partner with Hamilton Public Health Services to work collaboratively to address car seat safety for children in the City of Hamilton.”

PHS looks forward to continuing this innovative joint initiative with Hamilton Police Services.

---

**Letter from the Medical Officer of Health**

In a year where services and programs encountered the likes of H1N1, we accomplished a great deal, and I am proud to present a sampling of these achievements in our 2009 Report to the Community.

Other than H1N1, a large undertaking for PHS was to plan and coordinate a new organizational structure to maximize effectiveness, innovation and efficiency – the pillars of our vision. I am confident the changes we make will increase our capacity to provide the communities of Hamilton with the health promotion and disease prevention they need.

I would like to thank the 2009 Board of Health members for their governance and support throughout 2009. Our dedicated staff and community partners ensure our programs and services are of the highest quality, and I would like to thank them for their tireless efforts as well. Together, we are a team that can and will continue to accomplish our goal of making Hamilton the healthiest community possible.

Sincerely,

Elizabeth Richardson, MD, MHSc, FRCPC
Medial Officer of Health – City of Hamilton
Public Health Services

---

**Training Foster Parents to Care for Traumatized Children**

The care foster children receive from their foster parents and grandparents is of immeasurable value to them and our community. At the same time, there can be challenges when fostering a child – such as issues of trauma and attachment.

To address these issues, Family Health’s Child and Adolescent Services developed a unique 15-hour specialized Training for Foster Parents and Kindship Care Providers program. The Complex Trauma Services at Child and Adolescent offers the program to Catholic Children’s Aid Society and Children’s Aid Society Hamilton staff.

With a goal of providing foster parents with an increased awareness and sensitivity to trauma and attachment, it presents a framework for understanding these topics, enhancing awareness regarding behaviour and symptoms in children, understanding the long-term impact of children’s traumatic experiences and the role of the caretaker in supporting children.

“Out of this training, a shift in perspective and an enhanced parenting capacity has emerged. The children residing in foster care have greatly benefited from this partnership.”

- Sandra Chan, Children's Aid Society

---

**HELPING FAMILIES**

- 5,308 visits by PHNs or Family Home Visitors to families in the Healthy Babies, Healthy Children Long-term Home Visiting Program
- 4,556 clinical sessions were provided to children and youth at Child and Adolescent Services
- Public Health Nurses provided health information to 845 parents through Ontario Early Years Centres
- 3,573 individuals received services from the Mental Health/Outreach Team
- 1,542 individuals served through the Substance Abuse and Problem Gambling programs
- 4,352 client interactions at Breastfeeding Clinic, Limeridge Mall OEYC
Becoming Smoke Free: A Quit Smoking Clinic

Providing effective treatments to people who are trying to quit smoking has the potential to increase the health of individual residents and the community.

Knowing this, Hamilton PHS opened a new clinic which offers intensive individual counseling by public health nurses and medications to manage nicotine withdrawal symptoms.

From its opening in 2008 and throughout 2009, 240 Hamilton residents have received nursing care and support that would otherwise not have been available to them.

“At 63 years of age, I had been smoking for 40 years. Like many others, I have tried to quit many times over the years. In 2008, after a diagnosis of breast cancer, the Juravinski Cancer Centre nurse referred me to Public Health Services’ Quit Smoking Clinic. The patch and the one-on-one counseling is what really helped me. The nurses in the clinic never judged or criticized me for smoking, and really supported and encouraged me when I was quitting. I have been smoke free for 14 months and now exercise regularly, eat well and feel great.”

- Nella Burrows, Hamilton, Ontario

2009 Unfiltered Facts Youth Summit

The Unfiltered Facts Youth Summit is an annual one-day peer-to-peer conference for local high school students that takes place each fall. It offers an exciting opportunity for attendees to build advocacy and leadership skills and to learn about industries that target youth – tobacco, alcohol, and food and beverage.

The 2009 Summit was attended by 300 students representing 25 secondary schools throughout Hamilton. It was developed and implemented by a public health planning committee comprised of youth aged 14 to 24 and supporting adult staff, and the conference agenda was built on the theme “Be the Change, Be the Leader, Be the Difference”. Workshops and speakers were aligned with this theme and delivered inspiring and motivational messages, empowering youth to take action and make a difference on issues that affect them.

Participants left the summit with a challenge and a call to action, encouraging them to advocate for healthy environments by implementing youth-led health action initiatives in their schools and community.

PHS Staff Keeping Everyone Safe, Healthy and Happy at H1N1 Clinics

“I wanted to let you know how impressed I was with the staff and volunteers at the H1N1 Vaccination Clinic… The clinic was run extremely efficiently, ensuring no one wasted their time while waiting in line… One staff/volunteer took it upon himself to entertain the kids with magic tricks and jokes – he was a welcome relief for parents who had crying or distressed children with them.

My own son, who like most kids hates needles, was treated gently and sensitively by the nurse giving the vaccination, and was not the least bit distressed by his experience. I think that alone speaks volumes!

It’s not often we take the opportunity to recognize good work done during difficult times – I hope you will pass on my message of thanks to your colleagues who worked with you at the Dundas clinic, as well as others from Public Health who have worked diligently over the last several weeks in trying to keep everyone safe, healthy and happy.”

- E-mail sent to PHS staff (November 17, 2009)

“Just a quick thank you to all of you who are working so tirelessly with this immunization… Just got my H1N1 shot today and EVERYONE at Chedoke was polite, professional, kind and knowledgeable. It was my first flu shot ever, and it was really effortless. Way to go, Public Health, in this middle of a pandemic, no less.”

- E-mail sent to PHS inbox (November 2, 2009)

“Recently I visited a Vaccine Clinic in east Hamilton and yesterday took my elderly (88 years) mother to the Vaccine Clinic at the Chedoke Twin Pads. There are several words that describe the Clinics, well organized, orderly and expedient, all the result of a caring and patient staff. Great job, thank you…”

- E-mail sent to PHS inbox (November 25, 2009)

“Generally, I was struck by the wonderful patience of small children, the co-operative behaviour of the population and the good humour and even temper among the clinic staff - very much to be commended.”

“My thanks to all public health nurses and staff for their hard work during this time.”

- E-mail sent to PHS inbox (October 29, 2009)

“I was quite near the front and was still very grateful for the personnel who could answer questions and made one feel like there was a purpose to the line-up instead of an aimless exercise! Thanks so much for your time and efforts!”

- E-mail sent to PHS inbox (October 28, 2009)
2010 Moving Forward

2010 Aspirations for Hamilton Public Health Services

- Implement the new PHS organizational structure
- Build upon the PHS emergency and pandemic plans, as well as the Incident Management System
- Ensure implementation of the new Clinical & Preventive Services division
- Comply with the Ontario Public Health service standards, as well as the new Ontario Council on Community Health Accreditation standards
- Develop and implement the new PHS Strategic Plan to coincide with new council

2010 Challenges for Hamilton Public Health Services

- Flat line funding vs. increased service expectations
- Outcomes-based reporting: Requires new approaches to program and service management, economic evaluation and planning
- Ongoing debate about where to best invest Public Health resources: Population-wide programs or high risk groups
- Obesity epidemic
- New Customer Service Standards of the Accessibility for Ontarians with Disabilities Act (AODA), which came into effect January 1, 2010
- Evolution in the provincial public health system: New Ministry roles, new Agency and new Non-governmental Organization roles
- Any unexpected issues that may arise; such as H1N1 in 2009

Values
ACCOUNTABILITY
EXCELLENCE
HONESTY
INNOVATION
LEADERSHIP
RESPECT
TEAMWORK
Acknowledgements
This report was prepared by the Applied Research & Evaluation Team, Planning & Business Improvement Division at the City of Hamilton, Public Health Services. Project leads provided the summaries for the individual research and evaluation projects.

The report is available on the City of Hamilton website.

For more information please contact:
Colleen Van Berkel
Manager, Applied Research & Evaluation
Planning & Business Improvement
Public Health Services, City of Hamilton
1 Hughson St. North, 4th Floor
Hamilton, Ontario
L8R 3L5
905-546-2424 ext 5916
Colleen.VanBerkel@hamilton.ca

Recommended citation:

Copyright information:
Copyright for this document belongs to the City of Hamilton, Public Health Services. Permission is granted for the reproduction and or adaptation of this document for non-commercial and educational purposes as long as City of Hamilton, Public Health Services is credited.
Research Partnerships

The research and evaluation projects highlighted in this report would not be possible without supportive, collaborative relationships with our many partners. We would like to take the opportunity to thank and acknowledge our valuable research and evaluation partners.

Brock University
Canadian Institute of Public Health Inspectors
Center of Excellence for Youth Engagement
Centre for Addictions and Mental Health
Centre for Disease Control
Hamilton-Wentworth District School Board
Institute for Social Research, York University
Institute of Excellence for Youth Engagement
McMaster Institute for Environment and Health
McMaster University
Propel Centre for Population Health Impact, University of Waterloo
University of Guelph
Offord Centre for Children at Risk
Children’s Aid Society of Hamilton
Catholic Children’s Aid Society of Hamilton
Community Child Abuse Council
Hamilton Community Foundation
McMaster Child Health Research Institute
Ministry of Children & Youth Services
Nursing Secretariat - Ontario Ministry of Health and Long-Term Care
Provincial Centre of Excellence for Child and Youth Mental Health at the Children’s Hospital of Eastern Ontario
Preface

I am pleased to share with you the 2009 Research and Evaluation Report. This report highlights the scope of our research and evaluation work undertaken at Hamilton Public Health Services. Research and evaluation are core aspects of the services we provide to both our local community and to the greater public health field. Through the Public Health Research Education and Development (PHRED) program we have lead and contributed to a number of applied public health projects that impact the practice of public health across Ontario. The release of the 2008 Ontario Public Health Standards signaled a new mandate for public health in Ontario, where research and evaluation take an even more prominent role in public health practice.

Many of our research and evaluation projects are undertaken with collaborative partners. By working with our partners, both within the City of Hamilton and across the province, we are able to achieve a much greater impact in our public health initiatives.

We hope you will find this report interesting and informative. If you would like any additional information about any of the projects summarized within the report, please do not hesitate to contact the designated health unit contact for that study.

Colleen Van Berkel
Manager, Applied Research & Evaluation
Planning & Business Improvement
Public Health Services, City of Hamilton
# TABLE OF CONTENTS

Research Partnerships ................................................................................................................2  
Preface ........................................................................................................................................3  

## FOUNDATIONS

Get the “PHacts!”: Building Workforce Capacity around the Access & Use of Community Profiles Census Data ..............................................................................................................6  
Evaluation of a Social Determinants of Health (SDH) Workshop to Increase Knowledge, Skills, and Comfort with the SDH in Public Health Practice at the Health Unit Level .....................7  
Advancing Inter-professional Education for Future Public Health Practitioners .................8  

## CHRONIC DISEASES AND INJURIES

An Evaluation of the Expansion of the Feel the Power Feel Fit Club to Additional Sites in Hamilton .................................................................................................................................9  
Evaluation of a Health Messaging CD for Places of Worship .................................................10  
Youth Net National Meeting: Translating Knowledge to Practice ........................................11  
2009 Hamilton Student Drug Use Survey ..................................................................................12  
Alcohol, Drug and Gambling Services: Review of Organizational Position and Service Delivery Models ............................................................................................................................13  
School Health Action Planning & Evaluation Systems (S.H.A.P.E.S.) .....................................14  
Public Health / Primary Care Collaboration on Diabetes Prevention through “Prescribed” Physical Activity for Low Income and / or Culturally Diverse Women in Hamilton .......................15  
An Exploration of The Experiences Related to Mental Well-Being of Women of Low Socioeconomic Status Who Have Participated in the Woman Alive! Physical Activity Program ............................................................16  
The Experience of Immigrant Women who have Accessed Breast Health and Screening through Hamilton Women’s Health Educator Program ..............................................................17  
Maximizing Nutrition & Physical Activity Strategies ...............................................................18  

## FAMILY HEALTH

Evaluation of the Quick Access Service at Child and Adolescent Services ..............................19  
The Nurse-Family Partnership Feasibility & Acceptability Study ...........................................20  
Evaluation of PHN Secondment Role with Hamilton Family Health Team ................................21  
Breastfeeding Peer Support Group – 10-week Pilot ...............................................................22  
Health Status of Expectant Women in the City of Hamilton: A Situational Assessment ...........23  
Child and Adolescent Services: Review of Service Delivery ..................................................24
INFECTION DISEASE
Needs Assessment of HIV/STI Prevention Strategies for Men Who Have Sex with
Men in Hamilton .........................................................................................................................25
Sexual Health Clinic: Usefulness of Sexual Health Education Materials ....................... 26

ENVIRONMENTAL HEALTH
Hamilton Child Blood Lead Prevalence Study ................................................................. 27
Air Quality Program ............................................................................................................... 28
Predictive Modeling of Recreational Bathing Water in Hamilton Harbour ...................... 29
Research Support Regarding Evidence for the Creation of a “Cooling Tower and
Evaporative Condenser Registry By-law” to be Presented to Board of Health .................. 30
Preparation of Draft “Cooling Tower and Evaporative Condenser Registry
By-law – Legionella” .................................................................................................................. 31
City of Hamilton Vector Borne Disease 2009 Annual Report and Evaluation of West
Nile Virus Program Activities in Preparation for Annual Ministry of Health and Long
Term Care Report ...................................................................................................................... 32
West Nile Virus Messaging within Diverse Communities .................................................. 33
Beach Water Quality Modeling and Surveillance ............................................................. 34
Evaluation of ‘Food Safety Zone’ Web-Based Food Disclosure System .......................... 35
Evaluation and Revision of Food Handling Mandatory Certification Program ............... 36

EMERGENCY PREPAREDNESS
Evaluation Tool and Thematic Analysis of Data for Pandemic Plan Response (Internal):
Pandemic Plan & H1N1 ............................................................................................................. 37
Get the “PHacts!”: Building Workforce Capacity around the Access & Use of Community Profiles Census Data

Investigators: Riley Crotta, Katrice Edgar and Colleen Van Berkel

Health Unit Contact Person: Riley Crotta

Background: Addressing the social determinants of health and tailoring services to local need are fundamental to the work of public health. The objectives of this project were to develop, pilot and evaluate a workshop and e-module that builds public health practitioners’ capacity to access and use Census data.

Research Questions:
1. How do participants rate the instructional quality and value of the learning module and does the learning module increase participant knowledge and confidence in their ability to apply knowledge immediately following completion?
2. How do learning module participants rate their preference for workshops or online module professional development delivery modes?
3. Do workshop participants rate the quality, impact and acceptability of an interactive approach to professional development higher than those participants who completed the online/ self-directed module?

Methods: Health unit staff were randomized to complete the workshop or e-module. Participant reactions and knowledge were evaluated using a survey.

Results: 45 participants piloted the learning modules. Training practices and overall quality of the module were rated as highly effective. Most participants rated their capability and intention to apply learning as high, with a greater percentage of workshop participants indicating high levels of confidence in their ability to apply the knowledge to their job. Preferences for learning module delivery modes were mixed.

Conclusions: Initiatives that increase access to data to inform planning are valued by practitioners and are a vehicle for capacity-building. Technology can increase the ‘reach’ of a learning module, but how the information is intended to be used needs to be considered when making decisions about delivery modes.

Project Timeline: 2009

Project Funding Source and Amount: $12,000 (PHRED)

Conference Presentations:
Evaluation of a Social Determinants of Health (SDH) Workshop to Increase Knowledge, Skills, and Comfort with the SDH in Public Health Practice at the Health Unit Level

Investigators: Dr. Jessica Hopkins (Community Medicine Resident, McMaster University), Dr. Elizabeth Richardson and Hamilton Public Health Services Social Determinants of Health Workshop Group

Health Unit Contact Person: Suzanne Brown

Background: This project describes an innovative method of knowledge transfer and implementation of a SDH framework into public health. The goal is to evaluate the ability of the health unit to take the next step in translating theoretical knowledge of the SDH into daily public health practice and programming.

Research Questions:
1. To determine the effectiveness of a SDH workshop in increasing knowledge, skills, and attitudes of Hamilton PHS staff with respect to the SDH
2. To compare the knowledge of Hamilton PHS staff prior to, and following, a workshop on translating the SDH from theory into practice
3. To compare Hamilton PHS staff’s self-perceived comfort and capabilities with implementing a SDH lens into daily public health practice

Method: A before-after design was used to compare Hamilton PHS staff’s knowledge, comfort, and capabilities with the implementation of a SDH framework into public health practice prior to and following a workshop on the SDH. All SDH workshop participants were invited to complete a self-administered questionnaire conducted immediately prior to, and following, the workshop.

Results: The four workshops were attended by a total of 132 PHS staff. Of these, 86 (65%) participated in the survey. Evaluation of the workshop showed an increase in subjective knowledge, skills and comfort with incorporating the SDH in public health practice. Objective knowledge measurements supported this finding. Evaluation of the workshop, itself, was very positive with all aspects of the workshop (game, game debrief, scenarios, scenario debrief, facilitation) being felt to be useful and effective.

Conclusions: These results describe a novel workshop aimed at increasing the knowledge, skills and comfort of Hamilton PHS staff with the SDH in public health practice. The workshop accomplished its goals of increasing all of these aspects. As well, the evaluation by participants was positive, and most would recommend a co-worker attend.

Project Timeline: 2009

Project Funding Source and Amount: $45,000 (PHRED)
Advancing Inter-professional Education for Future Public Health Practitioners

Investigators: Ruth Schofield¹, Cyndy Johnston, Colleen VanBerkel, Karen Quigley-Hobbs², Dr. Hsui Li Wang², Dr. Ilana Bayer¹ (¹McMaster University; ²Region of Waterloo Public Health)

Health Unit Contact Person: Cyndy Johnston

Background: To develop and implement an inter-professional education initiative in public health related to the Inter-professional Education (IPE) competencies, defined by the Program for Inter-professional Education & Research (PIPER) at McMaster University, for the purpose of exposure.

Research Questions: Does the learning module increase participants’ knowledge of public health professionals roles and scope of practice and enhance their ability to collaborate with other public health professionals to establish common goals following completion?

Methods: A pre & post evaluation questionnaire was implemented to determine the student’s ability to describe their own and other’s professional roles and responsibilities in addition to scope(s) of practice and how to involve other professionals in public health issues. Both quantitative and qualitative data were collected. Participants included five nursing and medical students from McMaster University.

Results: Quantitative results revealed that all students had previous experience with inter-professional practice. Qualitative results revealed common themes such as learning more about the various discipline’s responsibilities, that communication was a key attribute in sharing tasks, expertise, skills and information in problem solving and decision making processes and that respect and trust for others was important.

Conclusions: This pilot project demonstrated the effectiveness of increasing student’s knowledge about the roles and scopes of practice of public health professionals and raised awareness of how they might collaborate around decision-making. This project has implications for orientation of new staff and students to public health.

Project Timeline: 2009

Project Funding Source and Amount: $5,000 Program for Inter-professional Education & Research

Conference Presentation:
An Evaluation of the Expansion of the Feel the Power Feel Fit Club to Additional Sites in Hamilton

Investigators: Gail Dowling, Christine Senson, Eliana Witchell¹ and Edwoba Konadu¹, (¹Student, University of Guelph)

Health Unit Contact Person: Gail Dowling

Background: Healthy Living Hamilton is a coalition of local agencies, organizations and community volunteers who are committed to working together for a healthy community as part of the Ontario Heart Health Program. Since 2004, the Feel the Power Feel Fit Club has been funded by Healthy Living Hamilton and supported by many community partners. The Club is a free supportive network for adults who live or work in Hamilton, designed to encourage regular physical activity by providing participants with free information, resources, and opportunities to try new physical activities via Club meetings. An evaluation was conducted in 2009 to determine if the additional sites would be successful and sustainable.

Research Questions:
1. What is the effectiveness of expanding the Club to community sites, with minimal support from the original community partners, including Hamilton Public Health Services?
2. Is the community expansion model appropriate to meet the goals of the Club?
3. What level of assistance is required to run the Club at each site, with respect to funds and professional support?
4. What are the benefits reported by Club members, with respect to their health behaviours?

Method: Separate focus groups were held with Club coordinators and participants. All focus groups were conducted by trained interviewers. Previously collected quantitative data from each site was analyzed and included in the assessment of the program, as a whole.

Results: The results indicated that Feel the Power Feel Fit Club is most successful and sustainable in a recreational setting. The community expansion model supports the goals of the Club. Participants of the Club cited that the program encouraged them to be physically active, provided opportunities to try new activities, and taught them new information about physical activity. They enjoyed the social aspect of the Club which helped build a social network to support regular physical activity.

Conclusions: The Club can be sustained in a recreational setting. Participants valued the program for the social network benefits, physical activity opportunities, and resources.

Project Timeline: 2008 - 2009

Project Funding Source and amount: $3,000 (Healthy Living Hamilton)
Evaluation of a Health Messaging CD for Places of Worship

Investigators: Beatrice McDonough, Christine Senson, Edwoba Konadu¹, and Eliana Witchell¹
(¹Student, University of Guelph)

Health Unit Contact Person: Beatrice McDonough

Background: Funded by Healthy Living Hamilton, the Health Messaging CD for Places of Worship was developed in response to a need identified from 13 focus groups in the South Asian community in Hamilton. Places of worship were highlighted as an untapped population channel to reach not only those who attend, but also the staff of various places of worship. The CD contained information, resources, and links on a variety of healthy lifestyle topics and were arranged according to subject area and suggested times for promotion of certain topics, such as cardiovascular health information, during Heart Month in February.

Research Questions:
1. How do the places of worship use the information in the CD?
2. What is the usefulness of each topic and what formats are preferred?
3. How often are the materials from each topic area used?

Method: A questionnaire was mailed to all 292 places of worship that had received the CD a few months prior. For those not returning the mailed questionnaires, follow-up telephone calls were made to complete the questionnaire over the phone.

Results: The response rate was 38% after the non-responders were contacted by phone. Without this follow-up, the response rate was 5%. Forty-two respondents reporting either not receiving the CD or had misplaced it and only 14 of those requested that the CD be sent again. Of those with the CD, 49% reported using the CD or planning to use the CD. The major reason for not using the CD was that the respondents did not find the CD useful. Of those who used the CD, the most frequently used topics were Aging and Seniors, followed by Health Eating, and Families and Children. Information from the CDs was used mainly for bulletin boards, newsletters, and one-on-one and group counseling. The majority of respondents found the CD to be an effective medium for sharing information on healthy living.

Conclusions: Overall, the places of worship found the CD to be useful for the sharing of healthy lifestyle information with their members. Some needed additional time to review and use the CD, but were positive that the information would be used in some manner.

Project Timeline: 2008 - 2009

Project Funding Source and Amount: $3,400 (Healthy Living Hamilton)
Youth Net National Meeting: Translating Knowledge to Practice

Investigators: Dr. Linda O’Mara¹, Daina Mueller², Lorraine Grypstra², Cheryl Vrkljan², Dr. Gina Browne¹, Dr. Noori Akhtar-Danesh¹, David Hoy⁴ (¹McMaster University, ²Hamilton Public Health Services, ³Centre for Addiction and Mental Health, ⁴Hamilton-Wentworth District School Board)

Health Unit Contact Person: Lorraine Grypstra

Background: Youth Net Hamilton (YNH) is a mental health promotion and early intervention program for youth ages 13 to 18. The program is funded and administrated by Hamilton Public Health Services (PHS). The focus of the 2009 national meeting was to disseminate findings from 2 research projects, one of which was completed by YNH.

Research Questions: Does stigma towards mental illness decrease for youth 13 to 18 years old after participating in school-based YNH Focus Groups (YNFGs)?

Method: 294 youth from six schools participated in the study. Randomized by classroom, half of the participants received the YNFGs. Researchers measured changes in stigma, mental health problems, feelings, behaviours, and health and social service utilization both before the YNFGs and one month following the intervention.

Results: Although stigma did not decrease overall for study participants, there was less of an increase in the intervention group suggesting that YNFGs could be considered a harm reduction approach. For youth attending low need schools, there was a significant decrease in stigma after participating in YNFGs. The full report is available through the Provincial Centre of Excellence for Child and Youth Mental Health at CHEO.

Conclusions: The Youth Net National Meeting: Translating Knowledge to Practice was attended by 34 Youth Net delegates from sites across Canada as well as 11 local agency representatives. The event was a success as objectives were met, and participants had the opportunity to discuss the research projects and their implications.

Project Timeline: 2009

Project Funding Source and Amount: $7,500 (CIHR) and $1,707 (PHRED)

Conference Presentations:

2009 Hamilton Student Drug Use Survey

Investigators: Angela Paglia-Boak¹, Robert E. Mann¹, Edward M. Adlaf¹, Jürgen Rehm¹
(¹Centre for Addiction and Mental Health) John Pollard² (²Institute for Social Research, York University)

Health Unit Contact Person: Corry Curtis

Background: The purpose of this research is to identify epidemiological trends in student drug use and to identify corresponding trends in mental health, risk-taking behaviours and various protective factors among students in grades 7-12 in the City of Hamilton. The rationale for conducting this research is to detect emerging issues among Hamilton youth as they progress through the developmental stages and allow for the creation of appropriate programming based on extent of usage. This research also provides a basis for policy formation and evaluation based upon recommendations made from various reports such as the Canadian Drug Strategy.

Research Questions:
1. What is the extent of use and attitudes and beliefs about alcohol and other drug use of Hamilton students in grades 7 to 12?
2. What is the extent and nature of alcohol-related and drug-related problems?

Method: Detailed survey methodology is explained in two reports:
1. 2009 Ontario Student Drug Use and Health Survey developed by the Centre for Addiction and Mental Health
2. The Design and Implementation of the Ontario Student Drug Use and Health Survey (2009) developed by York University’s Institute for Social Research.

The survey was implemented in Hamilton over an 8 month period. A total of 12 schools were sampled in Hamilton with a total sample size of 493 students. This sample consisted of 302 students in grades 7-8 and 191 students in grades 9-12.

Results: Results of the survey indicate that substance use and other youth risk behaviours are prevalent for youth 11-19 years of age in the City of Hamilton. Initial findings show that alcohol, marijuana, tobacco and opioid pain relievers are the most commonly used drugs. These results and additional findings will be used to update current public health resources and will be released through various public health channels to target parents, teens and professionals in 2010.

Conclusions: The results of the 2009 Hamilton Student Drug Use Survey demonstrate an ongoing need for comprehensive substance abuse prevention programming that targets children and youth before the age of onset of use.

Project Timeline: 2008 - 2009

Project Funding Source and Amount: $4,999 (PHRED) and $10,874 (Internal)
Alcohol, Drug and Gambling Services: Review of Organizational Position and Service Delivery Models

Investigators: Dr. Susan Keller-Olaman & Luanne Jamieson

Health Unit Contact Person: Luanne Jamieson

Background: Hamilton is one of very few locations in Ontario where addiction services operate within Public Health. The purpose of this review was to provide ADGS and Hamilton Public Health Services (PHS) with information on the advantages and disadvantages of the present organizational position and service delivery, with consideration of alternative models of service delivery.

Review Objectives
1. To provide an overview of current ADGS operations.
2. To provide an overview of addiction-related data from Hamilton.
3. To present ADGS data such as wait times, client profile and client feedback.
4. To understand how the current ADGS service delivery structure is considered by stakeholders in Hamilton.
5. To report challenges and improvements with the current service delivery structure as identified by stakeholders based in Hamilton.
6. To report perceived benefits, challenges and improvements with current service delivery structure and service delivery integration, as reported by addiction and/or mental health service leaders based outside Hamilton.

Methods: A mixed methods approach was utilized to collect and analyze data. Eighty-eight individual interviews with ADGS clients, staff, advisory, former leaders, in addition to addiction and/or mental health service providers in Hamilton, and key informants outside Hamilton were assessed using content analysis to identify key themes.

Results: Clients who accessed and completed ADGS programs were overall very satisfied with the services. From the individual interviews, ADGS staff believed that they were conducting work of high standard, but acknowledged gaps in services. Interview responses from the Hamilton-based addiction and/or mental health agency representatives and key informants outside Hamilton were mixed. The majority of interviewees believed that ADGS clients would be better served by an alternative service delivery model with ADGS divesting from PHS and the City. Others felt that the exclusionary issues and access issues could be corrected without divesting.

Conclusions: Recommendations were suggested to be implemented within Hamilton PHS over three years using a three-phase approach of action.

Project Timeline: 2008 - 2009

Project Funding Source and Amount: Internal funding
School Health Action Planning & Evaluation Systems (S.H.A.P.E.S.)

**Investigators:** Dr. Steve Manske (The Propel Centre for Population Health Impact, University of Waterloo)

**Health Unit Contact Person:** Kevin McDonald

**Background:** The SHAPES survey is an assessment of Hamilton students in grades 9 through 12 conducted by the Propel Centre for Population Health Impact at the University of Waterloo in collaboration with the Hamilton Public Health Services (PHS). The survey asks students about their mental fitness, physical activity, eating behaviours, and tobacco use. A total of nine school-specific and one city-wide S.H.A.P.E.S. feedback reports will be produced to help schools, together with students, parents and other community partners, to: increase awareness of trends in mental fitness/resilience, physical activity and healthy eating at their school, plan actions related to these issues and co-ordinate these efforts with other groups. Participating schools are encouraged, to partner with other schools, local health and voluntary organizations, municipalities, businesses, etc., to take action on the results reported. Ideas on what to do with the information contained in the reports are included in each of the reports.

**Method:** SHAPES-Hamilton 2009/10 is a survey of up to 10 secondary schools selected from school boards served by Hamilton PHS. All consenting students in grades 9 through 12 at participating secondary schools will be surveyed. Within each school, classes will be randomly assigned to complete one of two survey modules focused on tobacco use, physical activity, healthy eating and mental fitness. Schools will receive a feedback report describing the results of students in the school, and linking survey results to implications for activities.

**Results:** Execution of the survey instruments with participating schools is ongoing. As a result of the fall 2009 H1N1 emergency, administration of the S.H.A.P.E.S. 2009 survey instruments in participating high schools was postponed until winter 2010. To date, seven of nine participating schools have been administered.

**Conclusions:** Data collection, analysis and reporting is ongoing. As a result of the fall 2009 H1N1 emergency, administration of the S.H.A.P.E.S. 2009 survey instruments in participating high schools was postponed until winter 2010. Full school-specific and city-wide reporting is expected to occur by May 2010.

**Project Timeline:** 2009 - 2010

**Project Funding Source and Amount:** $30,231 (PHRED)
Public Health / Primary Care Collaboration on Diabetes Prevention through “Prescribed” Physical Activity for Low Income and / or Culturally Diverse Women in Hamilton

Investigators: Ann Stanziani, Angela Frisina, Tricia Hack and Elizabeth Molinaro

Health Unit Contact Person: Ann Stanziani

Background: This research project examined how public health and primary care practitioners from a variety of settings and disciplines in Hamilton could collaborate better to address diabetes prevention within target populations (low income and/or culturally diverse women) via the lifestyle intervention of physical activity.

Research Questions:
1. How can Hamilton Public Health Services collaborate more effectively with health care providers from a variety of disciplines, to encourage physical activity to specific populations at risk of developing type 2 diabetes (DM2)?
2. How can Hamilton Public Health Services facilitate access to barrier-reduced physical activity programs for clients/patients for the purpose of DM2 prevention?

Method: A twelve member multidisciplinary advisory committee was formed to provide consultation regarding the recruitment of participants, focus group questions, feedback on the identified themes and advice on dissemination. The research project team submitted and obtained ethics approval from the McMaster University Research Ethics Board. Ten, 90 minute focus groups were conducted with 71 participants from Hamilton Public Health Services, Family Health Teams, Community Health Centres and Outpatient Diabetes Programs.

Results: A total of five key themes arose from the data analysis.
1. The Need for More Education and Awareness of the Client/ Community around Diabetes Prevention
2. The Need for More Client/Community-Centred Goal Setting
3. The Need for More Supportive Environments
4. The Need for More Communication
5. The Need to Address Systemic Issues

Conclusions: In this research project, public health and primary care practitioners validated the importance of DM2 prevention and shared a desire to collaborate more efficiently to improve the health of individuals and community, especially underserved populations such as low income and/or culturally diverse women. Further dialogue is required to develop strategies together that address mutual mandates.

Project Timeline: 2009 - 2010

Project Funding Source and Amount: $37,000 (PHRED)
An Exploration of The Experiences Related to Mental Well-Being of Women of Low Socioeconomic Status Who Have Participated in the Woman Alive! Physical Activity Program

Investigators: Angela Frisina, Ann Stanziani, Joanne Crawford and Priya Verma

Health Unit Contact Person: Angela Frisina

Background: The purpose of this project is to further explore, through individual and group interviews, the experiences related to mental health and well-being of women of low socioeconomic status who have participated in the Woman Alive! (WA) physical activity program.

Research Question: What are the experiences of women who have attended a WA! physical activity program series as it relates to their mental health and well-being?

Method: Participant descriptions of their experiences were collected by individual interviews and focus groups. Six focus groups of 60-90 minutes and three (60 minute) individual interviews were conducted by the research assistant. Cultural interpreters were used when required. A total of forty-one participants from diverse communities participated in the study. Each interview was tape recorded and transcribed verbatim. Data was analysed using thematic content analysis.

Results: Overall, participants described numerous physical and mental health benefits that resulted from their participation in the WA! Program. Although interest in physical activity (PA) formed early in life, participants felt that interest/participation was not nurtured in adulthood unless a supportive environment was present to address barriers. Numerous barriers were described by those who participated, including cost of programming, child care, transportation, and a feeling of not belonging/not fitting in with more mainstream programming. Participants said that they engaged in PA because of the supportive group environment offered through WA and described a sense of increased motivation due to the structured group exercise program. Skill and knowledge development obtained from the program, helped to sustain a healthier lifestyle, and inspire participants to share what they had learned with family members.

Conclusions: This project validated many years of anecdotal evidence provided by those women who previously attended the WA! Program. Further research on a larger scale would be beneficial to explore in more depth what role group fitness may play in the mental well-being of vulnerable women in our community. The results of this small scale study provide support to other community organizations working in the field of mental health.

Project Timeline: 2009 – 2010

Project Funding Source and Amount: $28,000 (PHRED)
The Experience of Immigrant Women who have Accessed Breast Health and Screening through Hamilton Women’s Health Educator Program

Investigators: Joanne Crawford, Angela Frisina, Faye Parascandalo, Trish Hack, Abir Alsaid1 Thuy Dam1, Fatima Homid1, Michelle Ji1, and Snober Naz1 (‘St. Joseph’s Immigrant Women’s Centre)

Health Unit Contact Person: Angela Frisina

Background: The Women’s Health Educators (WHE) Program utilizes a peer educator approach, with the primary goal being to facilitate increased access to cancer screening, in four immigrant communities in Hamilton: Arabic, Chinese, South Asian and Vietnamese communities. WHEs are women from the same cultural background as the community they serve and promote access by providing women’s health sessions, interpretation, cultural support and accompaniment to screening.

Research Questions: The purpose of this project was to examine immigrant women’s experiences accessing breast health and breast screening through the City of Hamilton’s WHE Program.

Methods: We utilized participatory action research and qualitative exploration to uncover immigrant women’s perceptions of the experience accessing a culturally tailored program utilizing peer educators. Immigrant women from the four identified communities, who have accessed the WHE Program for a breast health session and/or breast screening at the OBSP, were recruited. Data were collected from focus groups and in-depth interviews, facilitated by immigrant women from each of the four communities of interest.

Results: Eight-three immigrant women participated in the study; 36% Arabic, 15% Chinese, 25% South Asian, and 18% Vietnamese. Ages ranged from 40 to 74 years; 35% were 40-50 years of age and the remaining 65% were 50 years of age and older. Preliminary findings indicated that previously held assumptions of breast cancer such as fear and death were challenged by the knowledge gained and subsequently portrayed as hope, realization and personal responsibility for one’s own health.

Conclusions: Women shared perspectives about the WHE Program related to the provision of supportive care, presence, and safety. New directions for the enhancement of the WHE Program reinforced that culturally tailored programs require input from the women who access them to meet changing needs related to the sub-groups of the population of interest.

Project Timeline: 2008 – 2010

Project Funding Source and Amount: $197,000 over 2 years (Canadian Breast Cancer Foundation)
Maximizing Nutrition & Physical Activity Strategies

Investigators: Suzanne Brown and Eunice Chong

Health Unit Contact Person: Suzanne Brown

Background: The purpose of this program review is to identify and recommend a framework on which to deliver integrated and comprehensive chronic disease prevention strategies.

Research Questions:
1. What evidence exists on chronic disease prevention (CDP) interventions?
2. What are the current health promotion strategies used by CDP programs in Hamilton Public Health Services (PHS) and other relevant City of Hamilton departments?
3. What are the social determinants of health addressed by CDP programs in Hamilton PHS and other relevant City of Hamilton departments?
4. What are the best practices followed by CDP programs in Hamilton PHS and other relevant City of Hamilton departments?

Method: A literature review and environmental scan was conducted on CDP that relates to nutrition and physical activity. A focus group was conducted with the Central West Health Unit CDP Managers to learn about the approaches used in CDP programs in their health units.

Results:
1. The CDP literature emphasizes a shift in focus from individual-level to population-based approaches and consideration of the social determinants of health.
2. The primary health promotion strategy utilized by CDP initiatives in the Healthy Living Division is developing personal skills. Other strategies tend to be of a secondary focus in programming.
3. The main social determinants of health currently addressed by CDP programs in the Healthy Living Division are social environments and personal health practices.
4. The primary health promotion strategy utilized by CDP-related programs in the other Hamilton PHS Divisions and other City of Hamilton Departments is developing personal skills. The main social determinant of health addressed by CDP programs in the other Hamilton PHS Divisions is personal health practices.
5. In general, CDP initiatives in the Healthy Living Division were evidence-based.
6. CDP programs underway in other Central West Public Health Units take approaches similar to those of the CDP initiatives in the Healthy Living Division.

Conclusions: The findings from this project will provide directions to the development of joint CDP operational planning in 2010.

Project Timeline: 2008 - 2010

Project Funding Source and Amount: Internal funding
Evaluation of the Quick Access Service at Child and Adolescent Services

Investigators: Debbie Sheehan, Louise Oke, Dina Bednar, Dr. Drew Dane, Gord Greenway, Margarita Rabinovich, Karen Timmerman and Van Vu

PHS Contact/Lead: Louise Oke

Background: In 2007 Child and Adolescent Services began offering a single session, walk-in intervention that clients could access as soon as they were referred as a way to offer clients service when they ask for it and to help families get started with changes and accessing available resources while they wait for service. The purpose of this project is to evaluate the Quick Access Service (QAS) to see whether it is helpful to client families and is therefore a valuable addition to our range of clinical services. Because there is a growing focus in children’s mental health on accountability through services doing their own outcome evaluation, a secondary purpose of the project is to build capacity within our program for doing research and evaluation.

Method: Using a combination of interview and questionnaire data at four points in time we are looking at outcomes of, and satisfaction with, the QAS from clients and all other family members who attend the QAS.

Research Questions:
1. What are client’s perceptions of the QAS program?
2. What are the characteristics of clients who attend QAS compared to those who do not attend?
3. Does the QAS, single session family intervention result in increased self-ratings of: hopefulness, self-efficacy, parenting self-efficacy, coping, understanding of the problem and awareness of personal and family strengths and resources?
4. What are the specific characteristics of clients who do not require further service following the QAS appointment?
5. Does the QAS, single session family intervention result in a change in parents’ ratings of: the identified child’s symptom severity, caregiver depression, impact of the problem on child and family members, and family functioning one month after the session?
6. Do high pre-intervention levels of parental self-efficacy moderate the impact of the QAS?

Project Timeline: 2008 – 2010

Project Funding Source and Amount: $40,000 - Centre for Excellence in Children’s Mental Health at the Children’s Hospital of Eastern Ontario
The Nurse-Family Partnership Feasibility & Acceptability Study

Investigators: Dr. Susan Jack¹, Dr. Harriet MacMillan¹, Debbie Sheehan¹, Dr. Michael Boyle¹, Dianne Busser, Dr. Jean Clinton¹, Dr. Christine Kurtz-Landy², Dr. Christopher Mackie, Dr. Alison Niccols¹, Ruth Schofield¹, and Dr. Olive Wahoush¹ (McMaster University¹, York University²)

Health Unit Contact: Debbie Sheehan

Background: The Nurse-Family Partnership (NFP) is an effective, evidence-based approach to improving the health and life-course of low-income, first-time mothers and their children through the long-established service strategy of home visiting.

Research Questions: This proposal will test the feasibility and acceptability of implementing the NFP program with public health nurses (PHNs) in Hamilton and local first-time mothers. In addition, we will test procedures for recruitment, strategies for retention of the sample, the feasibility and methods for collecting data.

Methods: Focus groups and individual interviews have been conducted with mothers (n=18), family members including fathers (n=12), community partners (n=19), and public health nurses/managers (n=18). Additional interviews to be conducted.

Results to date: 108 mothers were recruited into the study. Response to the Hamilton NFP program has been very positive. Key findings indicate the NFP is acceptable as:
- mothers see the PHN as a source of “expert” advice and perceive that their participation is supporting their capacities to become better mothers,
- community partners see the NFP as unique and meeting the needs of the population
- family members/fathers feel welcome to participate and support the home visits
- the PHNs value delivering a standardized, evidence-based intervention.

Project Timeline: 2008 - 2011

Project Funding Source and Amount: $284,149 in total from multiple funders: Children’s Aid Society of Hamilton, Catholic Children’s Aid Society of Hamilton, Community Child Abuse Council, Hamilton Community Foundation, City of Hamilton PHRED, McMaster Child Health Research Institute, Ministry of Children & Youth Services, Nursing Secretariat - Ontario Ministry of Health and Long-Term Care and the Provincial Centre of Excellence for Child and Youth Mental Health at CHEO.

Conference Presentations:

Evaluation of PHN Secondment Role with Hamilton Family Health Team

**Investigators:** Loretta M. Hillier¹, Tracy Hussey², Dr. Carrie McAiney², Jaclyn Busser and Dr. Jean Clinton³ (¹Health Care Research & Evaluation, ²Hamilton Family Health Team, ³Child Psychiatry, Lead for the 18-month local initiative)

**Health Unit Contact Person:** Glenda McArthur

**Background:** The Hamilton Family Health Team (HFHT), as part of its Children’s Health Project, has developed a plan for assisting practices to learn how to conduct the expanded 18-month well baby visit (WBV) and to assist them to integrate this expanded WBV into their regular practice. In an effort to provide a coordinated approach to training physicians, nurses, and nurse practitioners to conduct the expanded WBV and to foster continuous relationship building and collaboration between the HFHT and Hamilton Public Health Services, this project involves the secondment of a public health nurse (PHN) to act as a mentor/coach and to develop educational modules and materials to support team training on the expanded visit.

**Research Questions:**
1. Describe practice related to the 18 month WBV prior to the start of this initiative
2. Describe the Family Health Team demonstration sites, population served, activities and services provided by PHN
3. Determine whether anticipated short-term outcomes/objectives were achieved
4. Describe the process of developing and implementing this initiative

**Method:** Mixed method approach (qualitative and quantitative) to assess process and outcomes
- Initiative, referral, service and education tracking (prospective data collection)
- Site Checklist (Environmental Scan) to assess current processes in place for 18 month WBV
- Retrospective Chart Review to describe changes in practice as a result of this initiative such as referral and care practices (chart audit tool developed)
- Parent Satisfaction Survey
- Health Professional Survey
- Interviews with Key Stakeholders (FHT team members and PHN)

**Project Timeline:** 2009 - 2010

**Project Funding Source and Amount:** $20,967 (PHRED)
Breastfeeding Peer Support Group – 10-week Pilot

**Investigators:** Eunice Chong, Lesley Jefferies and Sue Keller-Olaman

**Health Unit Contact Person:** Eunice Chong

**Background:** The purpose of this project was to implement and pilot a 10-week breastfeeding support group for minority ethnic women in Hamilton. This project was intended to provide information on the feasibility of establishing a community-based peer-led breastfeeding support group for minority ethnic women.

**Research Questions:**
1. What are the perceived benefits of those participating in the breastfeeding support group pilot?
2. Does group participation influence breastfeeding indicators? (e.g., opinions about breastfeeding knowledge, skills and attitudes, exclusivity, duration)
3. Can a peer support group be implemented successfully and is it transferable?

**Method:** The support group was conducted at the Wesley Ontario Early Years Centre, since there are a high proportion of visible minority parents who reside within walking distance of this centre and often visit there. The pilot was facilitated by a public health nurse/lactation consultant (PHN/LC). Mothers participating in the support group were required to fill out surveys regarding their opinions of their experience of the support group on week 1, week 5, and week 10. In addition, the PHN/LC also shared her experience in implementing and facilitating the support group over the 10-week period.

**Results:** In general, mothers enjoyed attending the support group and found it helpful for networking with other mothers, discussing breastfeeding and other baby-related issues with each other, and for obtaining answers to any questions from the PHN/LC. Since mothers reported an overall good level of satisfaction with their breastfeeding experience prior to joining the support group, there was no dramatic improvement in breastfeeding experience from the support group. It is clear that mothers preferred a PHN/LC-led support group over a peer-led support group, as they indicated the importance of having their questions answered by a health care professional. Observations from the PHN/LC also confirmed that it was very difficult to generate discussions with this group over the 10-week period. In addition, the PHN/LC was hoping that more mothers of various ethnic backgrounds would participate in the pilot.

**Conclusions:** The key recommendation is that a peer-led breastfeeding group for breastfeeding mothers of ethnic minorities is not recommended in Hamilton at this time.

**Project Timeline:** 2009

**Project Funding Source and Amount:** Internal funding
Health Status of Expectant Women in the City Of Hamilton: A Situational Assessment

Investigators: Luanne Jamieson & Angie Bennett

Health Unit Contact Person: Luanne Jamieson

Background: Past empirical literature has provided evidence of adverse effects on maternal-infant health associated with expectant women’s cigarette smoking, alcohol consumption, folic acid deficiency, lack of physical activity and proper nutrition. The current assessment provides an opportunity to define public health needs in addition to informing program development. The goal of this situational assessment is to determine the current health status of expectant women in the City of Hamilton.

Research Questions:
1. What is the current knowledge of expectant women 16 years of age and older in Hamilton regarding the effects of alcohol consumption, cigarette smoking, folic acid intake, nutrition, and physical activity on maternal-infant health?
2. What are the current behaviours of expectant women 16 years of age and older in Hamilton regarding alcohol consumption, cigarette smoking, folic acid intake, nutrition, and physical activity?

Methods:
Pregnant women presenting at local hospital maternal registration clinics in Hamilton will be sampled to determine current knowledge and behaviours in this population.

Results: Results from this assessment will verify priority issues that can be addressed through health promotion activities provided by Hamilton Public Health Services.

Project Timeline: 2009 - Ongoing

Project Funding Source and Amount: Internal funding
Child and Adolescent Services: Review of Service Delivery

Investigators: Luanne Jamieson, Gordon Greenway and Angie Bennett

Health Unit Contact Person: Luanne Jamieson

Background: Child and Adolescent (C&A) Services provides mental health assistance to high risk children (ages 2-18) and their families who reside within the City of Hamilton. As an outpatient children’s mental health centre, C&A is funded entirely by the Ministry of Children and Youth Services. Currently, C&A is part of Hamilton Public Health Services (Family Health Division) and remains accountable to the Ministry of Children and Youth Services, in addition to the City of Hamilton’s governance structure. Due to a number of years of financial cutbacks, this program evaluation is being completed to address reduced resources and capacity related to service delivery.

Research Questions:
1. What are the core services for C&A Services to retain?
2. What are the recommended changes to current C&A Services?
3. What are the services offered by similar organizations in other communities?

Methods: A mixed-methods approach will be used to analyze data from key informant interviews with, staff and community agencies, client surveys, in addition to C&A administrative data.

Project Timeline: 2009 - Ongoing

Project Funding Source and Amount: Internal funding
Needs Assessment of HIV/STI Prevention Strategies for Men Who Have Sex with Men in Hamilton

Investigators: Eunice Chong, Linda Blake-Evans, Nicole Ritz, and Nancy LeMay

Health Unit Contact Person: Eunice Chong

Background: Men who have sex with men (MSM) continue to be the group most affected by HIV infections. Moreover, STI rates among MSM are on the rise. This increase is of particular concern since there is evidence that STIs among MSM can increase the likelihood of HIV transmission. Minimal data exists for the Hamilton region that relates to the MSM community. It is not known what options for HIV/STI prevention interventions are best supported by the Hamilton MSM community.

Research Questions:
1. What are the evidence-based HIV/STI prevention strategies for MSM?
2. What are the sexual behaviour habits among MSM in Hamilton?
3. Where do MSM in Hamilton get information about sexual health?
4. What types of sexual education interventions do MSM prefer (e.g. topics, methods)?
5. What are the current HIV/STI prevention strategies adopted by the MSM community and organizations in Hamilton?
6. How to increase HIV testing rates among MSM in Hamilton?

Method: Several approaches were used to gather data: Literature review to identify evidence-based HIV/STI prevention interventions for MSM; Men’s Sexual Health Survey was developed and administered to MSM to gather info on sexual behaviour and HIV/STI prevention service needs, and key informant interviews on needs and barriers of HIV/STI Prevention interventions in Hamilton and surrounding area.

Results: Strong evidence was found to support behavioural HIV prevention interventions for MSM in reducing risky sexual behaviour. Results from the Men’s Sexual Health Survey showed that many respondents continue to practice unsafe sex. “Unaware of services” was cited as a reason for not attending HIV/STI prevention services, and this was confirmed by key informants as one of the barriers of MSM to access services. Lastly, key informants and best practices emphasized the importance of HIV/STI prevention education for youth and young MSM.

Conclusions: The findings from this needs assessment will be used to guide new or existing HIV/STI prevention programs to increase awareness of safe sex and reduce HIV/STI transmission among MSM in Hamilton.

Project Timeline: 2009 - 2010

Project Funding Source and Amount: Internal funding
Sexual Health Clinic: Usefulness of Sexual Health Education Materials

Investigators: Eunice Chong and Fiona Newton-Brown

Health Unit Contact Person: Eunice Chong

Background: Health education materials, such as pamphlets and fact sheets, are available at the sexual health clinics for clients to read. Concerns have been raised regarding the usefulness of these education materials. Since the content of the materials contains sensitive information, it is questionable as to whether clinic clients will take these pamphlets and fact sheets and read them outside of the clinic. In addition, we would like to find out if clients prefer other methods to receive this information, such as websites or educational videos playing in the clinics.

Research Questions:
1. Do clinic clients find the sexual health education materials useful?
2. What are the barriers for clients in using the educational materials?
3. What methods do clients prefer to receive sexual health information?

Method: A survey was developed and administered to revisiting clients by the receptionists at the sexual health clinics in four locations.

Results: Results showed a positive response on the educational materials offered at the sexual health clinics, with clinic clients stating that the materials are easy to understand, beneficial in terms of the topics discussed, effective in increasing sexual health knowledge, and useful in promoting sexual health behaviour change. “Did not see the pamphlets and fact sheets in the clinics” is cited as the biggest barrier to not reading the materials before. The Sexual Health Program website is also another source that clients stated as a preferred method to obtain sexual health information.

Conclusions: Results from this project demonstrated that educational materials are useful and worthy to keep. To increase effectiveness, education materials should be placed in a more visible location in the clinics, and be distributed to the clients by clinic professionals. Providing information on the sexual health clinic website and promoting the website to the clients, particularly to the teenage population, is also another method to increase awareness of sexual health information.

Project Timeline: 2008 - 2009

Project Funding Source and Amount: Internal funding
Hamilton Child Blood Lead Prevalence Study

Investigators: Dr. Elizabeth Richardson, Wendy Pigott, Carole Craig, Nancy Greaves, Matt Lawson, and Dr. Lesbia Smith

Health Unit Contact Person: Matthew Lawson

Background: This prevalence study is intended to fill a long-standing gap of quantitative information on children’s exposure to lead from environmental sources in the City of Hamilton and will help to provide a basis for support of either existing or newly proposed guidelines and public health programming by using data from the most susceptible group in the population, children 6 years of age and under.

Research Questions: The Hamilton Board of Health directed staff to “determine if Hamilton has a lead problem”. To help answer this question, two research objectives were identified: 1) provide an estimate of the prevalence of blood lead levels ≥ 0.48 µmol/L as well as clinically actionable blood lead levels (> 0.19 µmol/L) among children 6 years of age or under residing within a targeted geographic area in the City of Hamilton judged to be at increased theoretical risk of environmental lead exposure; and 2) explore the influence of risk factors and environmental lead levels on children’s blood lead levels within the sample.

Method: The study consisted of the following components:

- a survey of children’s blood lead levels (Fall, 2008);
- interviews with parents/guardians of children tested for blood lead levels to determine family and household characteristics (Fall, 2008);
- environmental testing for lead levels in tap water and dust from a sub-sample of the households of children who had their blood lead levels tested (Fall, 2008);
- lead levels in soil around the dwellings where a sub-sample of the children lived (Summer, 2009);
- air lead sampling data for the study area (provided by the Ministry of Environment – 2008 data); and
- data for water samples taken from fire hydrants (as part of surveillance for regulatory compliance with water standards) and to respond to requests from the public (provided by City of Hamilton Public Works – 2008 data).

Results: Data from the study is still currently being analyzed, and is expected to be made available in Spring, 2010.

Project Timeline: 2008 - 2010

Project Funding Source and Amount: $105,000 (PHRED)
Air Quality Program

Investigators: Marie McKeary¹, Carita Ng¹, and Bruce Newbold¹ (‘McMaster Institute for Environment and Health)

Health Unit Contact Person: Rob Hall

Background: Hamilton Public Health Services (PHS) current Strategic Business Plan designates Environmental Health Services Division as the ‘champion’ for Air Quality improvement in Hamilton. McMaster Institute for Environment and Health (MIEH) will offer appropriate and needed research support and collaborate with the Project Manager and Division Director in the achievement of the goal.

Research Questions: What are the main sources of air pollution? What are the health effects of air pollutants? What is the ‘state of the art’ of air pollution modeling?

Method:

- Review of Strategic Business Plan “A” and development of template for Literature and Policy review activities to be conducted by MIEH in support of the Air Quality team based on interviews with Air Quality Management and team members.
- Advise Air Quality Project Manager on pertinent Webinar, conferences, media articles, research partnership opportunities regarding the Air Quality initiatives in local and surrounding areas.
- Review of Toronto Public Health report on the launch of the Air Quality Health Index (AQHI). MIEH to deliver summary of findings and recommendations report in support of possible AQHI launch in Hamilton by Hamilton PHS.

Results: Hamilton PHS staff were presented with two review documents:

1. Sources and Health Effects of Air Pollution. An analysis of TSP, PAH, VOCs, NOx, Sox, CO and ground level ozone
2. Modeling Air Pollution Dispersion & Concentration and the Use of Air Pollution Models in Epidemiological Studies

Hamilton PHS, in collaboration, with MIEH continue to work toward the accomplishment of this important and strategic goal – Air Quality Improvement.

Project Timeline: 2009 - Ongoing

Project Funding Source and Amount: PHRED/HPHS
Predictive Modeling of Recreational Bathing Water in Hamilton Harbour

Investigators: Sally Radisic, Eric Mathews, and McMaster Institute for Environment and Health (MIEH)

PHS Contact/Lead: Eric Mathews

Background: The predictive modeling project will collect data to identify potential environmental variables that might affect E.Coli levels in the water at Hamilton beaches.

Research Questions:
1. Are there environmental variable(s) that are directly related to high levels of E.Coli in Hamilton recreational waters?
2. Are there environmental variable(s) that can be used in the field as an indicator of high E.Coli levels?
3. Will the implementation of a predictive model improve efficiency with respect to notification of key stakeholders (i.e. beach users/visitors)?

Method: Public Health Inspector trainees will record the following environmental variables Monday to Thursday from Victoria Day to Labour Day:
   - Air temperature
   - 48hr rainfall
   - Wave height
   - Wind speed and direction
   - Lake level
   - Water temperature
   - Turbidity

Results: The findings of the predictive modeling project will set the framework for future projects that can be initiated by staff to improve the Hamilton Beach Management Program. The project will assist in surveillance and inspection of Hamilton beaches, management and response of adverse events at Hamilton beaches and reporting if Hamilton bathing water conditions are safe or not safe for users.

Project Timeline: 2009 - 2010

Project Funding Source and Amount: $17,320 (PHRED)
Research Support Regarding Evidence for the Creation of a “Cooling Tower and Evaporative Condenser Registry By Law” to be Presented to Board of Health

**Investigators:** Marie McKeary¹, and Bruce Newbold¹ (¹McMaster Institute for Environment and Health)

**Health Unit Contact Person:** Eric Mathews

**Background:** Two clusters of community acquired Legionella infections between 2006 and 2008 prompted Hamilton Public Health Services (PHS) to recommend enacting a Cooling Tower Registry by-law in order to facilitate more prompt and accurate future investigations by Hamilton PHS. This project aimed to gather international/national evidence regarding development, legislation and enactment/enforcement of Cooling Tower Registries (CTR).

**Method:** McMaster Institute for Environment and Health (MIEH) conducted an international literature review and prepared a summary report which outlined the development of registries and the necessary documentation. MIEH also acted as consultants advising on the preparation of the Board of Health report.

**Results:** The Hamilton PHS Program report and MIEH literature review were presented to Board of Health and approval was granted for the preparation of a draft municipal by-law.

**Conclusions:** The Board of Health approved Public Health Services to draft a municipal by-law for cooling towers and evaporative condensers, for further review and consideration by the Board of Health.

**Project Timeline:** 2009

**Project Funding Source and Amount:** PHRED/PHS
Preparation of Draft “Cooling Tower and Evaporative Condenser Registry By-Law – Legionella”

Investigators: Marie McKeary and Bruce Newbold (McMaster Institute for Environment and Health)

Health Unit Contact Person: Eric Mathews

Background: McMaster Institute for Environment and Health (MIEH) offered consultation and research support regarding development and preparation of a draft by-law report to be presented to Board of Health in April 2010. Based on the results of the international literature review will collaborate with HPHS both in the development of a draft by-law and advise on the consultation process including evaluation of stakeholder feedback.

Method: MIEH appointed member of Project Team (included Surveillance, Environmental Health Services and Legal Services); Assisted in development of Project Workplan; Developed Tool for consultation to industry stakeholders, including draft letter to stakeholders, plan of execution, contact to stakeholders; Member of Draft by-law writing team; Reviewed Legal Services response.

- MIEH currently performing research analysis of stakeholder ‘feedback’ and preparation of summary report.
- MIEH currently member of development team (including Environmental Health Services, Surveillance, and Legal Services).
- MIEH currently advising on creation of Annual Registration Form
- MIEH currently conducting Literature Review regarding exclusionary clauses to be included in final draft of By Law.
- MIEH currently involved in preparation of Board of Health report to be presented to members in April 2010.

Results: Draft by-law developed. Industry Stakeholder Consultation completed. Stakeholder data analysis ongoing.

Conclusions: Preliminary results reveal industry support for the by-law and necessary documentation and development of registry template is currently in development.

Project Timeline: 2009 - 2010

Project Funding Source and Amount: PHRED/HPHS
City of Hamilton Vector Borne Disease 2009 Annual Report and Evaluation of West Nile Virus Program Activities in preparation for Annual Ministry of Health and Long Term Care Report

Investigators: Marie McKeary1, and Bruce Newbold1 (‘McMaster Institute for Environment and Health)

Health Unit Contact Person: Susan Harding-Cruz

Background: Since 2005 McMaster Institute for Environment and Health (MIEH) has collaborated with the West Nile Virus (WNV) Program in the planning and evaluation of the education and outreach component of the program. Since 2008, the WNV/VBD Program is required to submit an annual report to the Ministry of Health and Long-Term Care (MOHLTC) regarding WNV/Lyme disease surveillance/control and public education/awareness activities, as well as an evaluation of their efficacy. MIEH acts as advisor, as well as, compiling, evaluating and composing a report on the public education/awareness component of the program. In 2009-2010 MIEH wrote this section of the annual report subsequently submitted January 2010 to the MOHLTC.

Method: MIEH conducted a review of the literature regarding climate change and WNV, compiled and analyzed the WNV website data, and compiled and analyzed the public education and outreach events/activities.

Results: WNV continues to be of concern to the general public, especially in terms of personal protection and prevention. Current education/outreach activities continue to meet the needs of both the Program and the general public, although the Program experienced a substantial MOHLTC budget reduction in 2009. The general public is also interested in the surveillance activities of the WNV program.

Conclusions: The Education and Evaluation section of Annual VBD report has been written and submitted, to the Medical Officer of Health and ultimately to the MOHLTC.

Project Timeline: 2009 - 2010

Project Funding Source and Amount: PHRED/HPHS
West Nile Virus Messaging within Diverse Communities

Investigators: Marie McKeary¹, Bruce Newbold¹ and Susan Harding-Cruz (¹McMaster Institute for Environment and Health)

Health Unit Contact Person: Susan Harding-Cruz

Background: In 2007, the West Nile Virus (WNV) Program chose to make accessibility of WNV information, particularly for diverse groups, one of their goals. To accomplish this goal, WNV program staff, in collaboration with McMaster Institute for Environment and Health (MIEH), conducted presentations and follow-up questionnaires with those in attendance. The project successfully contacted a number of diverse groups representing over 20 different language groups. It was a precedent-setting project that examined the efficacy of WNV messaging within diverse communities. In 2009, the WNV Program Manager and MIEH staff wrote an article outlining the methodology and results of the project in the hope of transferring knowledge to other public health programs and units.

Method: Knowledge Transfer, an article was written, submitted and published in an electronic newsletter.

Conclusions: The article was submitted and subsequently, published in the public health electronic journal entitled, “Equal Access…is Everybody’s Business” (June, 2009). The journal is shared with both internal stakeholders within the HPHS corporation and external stakeholders within the Hamilton community. The article was also posted on the MIEH website at McMaster University and shared with the academic community.

Project Timeline: 2009

Project Funding Source and Amount: PHRED/HPHS

Publication:
Beach Water Quality Modeling and Surveillance

**Investigators:** Bruce Newbold (McMaster Institute for Environment and Health)

**Health Unit Contact Person:** Bob Hart

**Background:** Closure of public beaches in Hamilton (both Hamilton Harbour and Lake Ontario) due to high E-coli counts are common over the summer months. The project aims to better understand the conditions under which local swimming beaches are closed during the summer due to high E-coli counts.

**Research Questions:** Can modeling provide an alternate means to predict beach closure due to high E-coli counts based on environmental conditions?

**Method:** Hamilton Public Health Services (PHS) staff collected water samples, along with other environmental information, at local beaches throughout the summer of 2009. McMaster Institute for Environment and Health (MIEH) is responsible for data analysis and model construction.

**Results:** Preliminary results were presented to Hamilton PHS based on 2009 data. Results show:

- For all beaches, log (turbidity), day, wind degree and water temp are statistically significant.
- Day (time of summer) is not significant at the lake-side beaches, but it is for Pier 4 and Bayfront beaches. This is likely due to the ‘flushing’ of E-coli from the lake-side beaches with greater circulation or wave activity as compared to the Harbour beaches.
- Wave height and log (turbidity) are more important for lake beaches.
- Harbour beaches are much more likely to have high E-coli counts.

**Conclusions:** Results are robust with expectations, with further data collection and verification of results needed. Future work should look at model validation and replication.

**Project Timeline:** 2009 - 2011

**Project Funding Source and Amount:** PHRED/HPHS
Evaluation of ‘Food Safety Zone’ Web-Based Food Disclosure System

Investigators: Marie McKeary¹, and Bruce Newbold¹ (‘McMaster Institute for Environment and Health)

Health Unit Contact Person: Bob Hart

Background: Hamilton Public Health Services (PHS) launched a web based food disclosure site in May 2009 to inform the public regarding the results of the Food Compliance Program for local restaurants. McMaster Institute for Environment and Health (MIEH) was responsible for tracking public activity on the new website, as well as tracking the media launch of the site to evaluate the efficacy of the medium for public interest and education. Results will ultimately allow the Program to focus on policy development/enhancement and program evaluation based on scientific evidence.

Method: Data captured from the new ‘Food Safety Zone’ website was analyzed and compared to similar information from other corporate and food safety websites.

Results: N/A

Conclusions: N/A

Project Timeline: 2009 - Ongoing

Project Funding Source and Amount: PHRED/HPHS
Evaluation and Revision of Food Handling Mandatory Certification Program

Investigators: Marie McKeary¹, and Bruce Newbold¹ (¹McMaster Institute for Environment and Health)

Health Unit Contact Person: Bob Hart

Background: Hamilton Public Health Services (PHS) instituted a Mandatory Food Handling Certification Program via a by-law in 2007. The Program Manager designated two Public Health Inspectors (PHI’s) to deliver Food Safety Courses/presentations, as well as develop website material/curriculum in preparation for writing the Food Handler Certification Exam. McMaster Institute for Environment and Health (MIEH), in collaboration, with Hamilton PHS revised the current Food Handler Certification Exam and developed evaluation tools to determine the efficacy and usefulness of the Food Handler preparation materials, (both the course and the website materials/curriculum).

Method: Revised Food Handler exam in collaboration with Program Manager and designated PHI. MIEH developed evaluation tools. MIEH is currently performing coding and data analysis of the evaluation tool data.

Results: All designated PHI’s have been trained in use the evaluation tool. The analysis of data is ongoing. The new and revised Food Handler Certification exam is currently in use.

Conclusions: N/A

Project Timeline: 2009 - Ongoing

Project Funding Source and Amount: PHRED/HPHS
Evaluation Tool and Thematic Analysis of Data for Pandemic Plan Response (Internal): Pandemic Plan & H1N1

Investigators: Marie McKeary1, and Bruce Newbold1 (1McMaster Institute for Environment and Health)

Health Unit Contact Person: Connie Verhaeghe


H1N1: During H1N1 response by Hamilton Public Health Services, McMaster Institute for Environment and Health (MIEH) was able to offer their research skills in terms of current scientific findings regarding policy and pandemic studies in order to assist Hamilton PHS to keep their response program up to date with current research findings. Research support regarding changes in vaccine policy, hand washing techniques, hand washing alternatives, international/national pandemic responses, case analysis, and review of literature regarding recommended vaccine dosages.

Method: Pandemic Response: Developed tool and conducted thematic analysis regarding internal structural response of wave 1 of the H1N1 allowing for revisions to the pandemic response structure and policy development/enhancement.

H1N1: Media searches, literature review, literature and research analysis, knowledge transfer.

Results: Pandemic Response Structure: Results utilized to review and reformulate internal response structure.

H1N1: Support to Emergency Management program (including staff assigned to public phone lines, Vaccine Preventable Disease Program, Medical Officer of Health office) on subjects listed in Background section (see above).

Conclusions: MIEH assistance supported the shaping of Hamilton PHS policy and information sharing with general public regarding H1N1, as well as, review of internal response structure.

Project Timeline: 2009

Project Funding Source and Amount: PHRED/HPHS
Low-Income Dental Program

Stage I: Strategic and Program Planning Stage
Business Case Template for Public Health Units

<table>
<thead>
<tr>
<th>Health Unit Name:</th>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Of Hamilton</td>
<td>1447 Upper Ottawa Street</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>Location:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Income Dental Program</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Name / Position Title:</th>
<th>Telephone Number:</th>
</tr>
</thead>
</table>
INTRODUCTION:

This template was developed to assist Public Health Units in developing their business case to support implementation of the Low-Income Dental Program as part of the Ontario Poverty Reduction Strategy.

The Ministry will evaluate business cases from Public Health Units based on established criteria as set out in the companion document Low Income Dental Program – Introductory Guide for Public Health Units.

Business cases, signed by the Board of Health Chairperson, Medical Officer of Health/Chief Executive Officer, and Business Administrator, are to be submitted to the Public Health Planning & Implementation Branch at phdental@ontario.ca and must be received no later than November 30th, 2009. The original signed business case should be forwarded to:

Ministry of Health and Long-Term Care
Public Health Division
Public Health Planning & Implementation Branch
1075 Bay St., Suite 810
Toronto, ON M5S 2B1
Attention: Donna Dupont

Please note that you are required to complete all sections, however if the options provided adequately describe your situation you are not required to add further description.

SECTION 1: ABOUT YOU - EXISTING DENTAL SERVICES AND PARTNERSHIPS

1. Select the statement(s) that best describes how dental services are currently delivered through your Public Health Unit?
   a. Clinics provided on Public Health Unit premises
   b. Clinics provided at another location in partnership with the Public Health Unit
   c. Services provided through mobile dental clinics
   d. Referral to fee-for-service providers
   e. Other (please describe)

   We currently deliver services through the following:
   a. Clinics provided on Public Health Unit premises
   c. Services provided through mobile dental clinics (Community Health Bus)
   d. Referral to fee-for-service providers (CINOT screening program)

2. For those Public Health Units that provide clinic services (above #1 a-c), what is the scope of services delivered?
   a. Preventive services only (Public Health Standards)
   b. Full treatment services (as outlined in the Children in Need of Treatment (CINOT) schedule)
      i. Does this include sedation and anaesthesia services?
The scope of services delivered is the following:

a. Preventive services including scaling, pit and fissure sealants, and topical fluoride application are provided to clients in the dental clinic.

b. Full treatment services including examination, radiographs, restoration, extraction and limited root canal therapy (anterior teeth only) are provided to clients in the dental clinic and on the Community Health Bus.

i. Treatment with sedation and anaesthesia services is not provided in the public health clinic or on board the Community Health Bus. Clients who require sedation or anaesthesia services are referred to a provider in the community, and the client would be responsible for the associated treatment costs.

3. Briefly describe your existing physical dental infrastructure. Does your Public Health Unit have the ability to expand to accommodate delivery of a new program?

The current physical dental infrastructure is comprised of three components.

1. A three operatory stationary dental clinic
2. A one operatory mobile dental clinic combined with a one room treatment area for provision of public health nursing services (referred to as Community Health Bus)
3. Three portable preventive dental units acquired through previous Federal funding

With additional funding, The City of Hamilton would have the ability to expand to accommodate the delivery of a new program.

4. For those Public Health Units that are currently in partnership with community providers:
   a. Please identify the partner(s),
   b. Describe the arrangement of the partnership and role/responsibility of each partner?
   c. Does your community partner have experience serving the low-income population?

   a. The City of Hamilton has many community partners that assist us in reaching our targeted populations to deliver services. The nature of each partnership is unique and will be explained further in section B of this question. Our current community partners include

   1. Ontario Early Years Centres
   2. Arrell Youth Detention Centre, Living Rock (youth centre), Notre Dame (youth centre)
   3. Canadian Institute of Dental Hygiene (CIDH)
   4. Beasley Recreation Centre, Dominic Agostino Riverdale Community Centre, East Kiwanis Boys & Girls Club, Pinky Lewis Recreation Centre, Neighbour to Neighbour, and Hess Street School.

   b. Below, corresponding with the list above, is a description of each community partner and the arrangement with them.

   1. **Referral** The nature of the partnership with Ontario Early Years Centres is a referral base and provision of oral health education. Clients are screened at the
centre and a variety of printed information is available to clients. Clients also benefit from the opportunity to speak with the Dental Hygienist during site visits.

2. **Referral** The agencies listed in item #2 of 4 (a) above assist youth in accessing care and resources in the community. They each have a unique client base which is challenging to reach through other venues.

3. **Referral** CIDH often refers clients to the public health dental clinic to access treatment services, and the CINOT program.

4. **On-Site service** The partners listed in item 4 of 4 (a) above receive on site services from the Community Health Bus. The Bus operates on a bi-weekly schedule (included below) and provides dental treatment and public health nursing services for clients in need.

**Bi-Weekly Community Health Bus Schedule:**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beasley Recreation Centre</td>
<td>Riverdale Community Centre</td>
<td>Neighbour to Neighbour</td>
<td>East Kiwanis Boys and Girls Club</td>
<td>Hess Street School</td>
</tr>
<tr>
<td>Pinky Lewis Recreation Centre</td>
<td>Riverdale Community Centre</td>
<td>Neighbour to Neighbour</td>
<td>East Kiwanis Boys and Girls Club</td>
<td>Hess Street School</td>
</tr>
</tbody>
</table>

5. Does your Public Health Unit provide dental services for the following Government programs? (please select all that apply)

   a. Ontario Works: Dependent children whose parents are Ontario Works participants, or children whose guardian receives Temporary Care Assistance under Ontario Works
   b. Ontario Works: Discretionary Dental Benefits for Adults
   c. Ontario Disability Support Program (ODSP): Recipients, spouses and dependent children
   d. Assistance for Children with Severe Disabilities (ACSD)
   e. Non-Insured Health Benefits Program (Health Canada)
   f. None of the above

6. In terms of accessing current public health dental services, is wait time to access services currently an issue for your unit? If yes, please explain situation.

**Wait times, and insufficient capacity, do present an issue to clients of the dental clinic and Community Health Bus.**

A new clinic client can expect to wait up to 3 months for a new patient assessment visit.
Subsequent treatment appointments are up to 4 months in the future. The Community Health Bus does not operate on an appointment basis, however due to need exceeding our capacity, clients are often turned away, or recommended to return another day, or at another site. In 2009, (January-December) 427 clients were unable to receive treatment due to demand exceeding capacity.

7. Does your dental clinic have infection prevention and control policy guidelines in place?

Yes. All staff of any discipline working in the clinic and on the Community Health Bus follow the Royal College of Dental Surgeons of Ontario (RCDSO) Infection Prevention and Control/November 2009 approved. December 2009 document distributed.

8. This question relates to the guideline on the Use of Sedation and General Anaesthesia in Dental Practice released by the Royal College of Dental Surgeons of Ontario on May 14th, 2009:

   a. According to the guidelines, are your dentists required to apply for a Facility Permit? If yes, have they already applied? [please note: deadline is December 31st, 2009]
   b. Does your clinic provide anaesthetic techniques that require the need for gas analyzers?

N/A. Sedation and General Anaesthesia services are not provided at Public Health facilities in the City of Hamilton.

9. Do you have staff dedicated to administration of public health dental programs? Please elaborate and identify challenges if applicable.

Current complement of staff supporting the dental program include the following:

Non-clinical staff:
- Receptionist
- Clinical Data Entry Clerk

Administrative staff:
- Dental Program Manager
- Public Health Dentist
- Program Secretary

The challenges currently being faced are related to increased needs of the program resulting from increased volume of CINOT dental claims and inquiries from clients and community partners.

Further program expansion would require additional support from the following:
- Data Entry Clerk
- Clinic Reception
10. Please indicate how many dentists are currently working with your Public Health Unit to deliver dental services.

- three Dentists (1.6 FTE) to deliver services in the clinic and on the Community Health Bus
- one Public Health Dentist (not providing clinical service)

11. How are your dentists currently remunerated? Indicate the number of dentists, if applicable.

   a. Fee-for-service schedule (indicate #_______)
   b. Salary (indicate #_______)
   c. Sessional (indicate #_______)
   d. Other (indicate #_______)

   b. Salary
   - one Public Health Dentist
   - three Clinical Dentists 1.6 FTE

12. Please indicate how many dental hygienists are currently working with your Public Health Unit to deliver dental services.

   There are currently five dental hygienists, equal to 4.2 FTE working in the Public Health Unit to deliver dental services.
   - School screening 2 FTE, two people
   - Clinical 1.2 FTE, two people
   - Community Dental Hygienist 1.0 FTE, one person
13. How are your dental hygienists currently remunerated? Indicate the number of hygienists, if applicable.

   a. Fee-for-service schedule (indicate #______)
   b. Salary (indicate #______)
   c. Sessional (indicate #______)
   d. Other (indicate #______)

b. Salary
   • 4.2 FTE, five people

14. Please identify other staff/providers working within your dental programs, indicate # and their role/responsibility.

<table>
<thead>
<tr>
<th>Position</th>
<th>Number</th>
<th>FTE</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptionist</td>
<td>1 person</td>
<td>1.0 FTE</td>
<td>Book clinic appointments, greet clients</td>
</tr>
<tr>
<td>Dental Assistant</td>
<td>4 people</td>
<td>2.5 FTE</td>
<td>Assist Dentist and Dental Hygienist in clinic and on Community Health Bus</td>
</tr>
<tr>
<td>Dental Clerk</td>
<td>2 people</td>
<td>2.0 FTE</td>
<td>Assist Dental Hygienists in school screening process</td>
</tr>
<tr>
<td>CINOT Data Entry Clerk</td>
<td>2 people</td>
<td>1.0 FTE</td>
<td>Process CINOT dental claims (fee for service)</td>
</tr>
<tr>
<td>Bus Driver</td>
<td>1 person</td>
<td>0.6 FTE</td>
<td>Drive Community Health bus to community sites</td>
</tr>
</tbody>
</table>

SECTION 2: ABOUT YOUR COMMUNITY

15. Please describe any unique characteristics of your community that require special program planning consideration (i.e. geography issues, servicing First Nation communities etc).

Hamilton has a high proportion of families living with low incomes. Many of these families have unmet dental needs. One quarter of Hamilton residents are immigrants and experience additional challenges in accessing dental care.

**Population**
In 2006, 504,560 people lived in Hamilton. This is just under a 3% increase from the population (490,270) at the time of the previous Census in 2001. Hamilton experienced
slower growth between the 2001 and 2006 Census years than what was observed between the 1996 and 2001 Census years, where Hamilton experienced a 4.8% growth in population. (Statistics Canada, 2006 Census). The population of Hamilton is projected to increase until at least 2031. (Provincial Health Planning Database, Population Projections 2008-2007, Extracted October 2008).

**Education**

Education is an important social determinant of health. It is strongly associated with earning power and job satisfaction, which can have significant effects on mental and physical health (Health Nexus, 2008). Lower education level is associated with risk factors such as lower levels of physical activity, smoking, and unhealthy weights (Health Nexus, 2008). It is also related to lower health literacy, which can impact access to, and use of, health information (CCL-CCA, 2008). Hamilton has a higher percentage of residents with less than a high school education and a lower percentage of residents with a university degree compared to Ontario, overall (Statistics Canada, 2006 Census).

**Language**

The linguistic profile is an important consideration when planning programs and services for a diverse community. It is a useful tool for assessing staffing requirements and other support services that may be needed to reduce barriers to accessing services. Just over 87% of Hamilton residents speak an official language most often at home, with 87.1% and 0.4%, reporting that they speak English or French, respectively, most frequently at home. Twelve and a half percent of residents (or 62,325 individuals) reported that the language they speak most often at home is a non-official language (Statistics Canada, 2006 Census).

**Immigration**

Immigration status is another indicator that is important to consider when planning programs and services for a diverse community. While many immigrants arrive in Canada with better than average health (Ng et al, 2005), recent research suggests that immigrants to Canada may face greater health risks over time (Lear & Mancini, 2008). This is especially true for recent immigrants who may have difficulties accessing health services because of language, culture, or other barriers. One quarter of the Hamilton population are landed Canadian immigrants, with 13.1% of those residents (or 15,1750) having immigrated to Canada within the last five years (Statistics Canada, 2006 Census) Trends in immigration status remained similar between 2001 and 2006 (Statistics Canada, 2006 Census).

**Income**

The impact of poverty on health is widely acknowledged and has implications for the health, quality of life and life expectancy of Hamilton residents. An estimated 69,000 Hamilton residents (or 14.0% of the city’s population) were members of a household who lived below the Low Income Cut-off (LICO) based on 2005 after-tax earnings. Hamilton has a higher percentage of people living in a low income household than the province of Ontario, overall (11.1%) (Statistics Canada, 2001 Census).
16. If applicable, please identify other community dental clinics in your catchment area that currently provide dental services to the low-income population. Please describe the target population served and scope of services provided.

**CIDH** - Canadian Institute of Dental Hygiene, an Accredited Dental Hygiene Training Institute, provides assessment and preventive care. Treatment is provided by the school’s students, and is supervised by Registered Dental Hygienists and Licensed Dentists. There is a nominal registration fee; however it is often waived due to clients’ financial constraints.

**Urban Core Community Health Center** employs a “para-dentist” (a foreign trained dentist that does not have licensure in Canada) who provides oral health instruction and other non-regulated services. The “para-dentist” also engages in limited classroom education and health promotion activities.

**Private dentists** in the local community through fee for service arrangements treat CINOT, Ontario Works (OW), Ontario Disability Support Program (ODSP) clients. Clients who access care from private dental practices who do not meet eligibility for public funding do so through private financial arrangements with the dental practice.

**Independent Dental Hygiene Practices** operate in Hamilton. They provide preventive dental care to clients accessing care through multiple public funding programs and treatment at reduced cost for those accessing care privately, and operate on a for-profit basis.
17. Is your Public Health Unit already in partnership with these community dental clinics?

   a. If yes, please identify.
   b. If no, please indicate whether there are future plans for collaboration.

   a. City of Hamilton is currently in a referral partnership with CIDH, Urban Core Community Health Center and private dental practices that provide service through the CINOT program. Each of these agencies regularly refers clients to Public Health when in need of dental care they are unable to provide, or clients cannot afford.

   The City of Hamilton also offers placement/observation opportunities to dental hygiene students at CIDH. Observation in alternate practice settings is a requirement for students prior to graduation.

   An expansion of the current model would support enhanced partnerships and could include the provision of preventive services on site at various community locations.

SECTION 3: ABOUT DEVELOPING A COMMUNITY DENTAL MODEL

18. Please describe your Public Health Unit-Community Dental Model design:

   a. Identify community partners that you plan to work with to provide new program services.
      i. Do they have experience with providing services to the low-income population?
   b. Provide details on the nature of the partnership to facilitate service delivery, including role/responsibility of each partner.
   c. Clarify whether you intend to expand an existing dental infrastructure, or whether this is a new development?

   a. The community partners we hope to work with to provide new services would include the following:
      • Arrell Youth Centre, Living Rock, and other community locations
      • Ontario Early Years Centres
      • Family Health Teams, Dentists in private practice, Canadian Institute of Dental Hygiene

   Each of the above agencies has experience in providing service to low income, and multicultural populations.

   We recognize there may be other community partners who wish to come forward to explore the potential of forming a partnership. The potential of other partnerships not yet identified are welcome for consideration. Partnerships will be evaluated for fit with the program and reassessed as needed to ensure maximum service delivery to the targeted population.

   b. The partnerships would be shaped to match the needs of each contributor.

   Referral

   Partnership with all agencies listed would enable referral for oral health promotion,
prevention and treatment.

**On Site Service**

On site preventive service could be offered at locations including, but not limited to Centre de sante communautaire, Ontario Early Years Centres, Arrell Youth Centre, Living Rock, and other potential sites yet to be determined.

c. An expansion of our current dental infrastructure is a component of this plan to increase access and service for the target population.

This plan includes three components:

1. **Increase Clinic Capacity and Referral Support**

The stationary Public Health dental clinic in Hamilton currently operates with a dentist three days a week and 2 hygienists each working three days a week. An expansion of the current program would enable the clinic to increase treatment to 2 dentists each working five days a week, and preventive treatment would operate 5 days per week with expanded hours. Enhanced service in the clinic could also be achieved by increasing clinic hours to include morning and evening appointments.

Public Health is receptive to receiving referrals from a variety of partners and agencies. This portion of the plan will focus on building relationships with Family Health Teams, Public Health Nurses and Ontario Early Years Centres to expedite the referral process. One consideration is to improve the flow of information to these partners, and also raise awareness of the importance of early identification, early intervention and education through health promotion.

Often, the referral process is successful, however the barrier is transportation. Ideally, being able to support the referral process by assisting transportation either with bus tickets or taxi chits could further increase access to care. Budget for taxi fare has been included in the requested amount for operating funds.

This portion of the plan would require

- Leasehold improvements to convert a hygiene operatory to a treatment operatory, and purchase of additional equipment, supplies and a Panorex. Leasehold improvements may also include reconfiguration of the clinic to incorporate a dedicated screening room.

- Recruitment of additional staff (5.54 FTE): Dentist 1.85 FTE, Dental Assistant 1.57 FTE, Clinic Receptionist, 0.22 FTE, Program Secretary 0.4 FTE, Clinical Data Entry clerk 1.0 FTE, Program Manager 0.5 FTE

**Current Staffing and Hours**

<table>
<thead>
<tr>
<th>Operatory</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>rotating</td>
<td></td>
<td></td>
<td></td>
<td>Used daily for overflow of clients</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Dentist</td>
<td>8:30-4:30</td>
<td>11:00-7:00</td>
<td></td>
<td>11:00-7:00</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Dental Hygienist</td>
<td>8:30-4:30</td>
<td>11:00-7:00</td>
<td>8:30-4:30</td>
<td>11:00-7:00</td>
</tr>
</tbody>
</table>

**Total current hours of service:**

- Dentist – 21 hours per week
- Dental Hygienist – 42 hours per week
Proposed Staffing and Hours

Reconfiguring and upgrading Operatories 1 and 2 would allow all three Operatories to be completely operational for treatment and preventive services according to the schedule below. Community Health Bus hours would not be extended.

### 1447 Upper Ottawa Clinic

<table>
<thead>
<tr>
<th>Operatory</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operatory 1</td>
<td>Dentist</td>
<td>8:30-4:30</td>
<td>8:30-6:00</td>
<td>8:30-4:30</td>
<td>8:30-6:00</td>
</tr>
<tr>
<td>Operatory 2</td>
<td>Dentist</td>
<td>8:30-4:30</td>
<td>8:30-6:00</td>
<td>8:30-4:30</td>
<td>8:30-6:00</td>
</tr>
<tr>
<td>Operatory 3</td>
<td>Dental Hygienist</td>
<td>8:30-4:30</td>
<td>8:30-6:00</td>
<td>8:30-4:30</td>
<td>8:30-6:00</td>
</tr>
</tbody>
</table>

**Total proposed hours of service:**

- Dentist – 86 hours per week
- Dental Hygienist – 43 hours per week

### Increased Client Capacity

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Number of Annual Client Visits</th>
<th>Current Capacity</th>
<th>Proposed Capacity Increase</th>
<th>Potential Total Capacity After staffing increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dentist</td>
<td>1,050</td>
<td></td>
<td></td>
<td>4,300</td>
</tr>
<tr>
<td>Dental Hygienist</td>
<td>1,750</td>
<td></td>
<td></td>
<td>2,150</td>
</tr>
</tbody>
</table>

### 2. Mobile Preventive Equipment

We currently have three portable preventive dental units which were purchased with previous Federal funding. A number of community locations have expressed interest in hosting preventive dental services at their site. Interested agencies include Centre de Sante, Arrell Youth Centre and Living Rock. Other agencies may express interest.

The portable equipment would be used at designated community locations to provide the targeted population with preventive dental services.

The Dental Hygienists working in the community would also be responsible for health promotion, resource development, and community events. Regular contact with community partners could be maintained through a quarterly newsletter or fact sheet created by this team of Dental Hygienists.

This portion of the plan would require:

- 2.0 FTE Dental Hygienist
- purchase of instruments and supplies
- budget for transporting of portable equipment
- agreement between community partners and Public Health Services regarding the security and liability for equipment if stored on site

### 3. Enhanced Screening Services
Our current complement of staff assigned to elementary school screening is working to capacity and would be unable to dedicate time to screening 0-4 years and 14-17 years. Adding a Dental Hygienist would allow for focused efforts to screen the targeted population at community locations, Ontario Early Years Centres, Child Care Centres and Secondary Schools.

Preliminary communications with all four school board superintendents in our area indicate their unanimous support for dental screening in Secondary Schools.

This portion of the plan would require:
- 1 FTE Dental Hygienist
- 0.5 FTE Program Manager for Mobile Preventive Equipment and Enhanced Screening Services

19. Is the location of your Public Health Unit-Community Dental clinic easily accessible by the low-income community? Please describe approach to reduce access barriers.

As noted in Section 2 #15, Hamilton has a higher percentage of residents living below the LICO compared to Ontario, overall (Statistics Canada, 2006 Census). There are pockets of neighborhoods with high rates of low income dispersed throughout the Hamilton community, including the south Hamilton Mountain where our clinic is located. The south Hamilton Mountain is also home to high numbers of children and youth between 0-18 years of age (Statistics Canada, 2006 Census).

The Mountain clinic is accessible via public transportation and as noted earlier, support for public transportation in the form of bus tickets or taxi chits would further decrease barriers to accessing care.

The use of portable equipment and mobile outreach services placed in the downtown core, and other outlying locations will greatly serve an area where we see the most concentrated ‘clusters’ of neighborhoods with high rates of low income.

20. Is your Public Health Unit interested in providing mobile dental services? Please explain rationale to support the request.

Mobile preventive dental services are a consideration for the City of Hamilton. Currently we have three portable dental units acquired from previous Federal funding. These portable units will be utilized at various community locations to increase access for clients seeking preventive care.

The City of Hamilton currently operates a Community Health Bus which delivers dental treatment and public health nursing services. The bus visits six locations on a bi-weekly rotation. Clients are treated using a triage system. Clients of the Community Health Bus most often are seeking emergency dental care and cannot access care in any other manner due to financial and other barriers. Providing service in their community rather than requiring clients to make appointments or travel to an office has greatly increased their access to care.

The City of Hamilton will continue its current delivery of service through the Community
21. Describe plan to include health promotion education as part of overall oral health service delivery. Do you require additional tools/resources to support your plan? Please explain.

Oral health promotion, disease prevention and outreach would be a component of the model.

To ensure a successful health promotion strategy, the dental team would support the Provincial health promotion strategy and utilize the resources created. Embedded in the role of the Dental Hygienists working in the community would be promotion and education activities. It will be critical to maintain partnerships with community partners who will assist us in reaching the targeted population.

Distribution of the Paediatric Dental Screening Tool in conjunction with the 18 month Nippising developmental assessment will broaden the reach of health promotion efforts to the preschool population and their caregivers.

Upstream prevention is far more effective and less costly than downstream treatment. With early intervention it is anticipated that oral health and hygiene will be greatly improved.

22. Please describe your health promotion outreach strategy for the low-income community to raise awareness regarding oral health and link to existing public health dental programs.

Our outreach strategy would include promotion of referrals to the stationary clinic from primary care and other settings, and mobile services delivered in strategically identified locations. Registered Dental Hygienists would use the mobile preventive dental units, and provide consistent oral health messages for clients.

23. Describe how your program will collaborate with primary care providers for dental screening, oral health counselling and to facilitate referral to public health dental programs where appropriate.

Collaboration with primary care providers could include, but would not be limited to the following:

- Communication and regular contact with partners such as Family Health Teams: Hamilton and McMaster, Physicians, Pharmacists, Ontario Early Years Centres, Family Visitors, Children's Aid, Public Health Nurses, Nutritionists and Dietitians and others.
- Distribution of Paediatric Screening Tool to above partners and others will assist with early identification and raising awareness of families with young children.
SECTION 4: DENTAL CARE PROVIDERS AND PROGRAM ADMINISTRATION

24. Please identify, in your model, dental care providers and plans to create an interprofessional dental model of care.

Staffing for this model would include a combination of the following professionals:
- Dentist
- Dental Hygienist
- Dental Assistant
- Administrative support

25. Please describe the type of remuneration being considered for the new dental program (i.e. Fee-For-Service/salary/per diem/sessional)

For staff, a salary remuneration model is being considered.
Fee for service would also be incorporated to remunerate dental providers treating clients referred from the Public Health Dental Clinic.

26. Please identify if recruitment of dental care providers to deliver program services is an issue for your Public Health Unit? If yes, explain situation and strategy to improve health human resources.

Recruiting dental care providers to deliver program services does not currently appear to be an issue. We have had success in the past recruiting Dentists by posting on the ODA Annual Conference job site, with the local dental society, and at University of Toronto, University of Western Ontario and McGill University.
Dental Hygienists and Assistants are frequently making inquiries about potential vacancies. With a nearby accredited dental hygiene training institute and multiple dental assisting training facilities, there is a robust supply of these professionals.

27. Will your Public Health Unit explore partnerships to encourage recruitment of new dental graduates? If yes, please describe.

Yes.
- Through discussions with the nearby training facilities, there is ample opportunity to
encourage new graduates to explore career options with in Public Health.

- Students at the Canadian Institute of Dental Hygiene (CIDH), complete a rotation of observation at the Health Unit. This serves as an introduction to Public Health programs
- City of Hamilton’s Public Health Dentist teaches part time at University of Toronto, Dental Faculty and through this partnership could facilitate recruitment of newly graduated Dentists

28. What additional support does your Public Health Unit require to assist implementation of this program? Please explain.

To implement this program we would benefit from support in the following manner:

**Accommodations**

Approval of this business plan will translate to a significant increase in staff. Our current office space is not able to accommodate additional staff. Additional office space would need to be acquired at an estimated cost of $17/sq ft; 100 sq ft/staff person.

**Province-wide promotional campaign**

Although each Health Unit will be designing a program specific to their local needs, a single message shared across the Province could assist in raising awareness and drawing support and engagement for the program.

**Information**

Developing a program in the absence of key information is a challenge. It is essential to know eligibility criteria, basket of services, fee guides, operational budget dollars that will be available and for what duration, etc.

**SECTION 5: GUIDELINES**

29. This question relates to the guideline on the Use of Sedation and General Anaesthesia in Dental Practice released by the Royal College of Dental Surgeons of Ontario on May 14th, 2009:

a. According to the guidelines, will your community dental model require your dentists to apply for a Facility Permit?
   b. Will your community dental model provide anaesthetic techniques that require the need for gas analyzers?

A. No
   B. No
SECTION 6: ABOUT YOUR READINESS TO OPERATE

30. Please provide your anticipated timeline to become operational and required planning activities. Please provide as much detail about the factors that will affect the length of time to become operational. The goal is to achieve operational status within 12 months or less.

   a. Within 1-5 months
   b. Within 6-9 months
   c. Within 10-12 months
   d. 12 months and beyond

<table>
<thead>
<tr>
<th>Within 1-5 months</th>
<th>• Recruit staff for Mobile Prevention and Enhanced Screening, Program Secretary and Manager</th>
</tr>
</thead>
</table>
| Within 6-9 months | • Purchase of equipment and supplies  
                         • Secure additional office space to accommodate staff  
                         • Develop legal agreements with community partners that will be sites for Mobile Prevention services  
                         • Initiate Mobile Prevention services and Enhanced Screening  
                         • Recruit remaining staff |
| Within 10-12 months | • Convert hygiene operatory to full treatment operatory and complete other leasehold improvements  
                          • Increase clinic hours and staffing levels |

SECTION 7: ONE-TIME FUNDING REQUEST TO SUPPORT STAGE II PROGRAM IMPLEMENTATION

Please identify start-up funding required to support program implementation and provide as much detail as possible to support the request.

31. Category of Request

(Check all that apply):

(✓ ) Major Capital     (✓ ) Leasehold Improvement   (✓ ) Office Equipment   (✓ ) Other
32. Description of Request

Describe how the funding will be used.

Funds will be used to enhance services in the following manner:

<table>
<thead>
<tr>
<th>Leasehold Improvement</th>
<th>To convert a hygiene operatory to a full treatment operatory, create an additional screening room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Equipment</td>
<td>Panorex, Dental instruments</td>
</tr>
<tr>
<td>Other</td>
<td>Purchase of office furniture</td>
</tr>
</tbody>
</table>

33. Will this project have an impact on service delivery and programming by the health unit?

This project will significantly enhance service delivery and improve access to care.

There is a huge segment of the population that is un-insured or under insured, along with a large number of under employed people. The dependents of these families (0-17) are lacking access to oral health care and education. This is not just dental knowledge but general health knowledge that contributes a great deal to oral health, and how their general health impacts oral health. CINOT only allows for urgent dental needs however, there is a large segment of the 0-17 years of age population that have vast unmet dental needs that do not qualify as urgent need under CINOT. Left untreated, these needs develop into urgent needs and become much more costly and invasive to treat. Early identification and treatment will reduce costs later.

34. Indicate any implications this project will have on other organizations or services within your district / region and identify persons you have consulted in support of this request.

The proposed program would complement existing health services in Hamilton, and address significant gaps in dental care.

Youth Centres have expressed an interest in mobile preventive services: Arrell Youth Centre, Living Rock and Notre Dame House.

The Hamilton Family Health Team and McMaster Family Medicine have expressed an interest in working together to refer clients for dental care.

Consultation was undertaken with Hamilton’s four Community Health Centres:

- Urban Core Community Health Centre – Denise Brooks, Maciej Kowalski
- Centre de sante communautaire Hamilton/Niagara – Joanne Chalifour
- De dwa da dehs nye>s Aboriginal Health Centre – Dennis Compton
- North Hamilton Community Health Centre – Kathy Allen-Fleet, Beth Beader

It was hoped that a partnership could be developed in which Oral Health Promoters,
employed by the Community Health Centres, would provide oral health promotion and prevention services, working with an Oral Health Coordinator. Unfortunately, after some discussion, we agreed not to proceed with such a partnership at this time, since we were not able to agree on the staff qualifications and reporting relationships.

- Hamilton Public Health Services strongly supports a requirement that Oral Health Promoters be Dental Hygienists. We believe that this approach would allow the most comprehensive services for clients and fit with best practices. The Community Health Centres indicated that while they were not opposed to hiring Dental Hygienists, they would prefer to also be able to hire staff that are not Dental Hygienists.
- The Community Health Centres stated that the Oral Health Promoters must report only to Community Health Centres. Public Health Services believes that a joint reporting model, with the Oral Health Promoters reporting both to Community Health Centres and to the Public Health Service Oral Health Coordinator, while not ideal, is necessary to allow us to meet our accountabilities for this program. This model would also create a clinical relationship between the Oral Health Promoters and the Public Health Dentist, allowing provision of services through standing orders and thereby maximizing resources.
- Lastly, we proposed a graduated approach, beginning with one or two Community Health Centres and then extending to all Community Health Centres. This was not agreeable to the Community Health Centres.

We have offered the Mobile Prevention services component of the program to Community Health Centres, with Dental Hygienists providing prevention services on-site at their facilities.

Meetings to consult with Ontario Early Years Centres and Hamilton’s Poverty Roundtable have been booked, but could not be scheduled before the application deadline. Partnerships with emergency shelters are being explored, but consultation has not yet taken place.

35. One-Time Start-Up Funding (maximum $500,000)

Provide a detailed breakdown of the projected costs.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
<th>Description</th>
</tr>
</thead>
</table>
| Leasehold improvements | $300 000 | • Reconfigure dental clinic to accommodate a designated screening room and work space for additional reception staff. This would require the removal of two walls to extend the reception area, and construction of an additional room for screening and client consultation  
• Add Panorex room, including all requirements to ensure |
radiation safety codes are met during construction
• Convert hygiene operatory to a treatment operatory. Additional plumbing and radiography set up is required

<table>
<thead>
<tr>
<th>Equipment and Supplies</th>
<th>$200,000</th>
<th>$80,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>• cabinetry, dental chair, operator stools, dental light, digital xray equipment, amalgamator</td>
<td>$50,000</td>
<td>Digital Panorex unit</td>
</tr>
<tr>
<td>$30,000</td>
<td>Instruments, restorative kits: amalgam and composite, forceps</td>
<td></td>
</tr>
<tr>
<td>$40,000</td>
<td>Instruments for use with portable dental units</td>
<td></td>
</tr>
<tr>
<td>$50,000</td>
<td>Sterilizing system including Lisa sterilizer with digital recording, Hydrim instrument cleaning system with digital recording and instrument cassettes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Protective transportation cases for portable dental units</td>
<td></td>
</tr>
</tbody>
</table>

| Estimated Total Cost | $500,000 |

36. Additional One-Time Start-Up Funding to support a Mobile Dental Clinic if applicable.

Provide a detailed breakdown of the projected costs.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Estimated Total Cost | 0 |
37. Total one-time funding requested from MOHLTC

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$500,000</td>
</tr>
</tbody>
</table>

38. Will the project impact operating costs?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

(if yes, provide details below)

### Annual operating costs

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fees for Service Costs</td>
<td>$500,000</td>
</tr>
<tr>
<td>Annual clinic operating costs</td>
<td>$575,069</td>
</tr>
<tr>
<td>Annual Mobile Equipment operating costs</td>
<td>$375,075</td>
</tr>
<tr>
<td><strong>Total Operating Budget</strong></td>
<td><strong>$1,450,144.00</strong></td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional FTEs</td>
<td>Number</td>
</tr>
<tr>
<td>yes</td>
<td>9.04 FTE</td>
</tr>
<tr>
<td></td>
<td>Cost</td>
</tr>
<tr>
<td>Accommodations</td>
<td>Increase</td>
</tr>
<tr>
<td>yes</td>
<td>$15,368</td>
</tr>
<tr>
<td></td>
<td>(9.04 FTE @ $1,700 per FTE)</td>
</tr>
<tr>
<td></td>
<td>2-3% annual increase for wages and operational budgets</td>
</tr>
</tbody>
</table>
39. Will funds be spent by March 31, 2010?

Capital funds would be spent by December 31, 2010 as per extension announced during Web-conference on Dec 15, 2009.

Health Unit Approvals

<table>
<thead>
<tr>
<th>Signature – Business Administrator</th>
<th>Print Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature – Medical Officer of Health / Chief Executive Officer</td>
<td>Print Name</td>
<td>Date</td>
</tr>
<tr>
<td>Signature – Chair of the Board of Health</td>
<td>Print Name</td>
<td>Date</td>
</tr>
</tbody>
</table>