# Resources for Promoting Healthy Built Environments

CASE STUDIES



National Collaborating Centre
for Environmental Health

Centre de collaboration nationale
en santé environnementale

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*Cover Images: Portage La Prairie: WHO Global Age-Friendly Cities Pilot Project; Action to Revitalize Older Neighbourhoods in Salaberry-de-Valleyfield; Farm to School Salad Bar*

# Acknowledgments

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This document builds upon and updates the case studies presented by the 2009 report entitled "Bringing Health to the Planning Table – A Profile of Promising Practices in Canada and Abroad" funded by the Public Health Agency of Canada. This document expands on four case studies and adds four new ones with a focus on how Public Health Inspectors/Environmental Health Officers and Medical Health Officers have been involved in healthy built environment initiatives.

This document was prepared by Erik Lees, Katy Amon and Heidi Redman of LEES + Associates and Alex Berland of A. Berland Inc.

## Key Informants

The authors wish to thank the following key informants who generously shared insights during telephone interviews and reviewed earlier versions of case studies:

Joanne Bays
Project manager; Farm to School Salad Bar, British Columbia

Marie-Josée Denis
Knowledge development and Exchange Analyst; Public Health Agency of Canada, Région du Québec

Peyun Kok
Project Specialist; Chronic Disease and Injury Prevention Ontario, Peel Health

Pam Moore
Environmental Health Officer; Interior Health Authority, British Columbia

Dr. Catherine O'Brien
School of Education, Health and Wellness; Cape Breton University, Nova Scotia

Dr. Sangita Sharma
Principal Investigator; Healthy Foods North, Nunavut and Northwest Territories

Janet Shindle
Councillor; City of Portage la Prairie, Manitoba

Marjorie Willison
Project Manager; Chebucto Communities Development Association, Nova Scotia

# Executive Summary

This report profiles 8 Canadian case studies, where collaborative approaches to improve health outcomes have been a key consideration in planning decisions related to the built environment. A number of these case studies include comprehensive involvement from Environmental Health Officers (EHOs). Other case studies highlight collaborative projects that did not include extensive Environmental Health Officer or Medical Health Officer (MHO) involvement but may be of particular interest due to their subject matter. Each includes advice from key informants on ways in which EHOs and MHOs could be involved.

Case studies profiled in this report:

- PACIFIC - BRITISH COLUMBIA: *Farm to School Salad Bar*
- PACIFIC - BRITISH COLUMBIA: Interior Health Authority
- PRAIRIE - MANITOBA: WHO Age-Friendly Cities Pilot Project
- ONTARIO: Region of Peel Public Health
- QUÉBEC: Action to Revitalize Older Neighbourhoods in Salaberry-de-Valleyfield
- ATLANTIC - NOVA SCOTIA: Child and Youth Friendly Land Use and Transport Planning
- ATLANTIC - NOVA SCOTIA: Healthy Housing, Healthy Community Project
- NORTH - NUNAVUT: Healthy Foods North

A section on "lessons learned", offers detailed advice for EHOs and MHOs involved in similar projects. Lessons learned form 5 categories:

**1. Capacity.** These projects highlight the importance of including built environment issues as a mandated priority for EHOs and MHOs.

**2. Training.** Learner-specific training will make health-planning-community collaborations more effective for EHOs and MHOs.

**3. Role of Public Health Professionals.** These case studies highlight the role that EHOs and MHOs can have with planning and with community development projects.

**4. Collaboration.** Key informants provide lessons to increase the success of intersectoral partnerships as a "catalyst for change."

**5. Community involvement.** Promoting projects in communities early on can create greater levels of investment and success.

This report presents successful projects as a foundation for future efforts. Such projects capture the diversity of our country's many built environments, the partnerships being developed, and the promising practices. Further details suggest how these initiatives can be repeated in other communities. The common theme of such innovative projects is strategic collaboration that includes health outcomes as part of the planning goal. Several jointly planned health projects, showcased in this report, offer examples of explicit EHO and MHO involvement. However, a lack of involvement in other areas highlights the need for greater collaboration between sectors. Lack of EHO or MHO involvement tends to be related to uncertainty about the roles they can play in planning or being involved.

# Introduction

*Why is it important to include a health perspective in planning processes related to the built environment? The most obvious example is the increased incidence of obesity across Canada and globally. Some experts suggest that the impact of this problem is comparable with climate change and requires action across all of society, due to its complexity.1 There is ample evidence to suggest that declining physical activity levels, together with limited access to healthy food, contribute to the rising incidence of obesity and associated problems, such as, diabetes, hypertension, and cardiovascular disease.2, 3 It is also recognized that the built environment is a key determining factor to promote physical activity and prevent obesity. Built environments include cities, workplaces, homes, schools, shops; places where people are born and where they live, grow, work, and age.4*

Urban planning decisions can advance or hamper health goals. However, as with any complex issue, progress will require inter-sectoral action. Planners and health officials need to work together to strengthen the health-promoting features of land use, community, and transportation planning. Environmental Health Officers (EHOs) are often tasked with implementation and enforcement of policy. Medical Health Officers (MHOs) apply scientific evidence to design and monitoring efforts. Both groups can help planners understand the need to design healthier built environments, as well as their practical implications.

This report profiles 8 Canadian case studies where collaborative approaches, to improve health outcomes, were a key consideration in planning decisions related to the built environment. Case studies profiled in this report include:

PACIFIC

- BRITISH COLUMBIA: Farm to School Salad Bar | **A school-based program that connects schools and local farms**
- BRITISH COLUMBIA: Interior Health Authority - Healthy Community Environment Program | **Development of an integrated, collaborative approach to healthy community environments**

PRAIRIE

- MANITOBA: WHO Age-Friendly Cities Pilot Project | **A Portage la Prairie plan to make their city a better, healthier, and safer place for seniors**

ONTARIO

- ONTARIO: Region of Peel Public Health | **A project to re-forge the historical relationship between planning and health**

QUÉBEC

- QUÉBEC: Action to Revitalize Older Neighbourhoods in Salaberry-de-Valleyfield | **An initiative to increase healthy housing conditions in disadvantaged neighbourhoods**

ATLANTIC

- NOVA SCOTIA: Healthy Housing, Healthy Community Project | **Health professionals, residents, planners and developers at the table, talking**

[1] UK Department of Health (2008). Healthy Weight, Healthy Lives: a Cross-Government Strategy for England. http://www.dh.gov.uk/publications (accessed 21 March 2009).
[2] WHO (2005). Preventing chronic diseases: a vital investment. Geneva, World Health Organization, http://www.who.int/chp/chronic_disease_report/en (accessed 21 March 2009).
[3] Butler-Jones, D. (2007) "A pound of cure? Avoiding a generational decline in overall health." Canadian Family Physician Vol. 53, No. 9, September 2007, pp.1409 – 1410.
[4] Health Canada (2002). Division of Childhood and Adolescence. Natural and Built Environments. Ottawa: Health Canada.

- NOVA SCOTIA: Child and Youth Friendly Land Use and Transport Planning | **A project to establish transportation and land use arrangements that meet the needs of children and youth and, as such, the whole community**

NORTH

- NUNAVUT: Healthy Foods North | **A cultural-appropriate and community-based program to promote healthy eating**

These case studies provide insight into key approaches to include the health "lens" for improved planning decisions; illustrating ways in which Environmental Health Officers and Medical Health Officers are, and can, be involved.

This pan-Canadian snapshot presents successful projects as a foundation for future efforts. They capture the diversity of our country's many built environments as well as partnerships and promising practices. The lessons learned suggest how these initiatives can be repeated in other communities.

This is not an exhaustive sampling but rather a selection of innovative projects that provide pertinent and varied lessons. Their common theme: strategic collaboration that includes health outcomes as a part of goal planning. The intent of this report is to strengthen the "evidence to practice" link so that health promotion concepts will influence decisions around the built environment.

# Key Findings

The case studies showcase a range of projects. They include projects on housing, community nutrition, targeted community design guidelines (children and youth, age-friendly, community driven), as well as Health Authority approaches to influencing the built environment.

Projects range from urban to rural to Aboriginal communities. Some are community-specific programs, while others are part of wider regional, provincial, national, and international initiatives.

## Partnerships

All of these case studies are highly collaborative in nature. They include: health authorities, municipalities, school boards, universities, developers, not-for-profit organizations, farms, community organizations, and local citizens. Some of them include upwards of 10 primary partners. Several are community-driven and community-owned projects.

The case studies showcase innovative collaboration within health authorities and with partnerships forged between health authorities and other organizations. Many have brought together new partnerships, while others have strengthened existing relationships. They all include public health involvement; the majority includes either Environmental Health Officers or Medical Health Officers.

## EHO involvement:

EHOs have been involved with project development: as key informants, in the evaluation framework development, or throughout every stage of the project. Their involvement has included the following roles:

- advisory position on the project's steering committee;

- training or preparing EHOs for on-the-ground work;
- training communities or other organizations;
- organizing community events to support behavioural changes;
- offering expertise (food safety, housing conditions, air quality, etc.);
- preparing guidelines/technical expertise;
- seeking and strengthening relationships within the Health Authority and beyond;
- participating in research and policy development;
- collaborating with other health sectors, including injury prevention, population health, etc.;
- providing input on secondary plans;
- raising community health issues at the regional scale;
- raising wider health issues.

Lack of EHO inclusion in some projects highlights the need for more awareness of how best to involve EHOs. If health authorities would like more EHO involvement in community planned projects, authorities may need to adjust the EHO role to include increased opportunities for open communication at early planning stages. Although EHOs were not involved in all stages of each project described in this document, or even in all projects, key informants shared a number of ways in which EHOs could have been more involved.

Key informants suggest that EHO involvement may have broadened the scope of the project and helped reach greater public health audiences. However, informants also thought early involvement in the planning process would assist public health officials with a greater awareness of how they could be most helpful and where their skill set could be best utilized.

Key informants suggested the following potential roles:

- as facilitators, training planners in public health;
- sharing their knowledge and evidence-based approach;
- reviewing planning and development proposals from a public health lens;
- disseminating information to broaden audience knowledge and using their credentials to help the perceived validity of a project;
- continued involvement in supporting the community and education;
- changing public health policy;
- evaluating development plans;
- suggesting project indicators and providing information about these indicators;
- participating at round table discussions; some partners require tangible examples of how health fits into a project.

## MHO involvement:

Medical Health Officers and Chief Medical Officers were involved in a number of the projects: in some, involvement as key decision-makers at all stages of the project; in others, playing a smaller role. Key roles include:

- generating ideas;
- decision-making;
- capacity building within the Health Authority;
- raising issues at the regional scale;
- being a key informant;
- attending presentations on the project;

- offering feedback;
- disseminating information;
- using evidence deducted from the projects;
- co-authoring papers.

## Lessons learned

There are a number of transferable lessons to be taken from these case studies. Many can be classified into five categories: Capacity, Training, Role of Public Health Professionals, Collaboration, and Community Involvement.

**1. Capacity.** Many of these projects highlight the importance of including built environment issues as a mandated priority within the Health Authority, planning departments, and at various levels of government (local, regional, provincial, federal). Without an adjustment to level of capacity and scope of job descriptions for MHOs and EHOs, the projects would be considered additional workload.

**2. Training.** Learner-specific training would make health-planning-community collaborations more beneficial with EHO and MHO meetings. For example:

- deeper understanding between disciplines is needed in order to have a meaningful discussion, e.g., training workshops on community planning and legislation for health professionals, and health issues for planning professionals;
- training about community development principles and population health approaches;
- a shift from the enforcement of regulations to include the encouragement and support to assist community representatives to comply with regulations;
- EHOs need to have tools and processes that are flexible, in order to work on different projects and in different contexts;
- a link is easily made between the built environment and physical activity – other topics need more work.

**3. Role of Public Health Professionals.** These case studies highlight the role that public health can and should have in planning and community development projects. For example:

- it is easier to do development than undo, so have health on the table early on;
- Public Health involvement is evidence-based work; valuable in building the credibility of a project, especially when MHOs talk about health effects of the built environment;
- involvement in planning can increase the role of public health

**4. Collaboration.** Bringing people together to talk was described by one informant as a "catalyst for change." Key informants provided lessons to increase the success of partnerships, such as:

- keep objectives transparent;
- specify the role of each party;
- articulate goals/objectives – find a shared vision, even if there are differences;
- maintain ongoing collaboration and open communication throughout the project;
- use ongoing consultation with stakeholders to ensure that all agendas are being met;
- recognize that mandates won't always line up – consider the situation from all perspectives and disciplines.

**5. Community involvement.** Promoting projects in communities early on can create greater levels of investment and success. For example:

- listen to the community; bottom-up community-driven projects are more sustainable as they build more local capacity and buy-in from the start;
- a community is best mobilized in person;
- use language and terminology suitable for the audience;
- tailor goals to be accessible to the target population;
- remember that local action is limited by population factors, such as, aging, health problems, and poverty;
- use of community input and community-based information will yield a more successful project;
- many principles are transferable, but there is not one overall solution.

## Advice to other communities

In addition to the lessons learned, key informants offered the following advice to those interested in pursuing similar projects:

- priorities and needs are different in rural and urban areas;
- tools may be somewhat transferable, but will require local data and the inclusion of local priorities;
- formative work should be done to ensure that the project is cultural- and community-appropriate;
- data should be collected immediately prior to and immediately following the intervention, for project evaluation;
- as a first step, identify local strengths, potential partnerships, and capacity within a community; determine the key players and the key community priorities;
- focus on senior staff to make changes in municipalities;
- continue despite any setbacks;
- be respectful and flexible; it's important to make communities aware of the rationale of guidelines, without saying which ones should be adopted;
- assess which levels of government will need to buy-in; the project needs to be identified as a priority for senior management;
- projects require a lot of internal work to begin operating – especially if they are to be replicated;
- recognize the need for flexibility in the process, timing, and adoption of project elements from elsewhere.

In order to develop a transferable project, it is important to include a broad base of participants from the start and to involve the right people at the table from the beginning. By including a broad range of participants (urban and rural), the project will likely be more widely applicable.

# Case Studies:

## BC: Farm to School Salad Bar – a school-based program that connects schools and local farms

**Lead Organization:**
Public Health Association of BC (PHABC)

**Key Provincial Partners:**
BC Healthy Living Alliance (BCHLA), Northern Health, Interior Health, Ministry of Agriculture and Land, Ministry of Education, and the Ministry of Healthy Living and Sport, and BC Healthy Communities (BCHC)

**Key Community Partners:**
Representatives from 16 schools, 24 farms and 4 bands across the Interior and Northern Health Regions

**Communities:**
Chetwynd, Crawford Bay, Fernie, Fort St. John, Hazelton, Kamloops, Okanagan Indian Band, Oliver, Oliver Indian Band, Osoyoos Indian Band, Smithers, Terrace, Williams Lake, and Vernon

**Population of Communities**
Community population - 500 - 75,000 School population 13 - 1500 children

**Setting:**
Urban, Rural, and Aboriginal Communities

**Target Group:**
Students (grades K - 12) and local farmers

**Project Principles:**
To improve student fruit and vegetable consumption, provide educational opportunities in health, nutrition, and farming, and to support local farmers

**Implementation Level:**
Provincial

**Stage of Development:**
Pilot complete

### BACKGROUND

The Farm to School Salad Bar initiative (F2S) aims to improve the health of children by increasing access to locally grown, nutritious, safe, and cultural-appropriate foods in BC schools.

According to Joanne Bays, Provincial Manager of Farm to School Salad Bar,

*"The concept is refreshingly simple! A relationship is developed between a school and local farms. Local foods are grown and harvested for use in the school's soup and salad bar twice per week in participating schools. Children have the opportunity to feast on a garden of farm fresh foods including 6 vegetables, 3 fruits, 1 protein and 1 grain. At a cost of approximately $3.00 per child per meal, the program serves up sound nutrition at a great price. Children, parents, school staff, farmers – whole communities - benefit from a program that broadens knowledge and experiences growing, harvesting, preparing and tasting fresh local greens."*

Farm to School programs began in California in 1996. These programs connected schools with local farms in order to improve nutrition and education while supporting local small-scale farmers. In 2007, building on a pilot program launched the previous year by Northern Health, the BC Farm to School Salad Bar initiative began. It sought to develop a network of Farm to School Salad Bar programs in urban, rural, and Aboriginal communities in BC.

Concern about the seemingly paradoxical issues of child hunger and child obesity

drew many players to the Farm to School table. It was amazing that such issues existed in one of the wealthiest nations in the world, renowned for the quality and quantity of food exported.

There was an understanding within the group that issues of child malnutrition in BC required action beyond educating children to make healthier food choices. Sustainable long-term solutions required collective action amongst diverse groups; action aimed at addressing the underlying factors giving rise to child obesity and hunger. The group zeroed in on the ability of children to access the highest quality foods possible; fresh, nutritious, safe, and cultural-appropriate foods from local farms. They sought to redesign systems to make access of such foods easier. Efforts focused on schools; where children spend most of their daytime hours.

Project objectives are to:

- increase fruit and vegetable consumption amongst participating school-aged children;
- increase student knowledge about the local food system, local foods, and nutritional health;
- enhance student skills in areas of food production, processing, and serving;
- strengthen local farm, school, and Aboriginal partnerships;
- strengthen local food economy;

- develop promising models that are self-financing, eco-friendly, and could be implemented elsewhere.

## PARTNERSHIPS

This project was collaborative from the start. The Farm to School Salad Bar is managed and administered by the Public Health Association of BC (PHABC) and funded by the British Columbia Healthy Living Alliance (BCHLA). It is guided by a 15-member advisory committee with provincial and regional representatives from: the BCHLA, the PHABC, Healthy Eating & Active Living in Northern BC (HEAL), Northern Health, Interior Health, Ministry of Agriculture and Land, Ministry of Education, Ministry of Healthy Living and Sport, and BC Healthy Communities.

The PHABC hired a provincial manager to oversee the initiative. She relied on the support of school, farm, community, and Health Authority staff, as well as community volunteers to guide and execute program activities at regional and local levels. EHOs were included from the beginning.

The collaboration was innovative, since it resulted in successfully blending a variety of agendas. Within the health sector it brought together Environmental Health, Community Nutrition, Healthy Communities, Population Health, and Aboriginal health perspectives. Groups within health were brought together with representatives from the communities served by health, including school representatives, Aboriginal communities, antipoverty, literacy, environmental, food processing and distribution groups, and others. Therefore, community nutrition, environmental health, health/food sovereignty, and farming agendas were effectively blended.

Regional Directors of Environmental Health Protection (RDHP) brought a high degree of

involvement from EHOs at the steering committee level. The RDHPs were actively engaged in the project's development, well before local EHOs were involved with individual projects on the ground. This brought EHO issues forward early on, provided a considerable amount of time for food safety discussions within health authorities, and prepared EHOs for their future involvement.

The RDHPs were able to offer the advisory committee a food safety perspective; vital to the success of this project. They provided food safety guidelines as well as information and training about those guidelines, for all EHOs in the area. The RDHPs made themselves available to EHOs and the public, in order to field questions and concerns. Northern Health also provided an EHO contact person so someone was always available to answer questions.

Foods in the Farm to School Salad Bar program initially included whole fruits and vegetables; food safety guidelines were developed around those products. Over time, eggs, baked items, and meats were introduced on the salad bar and EHOs provided guidelines regarding these items. When discussions moved into recipe development and food storage, EHOs presented a variety of ideas for canning, freeze-drying, and storing foods. They supported schools with the resolution of food storage, distribution, and composting problems. Some EHOs visited schools, on their own time, to teach food-safe classes.

## GENERATING BUY-IN

The seeds for PHABC's Farm to School Salad Bar Initiative were sown in the Northern and Interior regions several years before the launch of the initiative. Within the province, food security had been identified as a core public health service. Funds were provided to the health authorities to support community action initiatives that could improve community food security. Local food action and food policy groups emerged and community gardens, farmers markets, and food box programs dotted the landscape. Health Authority staff was supportive of these activities. The Farm to School Salad Bar concept had been promoted and marketed in the Northern and Interior Health Regions and the first pilot program in the province had been launched in the community of Quesnel; demonstrating positive health outcomes.

Thus, from the onset there was little difficulty generating buy-in. A steering committee was quickly formed and schools and farms came together to participate in a short period of time.

As the program unfolded, challenges began to emerge. The largest challenge for all sectors and at all jurisdictional levels was the notion of favouring the production, processing, purchasing, and consumption of local over imported foods. The second major challenge was to find local foods. Seasonality was a third challenge (schools need foods in the winter and farms produce foods in the summer). Volunteer burnout was a fourth major issue.

In terms of food safety, there were challenges, but none as large as those mentioned above. For example, the farming sector was initially hesitant to participate because of concern over farm certification they would need in order to participate. However, it was soon clarified that food safety focus would be on schools, as the bulk of foods arriving at the school were low-risk items; whole fresh fruits and vegetables. Kitchens were inspected and approved; food handlers took FoodSafe training.

## PLANNING & IMPLEMENTATION

BC now has the largest Farm to School network in all of Canada. To date, the network has seventeen programs in urban, rural, remote, and Aboriginal communities.

In the spring of 2007, Northern Health funded the first pilot project at Dragon Lake Elementary School, Quesnel, BC. Building on the success of this pilot, PHABC funded an additional sixteen schools.


All schools and farms are located in communities within the Northern and Interior Health Authorities of BC. Public, private, elementary, middle, and secondary schools were included in the pilot project. These schools are in a wide cross-section of communities: urban, rural, and on reserves. The farms are small scale, producing primarily fruit and vegetables and tend to be located within 100 miles of the school. In many cases, a representative from the public health sector, such as, a community nutritionist or a community food security lead, has taken on a supportive role to help establish links with other stakeholders.

More than 7,000 children now have the opportunity to participate in a Farm to School lunch twice a week. Through fundraising efforts, 16 more schools are expected to join the program by 2011.

Processes involved in the planning of the Farm to School project include: monthly Farm to School network teleconferences, annual provincial gatherings, on-site visits and meetings, and development of a comprehensive website.

Now that the pilot project is completed, schools will have access to the Farm to School website, local contacts throughout the province, a Farm to School guide, and PHABC staff to aid with planning and implementing the project.

The project guide, entitled "A Fresh Crunch in School Lunch: The BC Farm to School Salad Bar Guide," has been released and is available on the project's website; a guided walk through the process of setting up a Farm to School project and tips on making the program sustainable. The guide contains:

- the rationale behind the project;
- "Year at a Glance" timeline;
- building a team and creating a vision;
- engaging farmers, parents, and students;
- purchasing equipment and ensuring food safety;
- recipes and menus;
- sourcing and ordering food;
- promoting the program;
- funding the program;
- farm to school etiquette;
- running a greener program;
- education in the classroom and field;
- building a community around food.

EHOs contributed a significant amount to the guide section on purchasing equipment and ensuring food safety.

## LESSONS LEARNED

Three main lessons learned in this project are:

- Build a kitchen. Most schools in BC lack kitchens and many others provide minimal accommodation. With funding, schools are better prepared to make the program successful. When the kitchen is in place, the ripple effect is amazing!
- Adequate money for the purchase of kitchen equipment and structural design changes, to meet food safety requirements, was a key to the success of the project.
- Buy locally. In rural and remote communities in BC, the nearest farm may be 6 hours away, but this should not deter your program. Find a grower, whether they grow a little or a lot, and buy what they have, and start from there.
- Start with low-risk items, like whole fresh fruits and vegetables to garner initial support from EHOs, then add other food items.
- It takes a community to sustain a farm and a farm to sustain a community. Start by bringing a diverse group together: EHOs, a Principal, and at least one farmer.

Community readiness also played a significant role in success of the project. Sowing seeds early, promoting and communicating the initiative within the Health Authority and the communities it serves led to buy-in from the start and success over the long-term.

If the project were done again, the Program Manager would extend the implementation phase of the project to allow for more planning and more relationship building between farms and schools. It might have been more efficient to cluster pilot schools in the same school districts instead of spreading them out across two large health authorities.

EHOs have included food safety guidelines, for a variety of food types, in the project. Challenges still exist with meat; next steps may involve creative solutions for meat processing near to home.

As the Farm to School initiative moves forward, it will be useful to show EHOs what has been done in other communities and to demonstrate, by example, that EHOs can be involved in a variety of ways with similar community development projects.

EHOs face many barriers that may prevent their participation in such projects. A major barrier is that they are often strapped for time and have very high workloads. A second barrier is a relative lack of knowledge and training about community development principles and the population health approach. A shift is required in the training of new EHOs; from the current exclusive focus on enforcement of regulations to a focus that includes encouragement and support to assist community representatives comply with regulations.

## ADVICE TO OTHER COMMUNITIES

This project has been designed for urban, rural, and Aboriginal communities. The project guide takes a step-by-step approach for school and local farm personnel to begin a program.

For communities beginning a Food to School program:

- Engage diverse sectors;
- Start small (1 school, 1 farm, 1 local food product at a time);
- Make a legacy change – one that will remain long after the funding

runs out, i.e., change the built environment by adding a kitchen, a garden, a root cellar or change policy by adding a local food procurement policy.

Next steps: expand the project in BC and develop a national Farm to School network in Canada.

## EVALUATION AND IMPACT

Although not yet formalized, the results are similar to those found in US projects.[5]

For Children:

- Healthier option choices resulted in consumption of more fruits and vegetables;
- An increased knowledge and awareness about gardening, agriculture, healthy eating, and local foods and seasonality;
- Demonstrated willingness to try out new foods and healthier options;
- Reduced consumption of unhealthy foods and sodas, reduced television viewing, and positive lifestyle modifications, such as, daily exercise;
- Positive gains in awareness of the alphabet, increased social skills, and self-esteem.

For Farmers:

- Diversification of the market;
- Positive relationships with the school district, students, parents, and community;
- Opportunities to explore processing and preservation methods for institutional markets;
- Establishment of grower cooperatives to supply institutional markets.

## CONTACT

Joanne Bays, MSc
Project Manager, Farm to School Salad Bar
Principal: BaysGroup Consulting
E-mail: joannebays@gmail.com

## RESOURCES

http://www.phabc.org//farmtoschool

www.farmtoschool.org

[5] (Anupama Joshi and Moira Beery (June 2007). A Growing Movement: A Decade of Farm to School in California; National Farm to School Network, Community Food Security Coalition, School Food FOCUS (March 2009), Nourishing The Nation One Tray at a Time.)

# BRITISH COLUMBIA: Interior Health Authority: Healthy Community Environment Program – the development of an integrated, collaborative approach to healthy community environments

**Lead Organization:**
Interior Health Authority (IHA)

**Community:**
The Interior Health Authority

**Setting:**
Urban and rural

**Target Group:**
Health Professionals

**Project Principles:**
Knowledge Translation, Networking

**Implementation Level:**
Local and regional

**Stage of Development:**
Ongoing

## BACKGROUND

The Interior Health Authority's Healthy Community Environment (HCE) program aims to improve human health by creating a healthier built environment. The program uses an integrated approach; various Interior Health employees working collaboratively, promoting community planning and design, preventing potential environmental and social threats, while encouraging people to lead healthy lives. The program includes components on community responsiveness, collaboration for healthy community environments, and research and program evaluation.

One of the main forces behind this shift is the need for greater involvement in the upstream factors that affect health. The intent is to move away from issues alone, e.g., land, water, on-site sewage, towards a healthy community approach to examine issues through the seven dimensions of health:

1. Environment: air, water, and noise;
2. Injury prevention (includes traffic collisions and injury preventions to the individual, age in place, etc);
3. Access and inclusion from a mental health and disability perspective;
4. Physical activity (transportation recreation choices);
5. Healthy child development;
6. Nutrition and food security;
7. Housing and social wellness.

Pam Moore, Environmental Health Officer employed in the Healthy Community Environment program, has the task of developing internal partnerships with all programs associated with the seven

dimensions of health used in land use reviews and of educating staff on the built environment, its link to health, and how this link might become part of their jobs. The program intends to create a consistent lens for all land use projects.

## PARTNERSHIPS

There are two types of collaboration to consider in this project. The first is within the Health Authority, the second is between the healthy community environment program and external partners.

This internal shift has involved not only Environmental Health Officers, but public health nurses, addiction professionals, and population health professionals. Pam Moore has been actively pursuing relationships within different programs in the Health Authority, from population health to corporate management. The project was inclusive from the start, in order to select the best information for land use reviews.

This project has been innovative in that it requires Environment Health Officers to examine situations from a new perspective that does not rely on regulatory requirements and legislative frameworks. As this approach is not traditionally taught to Environmental Health Officers, they have learned through collaboration and relationship building.

In addition to work with planners, the program is conducted with a number of external partners. In doing so, the Interior Health Authority has been involved in projects of a wider scope. By working with other groups, health becomes one element of a bigger, complimentary agenda. Such collaborative projects include the development of integrated community plans with the Fraser Basin Council and Rural Secretariat. A recent "Common Ground" workshop linked the four pillars (environment, cultural, social, and economic) that make up integrated community plans. The goal is to have the three agencies develop a working plan to take forward to local governments.

## GENERATING BUY-IN

The launch of this initiative has been made easier through increased support by local government and senior management.

MHOs have been on board since the beginning, but there was not a formal process in place to ensure that HCE was incorporated into each of the public health programs involved. The gap analysis should help with this, as it will legitimize the inclusion of HCE into program mandates.

Formal creation of the healthy community environment program, along with a full time EHO employed in the position, demonstrates a great deal of buy-in. The move, away from drinking water and on-site sewage towards healthy communities, requires that a system be in place; the Senior MHO has established that their mandate must align with that of Ministry of Healthy Living and Sport and Ministry of Health before any big moves occur outside the Health Authority.

## PLANNING & IMPLEMENTATION

The program has evolved over the last few years and has just undergone a gap analysis, to work towards a comprehensive plan.

Internal presentations have been done to ensure that EHOs will give a consistent message to local governments. Staff presentations consider health outcomes in relation to specific program objectives and mandates within core programs. There has been internal recognition that the various programs of the Health Authority do play a role in this approach to health; there is now a coordinated process.

The Healthy Community Environment program has been expanding its presence through the Health Authority. Training has been done mostly through the Interior Health Authority. Two sub-regional service areas received training through a program called "Planning 101", or "Introduction to Land Use and Planning for Health Professionals", prepared for the Provincial Health Services Authority through the BC Healthy Built Environment Alliance. The intent was to develop a training module that would build a common language between planning and health and would begin to provide health professionals with some of the knowledge and tools to become more involved in land use planning.

Pre-workshop training was provided to have EHOs consider health from an economic and health outcome perspective and to introduce Integrated Community Sustainability Planning concepts. Papers and staff training were provided on the 7 dimensions of a healthier built environment. A template has been developed to evaluate the development of plans through the lens of the 7 dimensions – looking across scales from Regional Growth Strategies and Official Community Plans to the on-site development proposal.

Now that a review process has been established, the IHA's next step is to develop a coordinated approach for working with local governments. Planners seem to be on board with the Health Authority collaboration, but they have not yet actively approached councils.

Another aspect of the Healthy Community Environment Program is analysis and identification of environmental hazards. In order to move this element of the program along, a performance improvement plan will be developed in the coming months.

The intent is to continue the expansion of partnerships. More staff training is occurring within the Health Authority, and position papers are being drafted through the built environment lens; topics such as, injury prevention, seniors' falls, traffic collisions, youth suicide, and food security and nutrition.

## LESSONS LEARNED

The main lesson learned is that "there has to be a carrot**"** to advance the way EHOs work within the greater system. It has taken two years in the process to realize that while local governments generally see health authorities from a legislative side, they may not listen to Environmental Health Officers on the non-legislative components.

Planning and health are segregated and it is difficult, at present, for EHOs to work in areas beyond site sewage and drinking water.

It is important for EHOs to be as involved as possible in different workshops and interdisciplinary opportunities to demonstrate, to local governments, the benefits of involving health in planning. Partnerships will become easier as this project continues and as the HCE program becomes formalized within Public Health.

One key element to involving EHOs in decision making for local planning is to move beyond stakeholder tables. When EHOs participate in technical tables, they are involved in decision-making, rather than simply expressing their opinions.

Training is another key element to making this shift. When it comes to planning knowledge, EHOs' knowledge levels vary widely. EHOs in smaller communities may have greater involvement with local government. They may be more familiar with the planning process and shifting their role from a legislative capacity to a more

advisory one. In urban centres, this connection is generally less direct.

Finally, a big challenge is 'capacity'. Without allocated time and management directive, it is very difficult for EHOs to expand their work to include new initiatives.

## ADVICE TO OTHER COMMUNITIES

In order for this to be a successful venture in other communities, the process needs endorsement by senior management. It is vital to build internal capacity for such an initiative. It is also important for those involved to know "who's who in the zoo."

## EVALUATION AND IMPACT

The initiative is not yet at the evaluation stage. More work is required internally before moving beyond self-assessment. The dimensions of health are rooted in evidence and those links need to be made more apparent before moving beyond the Health Authority. A recent gap analysis has identified ways to strengthen and solidify the program approach.

## CONTACT

Pam Moore
Environmental Health Officer
Interior Health Authority
1340 Ellis Street
Kelowna, BC V1Y 9N1
Telephone: 250 868-7812
Fax: 250-868-7760
E-mail: pam.moore@interiorhealth.ca

## RESOURCES

Interior Health Authority:
http://www.interiorhealth.ca/

# MANITOBA: WHO Global Age-Friendly Cities Pilot Project – the community of Portage la Prairie was engaged to make its city a better, healthier, and safer place for seniors to live

**Lead Organization:**
City of Portage la Prairie

**Key Partners:**
University of Manitoba's Centre on Aging, Portage Services for Seniors, Canadian Mental Health Association, Portage Community Network, Portage Regional Library, Regional Health Authority, Gladstone Senior's Centre, City of Portage, Portage Friendship Centre, Manitoba Seniors, and Healthy Aging Secretariat

**Community:**
Portage la Prairie, Manitoba

**Population of Community:**
12,730 (2,810 seniors)

**Setting:**
Urban

**Target Group:**
Seniors

**Project Principles:**
The planning process focused on community consultation, partnership development, and universal accessibility

**Implementation Level:**
Local

**Stage of Development:**
In progress

## BACKGROUND

In 2006, The City of Portage la Prairie was invited to be part of the World Health Organization Global Age-Friendly Cities Project. Thirty-three cities participated worldwide; four in Canada. The project was aimed at engaging seniors and their communities in making healthier and safer place for seniors to live, enjoy good health, and participate fully in society.

Once the request to take part in the project was made to City Hall and approved by Council, the Director of Recreation and Leisure agreed to take on the project. The study was led by the University of Manitoba's Centre on Aging through four focus groups with seniors ranging in age from 61 – 92. Additional focus groups were conducted with caregivers of seniors, professional staff, business people, and representatives of volunteer organizations, respectively.

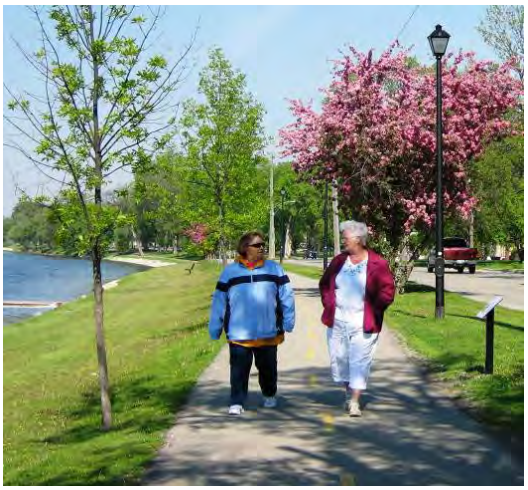
The focus groups addressed 8 domains related to aging:

1. Outdoor spaces and buildings;
2. Transportation;
3. Housing;
4. Respect and Inclusion;
5. Social Participation;
6. Communication and Information;
7. Civic Participation and Employment;
8. Health and Social Services.

The health perspective was brought to the table under the premise that a community, supportive of "active aging," is a community that is good for everyone. There is a desire for seniors to be able to stay and age in-place, in the City of Portage la Prairie. Not only do these issues affect seniors, but they

are integral to the health of the whole community.

The end result was a report released to Council that contained findings, including Key Age-Friendly Barriers and Opportunities and Recommendations. The Advisory Committee has recently focused on the business community, providing a checklist for businesses to assess their age friendliness. The community's new multi-purpose recreation centre (PCU Centre) was recently designed to include a number of age- and ability-friendly features.



## PARTNERSHIPS

The advantage of a small town, with a population of 12,730 - including 2,810 seniors, made it easy to identify who should be at the table; it was just a matter of asking them.

An Advisory Committee acted as a resource for the pilot project. It consisted of: Portage Services for Seniors, Canadian Mental Health Association, Portage Community Network, Portage Regional Library, Regional Health Authority, Gladstone Senior's Centre, City of Portage, Portage Friendship Centre, and three seniors at large (including one Aboriginal elder).

The health perspective has been brought to the table by members of the Regional Health Authority, whose main focus has been age in-place issues.

EHOs have not been involved in the Age-Friendly Cities process in Portage la Prairie, except in their regulatory role to enforce health legislation. In the course of building the PCU Centre, the city's new multiplex occupancy was dependent upon meeting the legislative requirements for health and safety. The standards imposed by EHOs have ensured that the facility operates safely for seniors and others alike.

Despite low involvement thus far, there is a place for EHOs at the table. Because of the formal legal obligations associated with EHOs, seniors may not initially be comfortable inviting them into their homes; however, EHOs can be a valuable resource as consultants to social workers and health care workers who provide advice and guidance to the elderly on how best to proceed.

For example:

- They have valuable expertise related to food safety and the appropriateness of certain types of food for the elderly;
- They have the regulatory power to impact seniors' landlords who are not living up to their obligations and to provide advice and input into decisions related to planning for newer facilities;
- They play a significant role during times of crisis and emergency in a community when the elderly and disabled have been shown to be at far greater risk than the general population.

For EHOs to play an enhanced role in making a community age-friendly, they would benefit from a greater understanding of the needs of seniors and their special vulnerabilities and strengths.

The Portage la Prairie Age-Friendly Cities Committee and the Gladstone Age Friendly Committee were recently invited to be part of a mobile workshop for the Manitoba Planning Conference. Participants were able to take guided, narrated tours to see some of the age-friendly and not so age-friendly features of both communities and to hear from the two Advisory Committees about the challenges and successes they experienced in trying to make their communities age-friendly. This type of tour might benefit EHOs in their efforts to understand how legislation, regulation, policy, attitude change, and approach can positively impact the community's elderly population.

EHOs know their field best and are therefore in the best position to judge how they might participate in and influence such an endeavour.

### GENERATING BUY-IN

There is considerable support for this work, both regionally and nationally. The age-friendly movement is very active within the Province of Manitoba. This work is stewarded by the provincial government and by individual communities within Manitoba. The regional Health Authority has been very supportive. They have provided strong representation at the board level, provided input into all aspects of encouraging age-friendliness in the community, and have included the advisory committee in relevant professional development opportunities.

Through the Minister and the Manitoba Seniors and Healthy Aging Secretariat, the Province of Manitoba has provided periodic funding to communities involved in the age-friendly movement and has taken the lead to make Manitoba the most age-friendly province to live in Canada. The only barrier has been shortage of staff and volunteer time to get the work done.

## Lessons learned

One of the main lessons learned has been that the simple act of bringing people together to talk is the catalyst for change. For example, the transportation subcommittee focused on bringing all providers together to talk. The intent was that both non-profits and for-profits would have a dialogue and ultimately work together. However, non-profits attended and for-profits did not. The unanticipated spin-off was that the non-profits were appreciative of the chance to network with each other and talk about their challenges. Through conversation, they collectively realized that information dissemination to seniors was a major challenge.

It quickly became clear that the project needed branding – a public profile that was easily recognizable within the community. It took some time to develop an age-friendly logo, and in the end a decision was made to use bright colours and a larger font size. The Committee is currently developing a website for further dissemination.

Another unanticipated spin-off has been team-building. New networking is occurring within the community and within the Advisory Committee.

Janet Shindle, Councillor for the City of Portage la Prairie, suggests that EHOs reach out to community partners to talk about what they do and to identify where their special skills might be of assistance. In all aspects of moving a community forward, it is essential that people talk with one another and build bridges rather than walls. Success in this project has been achieved

through a strong community network of service providers who meet on a regular basis. Ideas and relationships are nurtured through this process.

The most critical factor contributing to the success of the Age-Friendly Cities Project has been partnerships. It has also been the most critical factor in the building of the PCU Centre. Success of the overall project is dependent upon weaving together all the skills and information into something that works for a particular community. The skills and knowledge of the health system will always be critical to the success of the project.

## ADVICE TO OTHER COMMUNITIES

The model used in the Age-Friendly Project is extremely adaptable. In fact, 27 communities in Manitoba are involved. A forum was hosted in Portage La Prairie in February 2008 when both urban and rural communities were represented.

The following advice is offered to other communities:

- There is a need to evolve as a committee;
- The process of becoming a cohesive group and determining action steps takes time;
- Having the right people at the table, with knowledge in different areas, is critical. It is important, at the beginning, to seek out partners who will enhance the program.

Producing a formal report at the beginning proved to be very valuable. At the municipal level, it expedited the process of generating buy-in. Having people from "outside" giving recommendations was also perceived as valuable. Producing a report was a formal approach and in smaller communities it may not be needed.

The end goal is to adapt the project in every community in Manitoba.

## EVALUATION AND IMPACT

While a formal study or report is not necessarily needed, an inventory or assessment of the community does need to be undertaken. It is important to show people what the project holds for them, e.g., for businesses, being age-friendly could increase the number of shoppers in stores or increase their profile.

The project has brought nothing but positive results to the community. Because age-friendly means easier for everyone, the project benefits all citizens, including those physically challenged.

Implementation of the WHO Report is ongoing and the work is not yet done. The research was released in 2006 and the report in 2008, which is when the work began on implementing and starting to make it real.

The recent focus has been on the business community – hosting a luncheon in partnership with the local Chamber of Commerce and completing a pamphlet for the business community about advantages of being age-friendly. It also includes a checklist for businesses to assess their age-friendliness. The business pamphlet will be circulated to the entire business community and posted on the city's web sites.

A brochure has also been completed to address the role of the Portage la Prairie Age-Friendly Cities Committee and why it is important. This pamphlet will be personally delivered to every home in Portage la Prairie, as well as being available in pamphlet racks and on web sites.

Work, on a resource booklet for seniors, continues; providing contact and brief descriptive information on local services most important to seniors. It is being reviewed by all board represented agencies, including the RHA.

This project holds the potential to impact many sectors in the community. Through the Advisory Committee, this project has brought people together who are poised to make change. Although it has taken some time to get to this point, partners are united and ready to move forward.

Most importantly, the project has raised the profile of age-friendliness in the community.

## CONTACT

Janet Shindle
Councillor, City of Portage la Prairie
97 Saskatchewan Avenue East
Portage la Prairie, MB R1N 0L8
Telephone: 204-857-8142
E-mail: janetshindle@hotmail.com

## RESOURCES

City of Portage la Prairie: www.city-plap.com

University of MB Centre for Aging: www.umanitoba.ca/centres/aging/

Public Health Agency of Canada: www.phac-aspc.gc.ca/sh-sa/ifa-fiv/2008/initiative-eng.php

# ONTARIO: Region of Peel Public Health – Peel Health is re-forging the historical relationship between planning and health

**Lead Organization:**
Region of Peel Public Health

**Key Partners:**
Region of Peel, City of Brampton, Town of Caledon, City of Mississauga, Canadian Partnership against Cancer

**Community:**
Region of Peel, Ontario
(Caledon, Brampton and Mississauga)

**Population of Community:**
1,154,000

**Setting:**
Urban and semi-urban

**Target Group:**
General Population

**Project Principles:**
To provide leadership, advocacy, and support for integrating public health considerations in growth and development planning in the Region of Peel

**Implementation Level:**
Regional

**Stage of Development:**
In progress

## BACKGROUND

Increasing diabetes rates and dependence on the automobile have brought the issue of a healthy built environment to the forefront in the Region of Peel. In 2005, a report was presented to Peel Regional Council highlighting the impact of the built environment on population health. The Council took action and directed a formalized relationship between Peel Health and the Regional Planning Department. Since that time Peel Health has been providing comments, from a health perspective, on municipal and regional plans. The organization also continues to work on advocacy, knowledge transfer, and the development of tools and processes to assess the health impacts of development.

The Canadian Partnership against Cancer provides funding for various initiatives through its "Coalitions Linking Action and Science for Prevention" (CLASP) program. This support has provided Peel Health with new opportunities to explore different methods of assessing the health impacts of built environments and to examine potential areas for policy change, in collaboration with regional and municipal planning authorities.

## PARTNERSHIPS

Key partners on this project include public health, regional planning, and municipal planning staff. A strong partnership with planning at both levels is critical to ensure local needs are understood and considered in the context of Regional priorities and opportunities for coordination.

Public Health's overarching role in this initiative has been to promote an evidence-based rationale for changing land development practices. As obesity and diabetes prevention are key priority areas for Peel Health, staff and managers from the Chronic Disease & Injury Prevention division are leading this initiative on an ongoing basis, and there is strong involvement from Peel's Medical Officer of Health.

The joint initiative is overseen by a Land Use Planning and Health steering committee, comprised of senior staff from the Regional Health and Planning departments.

As these partnerships gain strength, the organization is also starting to engage external partners, including other health units, professional associations, and non-governmental organizations.

## GENERATING BUY-IN

Peel Regional Council and the Medical Officer of Health (MOH) were the key decision-makers approving the project. Key to the process was political support received through Council.

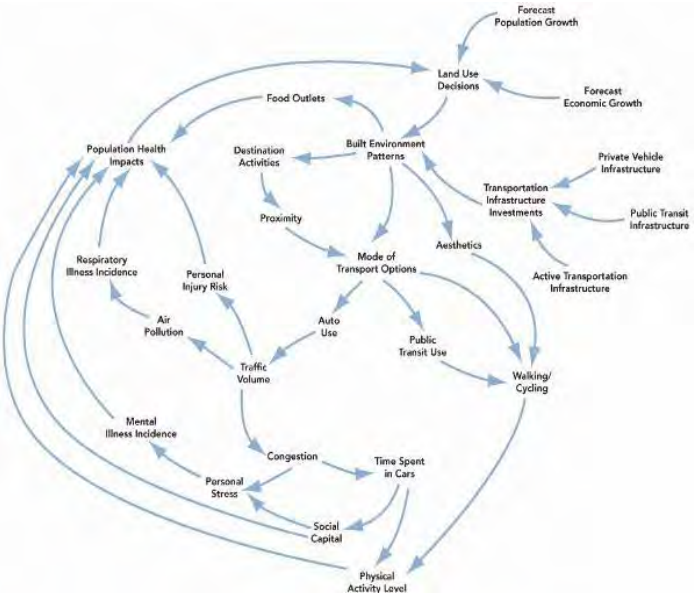
There has been no resistance to the project, but there was a need to negotiate changes in established processes and to shift priorities. All of the partners involved share a similar end vision of improving health and quality of life for Peel residents. The challenge is for the two very different disciplines of health and planning to coordinate their efforts toward the achievement of this common goal.

## PLANNING & IMPLEMENTATION

Peel Health's philosophy is not to focus on individuals' risk for obesity, but to promote environments that are supportive of healthy lifestyles for all populations. When work began in this area, there were few best practices already in place, so Peel Health has relied on applying public health rigor to this new project.

Outcomes of this project include:

- A set of conceptual models capturing the relationship between health and planning (see figure below);




- A literature review;
- A set of healthy development standards;
- Review and comment on development applications from a health perspective;
- Peel Health input into regional and municipal plans and policy;

- Formation of a Land Use Planning and Health Steering Committee to oversee health and built environment initiatives;
- Opportunities for knowledge exchange, including conferences and presentations to a variety of stakeholders, e.g., elected officials and professionals from the planning, health and development fields.

Recent policy changes include incorporation of policies into draft Regional and Municipal Official Plan amendments, stating that the region and municipalities will develop tools to assess the health impacts of development.

Peel Neighbourhood Showing Curvilinear Design, Long Walking Distances, and Low Connectivity. Photo **Credit: First Base Solutions**

## LESSONS LEARNED

The need to keep partnerships strong and objectives transparent was among the most important lessons learned. Forging of new partnerships has helped to create a more seamless merging of health and planning disciplines.

Another important lesson shows the necessity for partners to step outside their own comfort zones to familiarize themselves with other partners' perspectives and priorities. For example, health staff working on this project often attends planning events and presentations and receive assistance from regional and municipal planning staff to better understand planning legislation, the development application process, and other planning-related issues.

It is recognized that there may be a number of conflicting priorities throughout the development process and it is therefore important to ensure that health is at the table in the early stages. There are clear benefits in seeing a planning project through a variety of lenses, early in the process.

Several key lessons from this experience are:

- A need for tools or processes that allow for flexibility; importance of understanding each municipality's priorities and policy contexts;
- Ongoing consultation with stakeholders and joint decision making between planning and public health officials to ensure both agendas are being met;
- Mutual understanding and identification of common ground between planning and health professionals in order to engage in meaningful discussion.

Peel Health is embarking on new projects that will see a larger range of partners involved in the process. In order to achieve this, it is imperative for organizations to have their senior management prioritize the issue of health and the built environment. Another support that is required is clear direction from the province, for example, through the Provincial Policy Statement – it is important for healthy development

practices to be required at the provincial level to ensure that the necessary municipal policies are established down the line.

## ADVICE TO OTHER COMMUNITIES

Other communities can access tools and lessons learned through the current CLASP project. This will include information on how to adapt the tools and practices to meet the needs of different communities and regions.

## EVALUATION AND IMPACT

In order to evaluate the project, Peel Health will conduct thorough process evaluations throughout the development of tools and policies and will evaluate any pilot test phases of resulting tools.

A number of knowledge transfer activities are planned to disseminate tools and lessons learned, including publications and conference presentations to a wide-ranging audience.

## CONTACT

Peyun Kok
Project Specialist
Peel Health - Chronic Disease & Injury Prevention
10 Peel Centre Drive, Suite B
PO Box 2009 Stn B
Brampton, ON L6T0e5
Telephone: 905-791-7800, x 2112
E-mail: Peyun.Kok@peelregion.ca

## RESOURCES

www.peelregion.ca/health/urban

CLASP
http://www.partnershipagainstcancer.ca/coalitions

# **QUEBEC:** Action to Revitalize Older Neighbourhoods in Salaberry-de-Valleyfield – an initiative to increase healthy housing conditions in disadvantaged neighbourhoods

**Lead Organization:**
Partnership for Revitalizing Older Neighbourhoods in Salaberry-de-Valleyfield (PRAQ)

**Key Partners:**
Public Health Agency of Canada, Regional Public Health Authority (DSP Montérégie, Environmental health team)

**Community:**
Salaberry-de-Valleyfield, Montérégie

**Setting:**
Urban

**Target Group:**
Marginalized Populations – lower income/education living in improved neighbourhoods and/or in substandard housing

**Project Principles:**
Citizen participation to improve education and housing conditions for low income families

**Implementation Level:**
Local

**Stage of Development:**
Complete

REVITALISATION DES ANCIENS QUARTIERS

## BACKGROUND

6,000 of the City of Salaberry-de-Valleyfield's 40,000 residents live in three older neighbourhoods: Bellerive-Ouest, Sainte-Cécile, and Sacré-Cœur. They have a high concentration of households with negative socio-economic characteristics, including: single-parenting, child poverty, under-education, criminality, poor community cohesion, and poor housing conditions. Residents of these neighbourhoods have some of the poorest health statistics in Montérégie.

In 1997, a survey was completed by the local housing committee in collaboration with the Health Authority, DSP Montérégie. Among other results, it came to light that local asthma rates were 11.6%; more than double the rate in the rest of the region. The results, provided to the City and the local health centre, were taken very seriously and the report was passed to the Health Authority. The local health authority included it in their strategic plan and presented the findings to 33 local organizations. By the end of the following year, local and regional organizations agreed to work toward a global revitalization approach for these neighbourhoods. A focus group was formed and within months there were information sessions with nurses on various aspects of air quality, tobacco, asthma, and moisture issues in housing.

In 2002, PRAQ (Partenaires pour la revitalisation des anciens quartiers de Salaberry-de-Valleyfield; English: Partners for the revitalization of older neighbourhoods of Salaberry-de-Valleyfield), the Partnership for Revitalizing

Older Neighbourhoods, became involved in the project through its initiative to revitalize older neighbourhoods in Salaberry-de-Valleyfield. With funding from PHAC's population health fund, they began a two-pronged initiative in the neighbourhoods of Bellerive, Sainte-Cécile, and Sacré-Cœur. One focus was on housing with the intent to: improve healthiness of homes, indoor air quality of homes with crawl spaces, develop a municipal housing policy, and develop healthy environments to promote academic and social learning in youth.

## PARTNERSHIPS

The focus of the intervention was to strengthen community cohesion and develop consensus building skills to advance neighbourhood projects. Including a variety of partners in the project ensured that a range of approaches and areas of expertise were applied to this project.

Led by PRAQ, this project included a number of contributing partners. It was funded through PHAC's population health fund; established for not-for-profit organizations addressing a major community health concern, involving multiple sectors and community members to increase their ability to identify community health issues and implement solutions with a sustainable development framework.

Key partners in the global approach of the project included the City of Salaberry-de-Valleyfield, the local community service centre, regional and local public health authorities, the Valleyfield Employment Centre, Vallée-des-Tisserands school board, the CMHC, Quebec housing society, local schools, religious organizations, police services, the local alternative justice organization, community organizations, and local residents – both home owners and tenants. In addition to a grant from PHAC, funding came through Quebec's housing institute (research, tools, and technical support), Hydro Quebec (electricity), pharmaceutical companies (financial support to enhance air quality), a private company for renovations (financing), local health authority (organized 2 meetings) and the CMHC (feasibility study). The City provided subsidies for renovations and the Quebec bank has given lower interest rates to low income home owners, for renovations. This partnership was strengthened by the understanding that a community approach and interdisciplinary team would result in a stronger project and that there is sometimes a need to go outside the health arena to solve health problems.

EHOs from Montérégie Public Health Authority (DSP Montérégie) were involved early on. They worked with medical students to survey homes for levels of deterioration and to assess the health of the occupants; also working in a research capacity. In addition, EHOs identified technical solutions and developed tools to improve housing conditions. They also organized community activities to support tenants in behavioural changes.

EHOs had a very strong partnership with the City, the local health department, the sport and leisure partner, the legal partner, the school board commission, and local NGOs. They were able to raise the issue at a regional level, even though it started as a local issue.

EHOs' knowledge added depth to the project. While municipalities are able to perform some inspections, EHOs can raise wider health issues. In this case, they raised the issue of global health, the importance of healthy housing, and an awareness that physical environmental determinants need to be a priority for local planners.

The collaboration was strengthened by a common vision, open communication, a strongly-facilitated process, respect between partners, and through the flexibility of organizations involved - especially PRAQ.

## GENERATING BUY-IN

Buy-in for this project began after the initial survey in 1997 when it was passed from the local health centre to the Health Authority. Both the Health Authority and the municipality took the issue very seriously. The breadth of partnerships and funding partners working with PRAQ illustrates how widely the interest and buy-in was for this project. Political support of the project has led to policy changes.

At times it was difficult to mobilize the community, who were often busy with work and their families. However, by working through local organizations, community members played a key role in the success of the project. Key to this success was the creation of an action plan geared towards the reduction of endemic poverty in the neighbourhoods.

## PLANNING & IMPLEMENTATION

After initial survey work, the local housing committee and local health authority made housing conditions in this community a priority. PRAQ brought the issue to action in 2002. Good leaders at the local level strengthened the project through their understanding of a community approach and an understanding of interdisciplinary work.

Tools were developed to assess the condition of housing in the neighbourhoods. Nearly 200 houses were visited to identify occupant health issues and 50 homes with crawl spaces were inspected. Technical support tools were created to help with renovations and were also distributed to the residents; renovation assistance networks were established.

In addition to inspections, workshops to improve indoor air quality and lifestyle skills were provided to residents of these neighbourhoods. The City and Rénovation-Québec were canvassed to see if they could help low-income residents with renovations.

## LESSONS LEARNED

Lessons learned in this project include the importance of:

- Clearly articulating the organization's strategic direction with partners, which relates to the vision, mission, mandate, and establishment of a three-year action plan;
- Reviewing communication strategies (modified as required) to improve common understanding and strengthen buy-in;
- Specifying, early on, the contributions and roles expected of each of the partners;

- Continuing to refine the design of specific interventions to integrate the missions of the various organizations involved and to apply concepts and methods that are common to stakeholders from several sectors;
- Incorporating sustainability into the design of the program;
- Keeping the community mobilized, which is best done in person;
- Working through obstacles and acknowledge that this may take time;
- Having flexibility in resource allocation, but still working within a budget;
- Needing to understand the agendas of the contributing partners;
- Bringing strong EHO support to a project through their knowledge and evidence-based work;
- With future interventions, continuing to focus on the training of inspectors, the process of consent of the owners and follow-up with residents;
- Using language and creating goals that are accessible to your target population:
- Understanding that local action is limited by factors such as an aging population, health problems, and poverty;
- Producing and distributing leaflets to residents may not be adequate strategies to change their health behaviours; video production may be more suitable in presenting public health messages;
- Ensuring the formal commitment of municipal authorities before committing to renovation programs; without formal commitment of public agencies, it is difficult to structure a support network or to reach agreements with the economic sector.

EHOs can continue to support the community through the education of home maintenance and behavioural changes.

## ADVICE TO OTHER COMMUNITIES

Many of the lessons learned in this project are transferable as advice to other communities. One key to success is an understanding of how to develop people's skills to best express their needs and the specific neighbourhood's needs. Another is to establish a program and a local leader to ensure continued mobilization and community ownership of the project. Patience with all of those involved, including the authorities, will make projects run more smoothly.

The project operated within the framework of the local public health action plan, the school health approach, and the Healthy Cities approach. Working within these structures helps to build a solid foundation for such projects.

## EVALUATION AND IMPACT

The project was externally evaluated by a health authority. From a health perspective, it was deemed a valuable experience that opened up the importance of working with interdisciplinary teams.

A study conducted in cooperation with the Montérégie Public Health authority established that crawl spaces can lead to excessive moisture and structural rot that promotes mould and increases the incidence of asthma.

PRAQ arranged $600,000 for the "Rénovation-Québec" program, including management fees, to renovate 30 properties during the second phase. The

Quebec Housing Corporation (QHC) and the City of Ville de Salaberry-de-Valleyfield can now cover up to 90% of the cost of renovating these houses, based on family income. Today, the City of Salaberry-de-Valleyfield has regulations to ensure that 85% of the total program funds from Rénovation-Québec and Revitalisation des quartiers anciens are dedicated to priority areas, which include older neighbourhoods. One hundred and fifty cases have been processed to date, for a total of $2,178,667. This project, formerly administered through the Provincial government, is now administered locally, through PRAQ.

In order to support residents, the Quebec Housing Corporation (QHC), the City of Salaberry-de-Valleyfield and PRAQ have created a brochure outlining inexpensive residential maintenance and improvement measures. PRAQ has obtained a $10,000 grant from the Quebec Housing Corporation to conduct a study on community and social housing management; another for $20,000 from the CMHC to implement an initial affordable housing project.

As a result of this project, in 2007, the City of Salaberry adopted, on a 10 years basis, a municipal housing strategy based on citizen participation, equity, and healthy housing principles. An advisory committee has been established to identify issues, practices, and policies associated with housing, to examine other ways to improve the quality of life for citizens, to forecast future housing needs, and to develop an action plan to implement the policy. In January 2010, the city reaffirmed its commitment to improve housing conditions in the City's older neighbourhoods.

Partnerships formed in this project have continued. This project was showcased at an annual public health training workshop, as an example of public health officials working with municipalities. Another housing initiative, the Healthy Homes project in Lanaudiere, was spurred by the success of the project - Action to Revitalize Older Neighbourhoods in Salaberry-de-Valleyfield.

## CONTACT

Elisabeth Masson
Planning, programming and research officer
Montérégie Public Health Office,
Environmental Health Sector
Telephone: 450 928-6777 poste 4048
E-mail: e.masson@rrsss16.gouv.qc.ca

Julie Bergevin
Coordinator, PRAQ
75, rue St-Jean Baptiste, 2e étage
Salaberry-de-Valleyfield, Québec, J6T 1Z6
Telephone: (450) 370-4387

## RESOURCES

http://www.uquebec.ca/ptc/adsm/sites/www.uquebec.ca.ptc.adsm/files/Claude%20Champagne/CSP_ADSM_EN_2009.pdf

http://www.praq.osbl.ca/104/principal.htm

# NOVA SCOTIA: Healthy Housing, Healthy Community Project – this unique project got health professionals, residents, planners, and developers at the table and talking in a meaningful way

**Lead Organization:**
Chebucto Communities Development Association

**Key Partners:**
Spryfield Resident's Association, Professor Daniel Rainham, and Public Health Agency of Canada

**Community:**
Spryfield, Nova Scotia

**Population of Community:**
4,460 (Spryfield)
372,679 (Halifax Regional Municipality)

**Setting:**
Semi-Urban

**Target Group:**
Residents, Planners, Developers, Health Professionals

**Project Principles:**
Knowledge translation; dialogue

**Implementation Level:**
Local and Regional

**Stage of Development:**
Ongoing

## BACKGROUND

Spryfield, a suburb of the Halifax Regional Metropolitan area, is well known for its strong sense of community and history of resident participation in civic life. Recently, members of the Spryfield Residents' Association (SRA) became concerned about developments occurring in their community. The Residents' Association saw the need to give citizens a tool for assessing local development proposals and their potential impact on community health.

The Chebucto Communities Development Association's Marjorie Willison (also a local resident on the committee) saw a link between the needs of the SRA and her organization's mandate. With a background in population health promotion, she was able to make the initial connection between the SRA's concerns and the need to increase understanding of the strong, but generally unrecognized link, between community design and public health and well-being.

Seeing that more work could be done in this area, the CCDA applied for PHAC funding and launched the Healthy Housing, Healthy Community (HH, HC) project in October 2005. The project revolved around an extensive engagement process with four groups that do not usually find themselves at the same table: Planners, Health Professionals, Developers, and Residents. These groups were brought together for four facilitated Round Tables as well as one-on-one discussions. With input from these four stakeholder groups, the CCDA developed a user-friendly Healthy Places Toolkit and a Healthy Development

Evaluation Framework. These tools were designed to help residents, health professionals, and planners assess existing and proposed developments to determine how well they support community health. The project was not part of a particular planning process, but rather about development of a shared understanding of health impacts on the built environment.

In the past year, work has been done with community groups and local businesses to identify a selection of indicators for mapping. They have partnered with Dr. Daniel Rainham, who holds the Elizabeth May Chair in Sustainability and Environmental Health at Dalhousie University. Using Google Earth, aerial photography, and geographic data held by the municipality, a set of baseline indicator data, from the Healthy Development Evaluation Framework, was established for the community.

## PARTNERSHIPS

PHAC supported the project through their initiative to build healthy public policy. To complement her background in population health promotion, Marjorie added an environmental planner to the HH, HC project team. This duo clicked and the synergy of their collaboration affected the participants. Their collaboration demonstrated that health officials and planners could work effectively as a team.

The health – planning collaboration was innovative as Halifax public health had not previously been linked to planning. The first Round Table really opened people's eyes.

The CCDA organized four multidisciplinary Round Tables with citizens, planners, developers, and public health officials; such as, nurses, nutritionists, early childhood specialists, and family health professionals.

Getting these groups to the same table was a successful first step, given the history of conflict related to development in Halifax. After the Round Tables, the feedback from all sides was that they appreciated the chance to build something together - the Healthy Development Evaluation Framework and Healthy Places Toolkit. The Round Tables brought divergent groups to the table to talk in a meaningful way. Through facilitated dialogue, residents learned about the challenges faced by developers and health professionals, which contributed to their perspective on how housing and the built environment affects health. Many informal one-on-one conversations happened around the tables.

The regional Chief Medical Officer and public health managers attended presentations made by the group. Environmental Health Officers were brought to the table in the early stages of the evaluation framework and will be brought back for a "lunch and learn" session with HRM (Halifax Regional Municipality) planners. Since this is seen as a community empowering project, residents as well as diverse professionals have been involved in the formal evaluation of the project.

Marjorie suggests that EHOs could have been a useful asset in the early stages of the project, when they may have made useful contributions by suggesting indicators - a major component of the project. They could have provided information on determinants of health which may have added to the project's toolkit.

EHOs could also have strengthened the Round Tables. While residents seem to understand health implications intuitively, the group found that planners and developers tended to need more tangible examples of how health fit the project, by relating healthy built environment to their

own neighbourhoods. EHOs would have broadened the scope of the project and may have helped to further reach public health audiences.

The potential impact of EHOs, and other public health officials, in planning projects is rooted in a need to understand the planning process, knowing how to be helpful, and where their contribution and skill set are most useful. In working with a diverse group, including the public, specialists need to assess where they are most useful.

## GENERATING BUY-IN

Early feedback showed some hesitancy to jump on the bandwagon, but by the second Round Table the feedback was glowing. Now nearing the end of its funding, the project enjoys a great deal of political support and has received almost universally-positive reports from the sectors involved.

The philosophy from the beginning was to focus on stakeholder input. Because the Healthy Development Evaluation Framework was grounded in literature and then refined by the stakeholders at the Round Tables, all four groups had a say in shaping it. This contributed greatly to the buy-in and sense of ownership around the document. Care was also taken to make activities in the Healthy Places Toolkit useful for marginalized residents.

It became evident during the project that while the link between the built environment and physical activity is generally understood, the link between the built environment and other attributes of a healthy community are not as evident. In order to educate the public about the many aspects of health affected by the built environment, the CCDC returned to the four strategies of Health Promotion:

1. Raise Awareness;
2. Change Attitudes;
3. Change Behaviours;
4. Maintain Changed Behaviours.

Thanks to the HH, HC project, awareness and changing attitudes are taking root in Spryfield and the Halifax Regional Municipality. The challenge now is to work towards changing behaviours and maintaining those changed behaviours among residents and diverse professionals.

At the Round Tables, developers suggested that establishing a prize or award for excellence in development would help to get the word out to other developers. An award would allow for peer recognition, provide publicity for healthy developments, and create visibility for developers committed to best practices in healthy community design. The CCDA has been working with the municipality to develop criteria for an award.

## LESSONS LEARNED

Lessons learned include:

- Identify and include all major stakeholders from the beginning; next time, the CCDA would like to include financers (bankers) as a fifth stakeholder group;
- Ground your work in existing literature to build credibility;
- Carry on in spite of setbacks;
- Take time to develop trusting relationships;
- Use a common focus to reduce conflict;
- Focus on senior staff within the municipality to make change happen over the long term, as Councillors come and go with elections;

- Provide plenty of time for uptake of project results;
- Cross-pollinate between health, environment, and planning to generate creative solutions;
- Partner with institutions to access resources – understanding connections, familiarity with research and mapping technology.

The need to tailor your message to suit your audience has been another important lesson learned. During the project, the CCDA worked to frame its key message for different audiences. For planners, it framed the issue in terms of smart growth planning and environmental sustainability. For developers, it highlighted how healthy development principles could reduce developer-related delays and improve sales. For health professionals, it focused on relating the built environment to poverty and health inequities. Finally, for residents, the key message was how they could contribute towards making their communities better places to live for themselves, their children, and their grandchildren.

One unanticipated spin-off was the partnership with Professor Rainham. Without him, actual mapping of some of the indicators would not have occurred. The next step is to see if there is any relationship between the mapped built environment indicators and socio-economic indicators, such as, average household income and level of education. On the ground in Spryfield, the next step is to persuade the City to periodically map indicators, to monitor progress over time. A baseline of information has now been established through this project, which could be invaluable to future planning projects in the community. While the first few months of the project seemed to move slowly, the last few months have seen an increase in uptake. Things are coming together and local public health and planning professionals are now training together.

Challenges still exist that EHOs and other public health professionals can help to address, including:

- Work with diverse voices from the community;
- Public health policy should be there when planning regulations are changing;
- Involvement in the facilitator role could help to create supportive environments for these discussions and projects;
- Share their knowledge of determinants of health in user-friendly language.

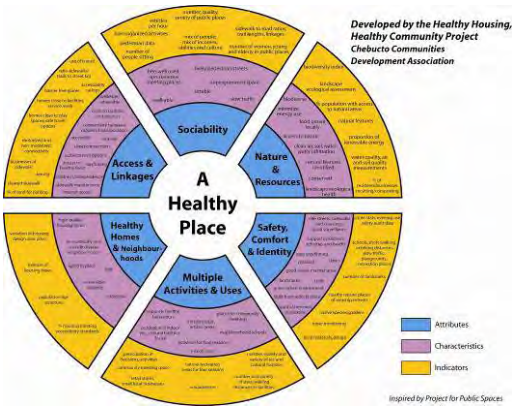
## ADVICE TO OTHER COMMUNITIES

The HH, HC project team has already started to get the word out to other communities; hard copies of project results, including the toolkits, framework, bibliography, and a CD were mailed to Mayors, CAOs and Directors of Planning in 10 major cities in each of the ten provinces across Canada, as well as northern cities.

The HH, HC Healthy Places framework graphic that was developed (see following page), contains indicators that are merely suggestions. The project team's advice is to start by building evidence and bringing stakeholders together to select indicators suited to their situation and resources.

## EVALUATION AND IMPACT

Evaluation of the project took the form of two rounds of stakeholder interviews.




Healthy Places framework graphic

Midway through the project the feedback was positive, but tentative. By the second round of evaluation the reviews were overwhelmingly positive.

The CCDA has participated in the Community Based Research Network through the University of Ottawa and realized, in networking with others around the country, that the work they are doing is innovative. There are few approaches being employed today that consider more than physical activity and transportation. They also include sociability, healthy housing, mixed uses, nature, and community identity and safety as attributes of a healthy community.

Measuring health outcomes is outside the scope of this project, but relating baseline indicator data with distal measures of health, such as income and education, is a first step. As well, the baseline data will make it possible to track change over time, to see if planning strategies and development are making any difference to attributes of a healthy community. The tools developed in the project were incorporated into Spryfield's community visioning process as part of HRM planning, and have been made available to other communities in the Halifax Regional Municipality. In a way, the project has come full circle – the very residents who brought forward their concerns and helped to shape the toolkit, are now using the tools and are empowered to engage in the planning process.

While the HH, HC project is coming to a close, the project team feels that change will continue to occur. "Planners and Health Professionals are talking now – they have started going down that road and the project has a life of its own."

## CONTACT

Marjorie Willison
Project Manager, Chebucto Communities Development Association
52, 16 Dentith Road
Halifax NS B3R 2H9
Telephone: 902-477-0964
E-mail: ccda.willison@ns.sympatico.ca

## RESOURCES

Visit the Chebucto Communities Development Association web site to download the project bibliography and Healthy Places Toolkit:
www.chebuctoconnections.ca

http://www.spryfield.ca/ccda/images/pdf/hhhc%20healthy%20places%20toolkit%20workbook.pdf

and French

http://www.spryfield.ca/ccda/images/pdf/toolkitunmilieudeviesainp.pdf

## NOVA SCOTIA: Child and Youth Friendly Land Use and Transport Planning – this project seeks to establish transportation and land use arrangements that meet the needs of children and youth and, as such, the whole community.

**Lead Organization:** Centre for Sustainable Transportation, University of Winnipeg

**Key Partner:** PHAC, Nova Scotia Department of Health Promotion and Protection, Ecology Action Centre

**Community:**
Nova Scotia

**Setting:**
Urban, suburban, and rural

**Target Group:** children and youth

**Project Principles:**

**Implementation Level:**
Local / Regional, guidelines are Provincial

**Stage of Development:**
Nearing completion

### BACKGROUND

The Development of Child and Youth Friendly Land Use and Planning Guidelines was prompted by "disturbing trends" in youth, including decreasing levels of physical activity and independent mobility, increasing levels of obesity, traffic fatalities, exposure to air pollution, and consequently, concern over emotional well-being. Many of the issues that face adults are exacerbated in youth and children, such as:

- Children and youth are especially vulnerable to adverse health effects associated with motorized traffic, including poor air quality inside and outside vehicles;
- Transport needs are different from adults, due to different destinations and access to different modes of transportation. Planning for adults, youth, and children are different. Facilities for non-motorized transportation modes are more relevant for youth and children.

Nineteen guidelines, grouped into six categories, have been established:

- putting young people first in land-use and transport planning;
- providing for them as pedestrians, cyclists, and transit users;
- providing for journeys to and from school;
- reducing the impact of all transport activity on young people.

The need for this project was established in 2005, during a project of the Centre for Sustainable Transportation regarding children and transportation in Ontario. Extensive consultations were undertaken and it became apparent that guidelines were applicable to other provinces as well. The PHAC agreed to fund development of a set of guidelines for each province. Later that year, 11 personnel from transportation and planning, health promotion, and other related professionals reviewed the document and began to comment on its relevance to Nova Scotia. In 2008 the Cape Breton University hosted a workshop on a set of guidelines specific to Nova Scotia.

The guidelines complement a number of Nova Scotia provincial initiatives including:

- Active Kids Healthy Kids and Health Promoting Schools;
- The Crosswalk Safety Task Force Final Report and an emerging Road Safety Strategy;
- Sustainable Prosperity Act and the Climate Change action plan;
- Age-friendly planning programs.

The project has expanded well beyond Ontario and Nova Scotia and, later this year, finalized guidelines will be released for all Canadian provinces, in addition to a guidelines document applicable to small towns and rural communities that was produced in Nova Scotia.

## PARTNERSHIPS

The pan-Canadian project is headed by Richard Gilbert and Catherine O'Brien, research associates of the Centre for Sustainable Transportation, University of Winnipeg and funded by the Public Health Agency of Canada. They are now involved in a project under the Coalitions Linking Action & Science for Prevention (CLASP), merging the guidelines with school travel planning.

Dr. O'Brien has led the initiative for the Atlantic Provinces and has prepared a literature review on youth and sustainable transportation, as well as guidelines for rural communities.

Development and application of the guidelines has been collaborative in a number of ways. Beginning as a sustainable transportation project, the authors have worked extensively with Green Communities Canada; presenting to municipalities and holding workshops that targeted both project goals. They have also been involved with the Active and Safe Routes to School program and the Ecology Action Centre. By working with groups where goals are aligned, a greater impact is felt.

Project stakeholders have played a significant role in the development of each province's guidelines. Half of each guideline document is a series of provincially contextual examples, often generated at workshops. Children and youth are involved in the process and have been good critics of the various guides.

A Chief Medical Health Officer and an Environmental Health Officer were involved as key informants, early in the initiative. Although they have not been involved extensively throughout the process, Catherine O'Brien suggests that they could be involved in the project in various ways. A number of environmental health issues are

mentioned throughout the guidelines. Dr. O'Brien does not feel that she is sufficiently familiar with EHO parameters to have included them specifically beyond the consultation process, but speculates that they could be involved through:

- decision making about school sites:
  - avoiding sites with high volumes of traffic, air and noise pollution;
  - encouraging sites where walking and biking are viable commuting options;
  - school drop off zone locations;
  - considering not only a maximum pickup distance from schools/homes for children, but also a minimum distance, to encourage walking;
- location of school parking lots;
- school closures;
- sidewalk placements;
- anti-idling policies.

Someone in each municipality should be in charge of plans to determine how the health and well-being of children and youth is being affected; this could be done by an EHO.

EHOs and MHOs could also help in the dissemination of guidelines. Their credentials may increase the credibility of guidelines for a wider audience.

## GENERATING BUY-IN

In the development of guidelines, there has been both provincial and PHAC support. Various government agencies have also offered assistance. Nova Scotia Promotion and Protection has encouraged further work on rural guidelines, providing a grant to do so. Service Nova Scotia and Municipal Relations have supported the dissemination of the project. A number of other government agencies have invited Dr. O'Brien to present the guidelines. Municipal staff has assisted in setting up workshops. The guidelines are viewed as very timely; present agendas relate to increasing physical activity, healthy living, and improving environmental health.

## PLANNING & IMPLEMENTATION

In order to build a case for the guidelines, the project is grounded in evidence. Planning of this project included consultations and focus groups, youth, and children.

The guidelines are presented as recommendations to municipalities, schools, and health associations and are not intended for application in every case.

## LESSONS LEARNED

It has been exciting to see that it only takes a 2- to 3-hour workshop for a municipality to realize the value of the guidelines; not requiring ongoing assistance.

So far, it has been hard to get the education sector involved – they see themselves as involved in school bus programs, but often fail to see their connection to health in relation to school siting, bike racks, and curriculum on active transportation. This is starting to change due to a concern around physical inactivity, but is still a challenge.

It is helpful to get the highest level of staff or council interested and to get as many stakeholders as possible together at the same time.

The relationship between stakeholders strengthened throughout the project. The project is now a part of CLASP and relationships are beginning to build across the country.

## ADVICE TO OTHER COMMUNITIES

The project began in more urban settings, but supported by Nova Scotia's Department of Health Protection and Promotion and by PHAC, it has been expanded to include a set of rural guidelines.

Advice to other communities includes being respectful and flexible. It is important to make stakeholders (e.g., municipalities, schools) aware of the guideline rationale, without explicitly saying that all guidelines should be adopted and followed. It is important for institutions to be selective in which guidelines fit or could be modified to work within the setting. Many of the child-friendly guidelines can complement age-friendly planning.

## EVALUATION AND IMPACT

There have already been some changes made in municipalities where presentations have been conducted, e.g., anti-idling bylaws around schools. Some municipalities have passed the guidelines to a transportation committee for integration into future plans.

Workshop evaluations have occurred along the way and the guidelines have been reviewed in an ongoing process. It is too soon to tell about health outcomes and the project is not planned to allow for such monitoring. Across sectors, a shift is occurring in acceptance and implementation of the guidelines and the inclusion of youth and children's well-being, into the planning, is increasing.

Through design for the health of youth and children, everyone will benefit, including those with disabilities.

## CONTACT

Dr. Catherine O'Brien
School of Education, Health and Wellness
Cape Breton University

P.O. Box 5300, 1250 Grand Lake Road,
Sydney, Nova Scotia, B1P 6L2
Tel: (902) 563-1849
Fax: (902) 563-1449
E-mail: Catherine_OBrien@cbu.ca

## RESOURCES

www.kidsonthemove.ca
http://www.kidsonthemove.ca/uploads/Guidelines%20Nova%20Scotia%203.pdf

CLASP
http://www.partnershipagainstcancer.ca/coalitions

# NUNAVUT/NORTHWEST TERRITORIES: Healthy Foods North – a cultural-appropriate and community-based program to promote healthy eating and lifestyle

**Partners & Contributors:**
Government of Nunavut Department of Health and Social Services, Government of The Northwest Territories Department of Health and Social Services, Dr. Sangita Sharma of UNC-Chapel Hill (Principal Investigator), Dr. Joel Gittelsohn of Johns Hopkins Bloomberg School of Public Health, Aurora Research Institute, Beaufort Delta Health and Social Services Authority, NWT Recreation and Parks Association, Aklak Air, Arctic Co-operatives Ltd., Arctic Foods, Canadian North, Explorer Hotel, First Air, Inuvik Community Greenhouse, Inuvik Interagency Committee, Northern Transportation Company Limited, NorthWest Company, Stanton's Stores (Inuvialuit Development Corporation)

**Communities:**
Cambridge Bay, Taloyoak and Gjoa Haven, Nunavut

Inuvik, Tuktoyaktuk and Ulukhaktok, NWT

**Population of Communities:**
From 809 – 3,484

**Target Group:**
Inuit, Inuvialuit

**Project Principles:**
1) Promote traditional food and activities; 2) Increase consumption of healthy market foods and decrease unhealthy market food consumption; 3) Promote physical activity 4) Provide nutrition education

**Project Aims:**
Reduce risk of obesity and chronic disease and improve dietary adequacy

## BACKGROUND

In Northern communities of Nunavut and Northwest Territories, rates of heart disease, obesity, cancer, and dental diseases are very high. This is largely attributed to a rapid transition of the Arctic diet and lifestyle. Based on this burden of disease and insufficient intake of many nutrients, the need for intervention was recognized. The Healthy Foods North (HFN) program was established as a community-based, multi-institutional chronic disease prevention program. The program's goals are to promote traditional food and activities, healthy and affordable nutrient-rich market foods, and increase physical activity to reduce the risk of obesity and disease and improve dietary adequacy.

By working closely with local Inuit and Inuvialuit community groups, program leaders – who include local community stakeholders, territorial government officials and university public health researchers – have developed a cultural-appropriate intervention program that functions at the individual, household, and community level to meet the health and nutritional needs of the communities. Led by project managers Elsie de Roose (Northwest Territories) and Cindy Roache (Nunavut), the program is currently taking place in six communities: Cambridge Bay, Taloyoak, Gjoa Haven, Inuvik, Tuktoyaktuk and Ulukhaktok. Discussions are currently underway to expand the project to other communities. The project involves two main components:

**Implementation Level:**
Inter-Territorial

**Stage of Development:**
Pilot phase completed and being maintained in the four pilot communities and implemented in two delayed intervention communities. Preliminary results show the program was successful in improving diet. Awaiting funding for expansion

**Sources of Funding:**
American Diabetes Association Clinical Research Award Grant # 1-08-CR-57; Government of Nunavut, Department of Health and Social Services; Government of The Northwest Territories, Department of Health and Social Services; The Northwest Territories and Nunavut Public Health Association; Aboriginal Diabetes Initiative; Health Canada; Public Health Agency of Canada, Canadian Diabetes and Healthy Living Fund.

**The Healthy Foods North team & Community Supporters:**
Hamlet Councils, health committees, and food shop managers of the communities.

1. *Store interventions*: including taste tests, cooking demonstrations, poster, flyers, and shelf labels with the Health Foods North logo identifying healthier alternatives.

2. *Community component*: integration of activities into workplaces and community events, including coffee station makeovers, health fairs, cooking classes, school programs, and the use of local media.

The intervention is tailored for each community based on input from community members, who participated in community workshops and interviews and on dietary assessments that highlighted the nutritional needs of the communities. These results have been published in 2009 and 2010 in the *Canadian Journal of Public Health*, *British Journal of Nutrition,* and *American Journal of Health Behaviour*.

The results were used to develop the nutritional and physical activity program specifically to address the needs of each community. One such need was the encouragement of the consumption of nutrient-dense traditional foods and healthier store-bought foods, as well as the promotion of traditional dietary practices and cultural values.

## PARTNERSHIPS

From the beginning, the Healthy Foods North project has been guided by the philosophy to be community driven and community owned. The program has brought together partners from all levels, including government, community organizations, stores, workplaces, and academic public health researchers. The program is unique in that many different groups in the community are involved – in Inuvik, a community of 3,000, it is rare to meet someone who has not heard of the program.

The Principal Investigator, Dr. Sangita Sharma (from the University of North Carolina-Chapel Hill), and Project Consultant Dr. Joel Gittelsohn (from John Hopkins University) are the public health researchers providing the expertise and support for the Healthy Foods North project. They have substantial experience working on cultural-specific dietary assessments of indigenous and multi-ethnic populations and community-based intervention programs. Other projects have ranged from inner-city to rural settings in the United States and Canada, including a diabetes project with First Nations in Northwest Ontario.

Partner organizations within the communities provide guidance on who to approach, which stakeholders to involve, and provide feedback on the materials and activities to ensure they are cultural-appropriate. Capacity building has been an immensely important part of establishing the success and sustainability of the program. For example, local community members are trained to implement program activities.

Planning for the HFN program was initiated by representatives from the Government of Nunavut Department of Health and Social Services, and local health staff is involved throughout the project. Data collected in this project is currently being used by MHOs in highlighting issues such as smoking levels, rates of supplement intake, and chronic disease prevalence. Although Environmental Health Officers (EHOs) were not involved in the project, Dr. Sangita Sharma, the Principal Investigator, feels that their involvement could have broadened the scope of the project by introducing a different set of questions, and therefore a broader range of known outcomes. EHOs may have been able to add important research questions that were overlooked by program leaders in the initial project proposal and could have been easily measured as part of the data collection. The comprehensive study undertaken to assess dietary intake could have possibly included the intake of contaminants. Other questions of interest may have included issues of water quality (the taste of water has come up as an issue in these communities), water-borne illness, family infection rates, and housing health. EHO involvement may have also influenced the selection of communities to include specific environmental conditions, such as, proximity to a mine or water source.

Dr. Sharma feels that EHOs have a valuable contribution to add to community projects and studies such as these and would be interested in future collaboration.

CMOs and MHOs in the North West Territories and in Nunavut are involved in the project. Andre Corriveau, the CMO in NWT, has had Dr. Sharma present the results to Medical Health Officers. They have also presented the results to MHOs in Inuvik. The MHOs feel that the results of this work, including the extent of nutritional deficiencies, should be highlighted for doctors who may be southern-trained and -based. Dr. Sharma supplies data to MHOs and the CMO for Nunavut on issues, such as, smoking rates, diet inadequacy rates, supplement use, family history of chronic disease, and physical activity levels. MHOs and the CMO for Nunavut are co-authoring several of the studies from this project. The data collected will govern the expansion and direction of the intervention as it continues to evolve and expand.

## GENERATING BUY-IN

Getting partners to the table was not a problem – the project leaders did numerous presentations to local boards and community groups and word spread quickly. Now it has come full circle and people are coming forward and asking how

they can help. Many are volunteering their time to hang posters, facilitate taste tests and coffee station makeovers, give out pedometers, and host walking clubs.

The project would not be successful without its incredible partnerships. Healthy Foods North has multiple partners who contribute funding, in-kind donations, and staff time. For example, the Aurora Research Institute in the NWT and territorial and hamlet governments in Nunavut have provided accommodation for staff, office space, vehicles, gear, and use of their boardroom. Local grocery stores have also been very involved and store managers have worked with Healthy Foods North so that when people ask questions, they know what to recommend that is high in fibre and low in sugar.

## LESSONS LEARNED

Lessons learned, that may be of interest to EHOs (who are interested in becoming involved in similar projects), included:

1. Listening to the community – from the beginning, HFN has used a bottom-up as opposed to a top-down approach, leading to a community driven and invested project.
2. Building capacity – the goal is to make the program sustainable so that when a researcher or project manager leaves or funding ends, the program will continue. This includes communities driving research questions and local education and employment in the project.
3. Translation – the information should be disseminated to the community in their own language and in terminology that is relevant to them.
4. Importance of building partnerships – as the program has grown it has had a "snowball effect," and many people and organizations want to be a part of it.
5. Importance of pre and post evaluation – to know where and why successes and failures occur.

Several factors have contributed to the success of the program including: (1) Excellent communication skills; (2) Involving the community at all stages; and (3) Doing formative work. The project team spent one to two years doing background work and gathering baseline data. They subsequently presented the information and asked the community to help them create solutions. Community members identified what was important for them, on which foods they wanted to intervene, and recommended cultural-acceptable foods they would like to recommend as alternatives, and messages to promote. The project team also worked with the stores and community leaders to identify their issues. This approach laid the foundation for the program.

More and more communities are now requesting to be part of Healthy Foods North. The very success of the program, and the fact that it is quickly growing, has led to new challenges of recruiting and training new people, and in continuing the project's solid research methodology as the program expands.

For each community, the program is based on information collected in that community. Following the gathering of baseline data, there is a community workshop. Finally, there is the development of the materials, and translation into local languages. With three programs currently running in Nunavut, word is spreading fast and another five communities have already approached the team asking how they can start the program. This is an incredible spin-off.

Another unanticipated spin-off was the growth of the program's objectives. The

program grew from its initial focus on obesity and chronic disease prevention to food security and improvement of other nutrition-related health outcomes, including dental health and infectious diseases. Cancer, obesity, diabetes, heart disease, high blood pressure, stroke, dental health, and immune response to infectious illnesses are all nutrition related and as the Arctic diet has undergone a rapid transition, it has affected all these health outcomes. The project has grown to address all of these conditions by addressing nutritional inadequacies in the local diet, as well as the availability and accessibility of traditional and market foods.

## EVALUATION AND IMPACT

In the past year, several groundbreaking studies have been published validating the methodology used by this program, bringing to light previously unrecorded information.

Results have been disseminated to local communities, government officials at multiple levels, and the international scientific community via presentations, lay publications, and scientific publications with the goal of affecting policy and strategy. A number of manuscripts have been published on the data collected prior to the start of the intervention, including a supplement in the *Journal of Human Nutrition and Dietetics* featuring HFN, which will be published in summer 2010. Data collection after the completion of the HFN pilot phase has recently been completed and the results are currently being analyzed.

The analysis of the changes that occurred in diet, physical activity, and health outcomes has not been completed, but preliminary results show an increase in the consumption of the foods promoted by the program, particularly traditional foods. Anecdotal evidence suggests program success; one store has already ordered 35% more fruit and vegetables since the program began. Participating food stores have reported that products promoted by Healthy Foods North are flying off the shelves. The program has not been successful with all the foods it promoted, but the majority have been well accepted. Rigorous evaluation has allowed the HFN team to specify the varying degrees of success. Some successful examples include: using skim milk powder over coffee creamers in coffee; replacing chips with homemade, low fat popcorn; adding frozen vegetables to meat-based stews; and using fruit in smoothies. Whole wheat bread and skim milk consumption have increased exponentially, and pop consumption has decreased. Promoting local foods, such as, Arctic char, caribou, and musk ox is also important to the program because they are full of essential nutrients and are important to maintain cultural identity.

New areas of studies have emerged, such as, the effects of decreasing number of caribou from climate change on local diets and the affordability of replacement foods. Studies are now being undertaken in the community on the nutrient intake among women of childbirth age, who are an important population to target to ensure the good health and well-being of the community in the future.

The long term goal is to expand Healthy Foods North throughout Nunavut and the Northwest Territories. The emphasis on building capacity in the communities has paid off, and many requests to expand the program speak more than anything about the success of the program.

## ADVICE TO OTHER COMMUNITIES

Because the project is community driven, it can be adapted to almost any setting. The underlying framework is to:

- Do formative work to develop a cultural-appropriate intervention tailored to the community's needs;
- Collect data immediately prior to the implementation of the intervention and immediately after the intervention has concluded to evaluate the program;
- Find out what is going on in the community, who are the key players, what are the problems, and what are the priorities for the local community;
- Build partnerships by getting everyone around the table discussing their issues and working together to address them from the beginning of the program.

## CONTACT

*Program Contact – Nunavut*

Cindy Roache
Healthy Foods North
Department of Health and Social Services
P.O. Box 1000, Station 1000
Iqaluit, NU X0A 0H0
Telephone: 867-975-5729

*Program Contact – Northwest Territories*

Healthy Foods North
c/o Elsie De Roose, Territorial Nutritionist
Department of Health and Social Services
Box 1320
Yellowknife, NT X1A 2L9
Telephone: 867-873-7925

Sangita Sharma, PhD, Associate Professor
Department of Nutrition and Nutrition Research Institute
University of North Carolina at Chapel Hill
500 Laureate Way Room 4201
Kannapolis NC USA 28081
Telephone: 704-250-5015

E-mail: sangita_sharma@unc.edu, gitasharma333@yahoo.com

## RESOURCES

www.healthyfoodsnorth.ca

www.internationalnutrition.edu

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# Conclusion

There is a growing understanding of the public health challenges posed by many aspects of our built environment. To meet these complex challenges, we need a broader, more collaborative approach that recognizes the interdisciplinary nature of the problem. The eight case studies presented here show that many innovative strategies and initiatives are already taking place across Canada, in all sectors – private, voluntary and non-profit, provincial/territorial and municipal, federal and beyond.

The key informants interviewed for this report offered helpful "lessons learned" from their front-line experience, which may be helpful to EHOs or MHOs involved, or looking for involvement, in similar projects.

The lessons learned form 5 categories:

**1. Capacity.** These projects highlight the importance of including built environment issues as a mandated priority for EHOs and MHOs;

**2. Training.** Learner-specific training will make health-planning-community collaborations more effective for EHOs and MHOs;

**3. Role of Public Health Professionals.** These case studies highlight the role that EHOs and MHOs can have in planning and community development projects;

**4. Collaboration.** Key informants provided lessons to increase the success of intersectoral partnerships as a "catalyst for change;"

**5. Community involvement.** Promoting projects in communities, early on, can create greater levels of investment and success.

This report should be a useful guide for Environmental Health Officers and Medical Health Officers who are interested in developing collaborative efforts between health and planning professionals in their own community. A concerted effort to introduce public health perspectives into planning and policy related to the built environment will help create more vibrant, liveable communities where all users and residents benefit.