



# KNOWLEDGE FOR A CHANGE

A report on the National Collaborating Centres for  
Public Health (NCCPH) 2009 Annual Summer Institute |  
February 2010



National Collaborating Centres  
for Public Health

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**AUTHOR**

Rebecca J. Harry  
Simon Fraser University

**EDITOR**

Marianne Jacques  
National Collaborating Centre for Healthy Public Policy

**LAYOUT**

Madalina Burtan  
National Collaborating Centre for Healthy Public Policy

**DATE**

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## LIST OF ACRONYMS

**NCCPH** – National Collaborating Centres for Public Health

**NCCs** – National Collaborating Centres

**NCCAHA** – National Collaborating Centre for Aboriginal Health

**NCCDH** – National Collaborating Centre for Determinants of Health

**NCCEH** – National Collaborating Centre for Environmental Health

**NCCID** – National Collaborating Centre for Infectious Diseases

**NCCHPP** – National Collaborating Centre for Healthy Public Policy

**NCCMT** – National Collaborating Centre for Methods and Tools

**GIS** – Geographic Information Systems

**NPOs** – Non-Profit Organizations

**ECD** – Early child development

**TEAM – ECD** – The Total Environment Assessment Model for Early Child Development

**NEGS** – *Naitre Égaux-Grandir en Santé*

**OHPP** – The Online Health Program Planner

**ACCPH** – Dutch Academic Collaborative Centres for Public Health



# 1 INTRODUCTION

From July 6 to 9, 2009, the National Collaborating Centres for Public Health (NCCPH) hosted their 4<sup>th</sup> Annual Summer Institute. The theme for this Summer Institute was *Knowledge for a Change*. This event was held at the Château Mont-Sainte-Anne in Beaupré, Québec.

The NCCPH provide a national focus for the synthesis, transfer and exchange of scientific and other relevant knowledge in priority areas of public health. Priority areas are represented by six National Collaborating Centres (NCCs) that are located across Canada. The Centres focus on Aboriginal Health (NCCA), Determinants of Health (NCCDH), Environmental Health (NCCEH), Infectious Disease (NCCID), Healthy Public Policy (NCCHPP), and Methods and Tools (NCCMT).

The NCCPH Summer Institute is an integral component of a much larger strategy for ensuring that the NCCs continue to identify and analyze priority health issues, exchange information with the health community, and contribute to the development of a national approach to public health. This year's attendees included approximately 200 public health practitioners, policy makers, researchers and other actors representing academia, government and non-governmental agencies from across the country.

François Benoit, the NCCHPP Lead, opened the 4<sup>th</sup> Summer Institute by challenging participants to rethink the responsibility of public health actors, expanding it to include building and improving "the basic public health information exchange system."

The theme of this year's Summer Institute, *Knowledge for a Change*, reflected the NCCs' goal of ensuring that the best available knowledge is shared and used to improve practices in public health. The subthemes of the conference included collaboration, networking and evaluation, as essential tools for improving public health. The specific objectives of the 4<sup>th</sup> Summer Institute were to:

- Explore how collaboration, networking and evaluation can foster change in the public health field.
- Learn what is happening in the NCCs and other organizations involved in Knowledge synthesis, transfer and exchange (KSTE).
- Provide opportunities for networking with innovative thinkers.

This three day Summer Institute consisted of interactive presentations and discussions on topics such as how to involve the public in public health, how to collaborate with the various actors, tools available for fostering collaboration, what framework to apply to tackling the social determinants of early childhood development, characteristics of effective networks, Indigenous knowledge perspectives for public health interventions, opportunities and challenges of using deliberative processes to inform policy development, practical tools for program design, how to use Geographic Information Systems (GIS) as a tool for knowledge translation, public health's role in policy development, and how to make evidence-informed decisions when there is insufficient evidence .

Pre-conference sessions were organized by both the NCCDH and the NCCHPP. The NCCDH discussed how to move beyond reports to address the social determinants of health with needs assessments and mapping and the NCCHPP reviewed how a Health Impact

Assessment can be used as a tool for ensuring that health is included in all policies.

The purpose of this report is to provide an overview of each session and summarize the dialogue that took place between the conference participants.

## 2 COLLABORATING FOR A CHANGE

Marcel Godbout, a member of the Huron-Wendat Nation, opened the Summer Institute with a thanksgiving prayer that is shared at every ceremonial gathering, chanted in Wendat.

### *Opening keynote*

#### **Making Research on Public Health Accessible to the Public**

André Picard, Health Reporter for the Globe and Mail, addressed the conference participants in the opening keynote with a call to involve the public in public health. He explained that communities have an important role to play in building more effective and useful public health projects; however public health actors are insufficiently involving the public.

He suggested that, “Public health professionals need to develop a more effective communication strategies for delivering messages to the public that are easy to understand, accept and follow.” One communication strategy that Picard encouraged is collaborating with journalists and other organizations to improve the public’s knowledge, thereby broadening the influence of public health.

In response to André Picard’s address, a participant raised the concern that certain public health services do not know “how to communicate with people.” Picard suggested that public health experts should work together, across fields and organizations, to share knowledge on how to work with communities.

Another participant asked Picard to comment on the challenges public health organizations face in collaborating with the

government, especially when dealing with public health policy that is difficult to implement. Picard acknowledged the difficulty of working with governmental policy yet emphasized the importance of the government’s involvement in public health. To respond to this challenge, he called for “stronger communication between public health policy researchers and government, aimed at improving knowledge exchange.”

### *Plenary sessions*

#### **Overview of the National Collaborating Centres for Public Health**

In the first plenary panel of the conference, Hope Beanlands, Scientific Director of the NCCDH, provided a brief overview of the history and mandate of the NCCPH as well as a review of recent initiatives by each of the Centres. This presentation introduced attendees to the extensive and diverse NCC activities and common projects, including the recently launched Small Water Systems project and the Summer Institutes.

#### **Interactive session**

Just after this short introduction, an interactive session provided a running start to the exchange of ideas at the 4<sup>th</sup> Summer Institute. It gave participants opportunities to share their experience and expertise in knowledge translation and dissemination. To begin this session, François Chagnon, Professor at the Department of Psychology, at the Université du Québec à Montréal gave a short presentation on the use of knowledge in the health sector. One aspect Chagnon discussed was the gap

between knowledge production and knowledge use, noting that the simple act of “disseminating information does not actually mean it will be used properly.”

According to Chagnon it is difficult to ensure knowledge use for three reasons: knowledge users assume a passive role because they are not actively involved in the transformation of knowledge; the knowledge translation process is not static; and needs and strategies vary according to the targets of knowledge translation. It is important to recognize that knowledge translation is contextual and has different meanings for different groups.

Chagnon suggested several solutions for closing the knowledge production-use gap: providing support for organizations and encouraging knowledge utilization, targeting needs-based strategies, creating mechanisms for sustained exchange between research and practice, choosing credible messengers, and producing timely results based on needs. He concluded with the following remark: “Ultimately, though, it should be always kept in mind that bridging the knowledge production-use gap is fundamentally about humans communicating with other humans.”

After Chagnon’s presentation, participants were asked three multiple choice questions related to knowledge sharing and utilization and encouraged to debate their answers in small groups to reach consensus. The first question posed was, “What would be the most important impact of knowledge translation on public health practices?” From the list of multiple choice answers, the majority of participants chose “more informed decision making.” However, small group discussions revealed that participants struggled to

identify a single impact as the most important. One group viewed all aspects of knowledge translation to be significant and concluded that no one aspect was more important than the others. In this case, a “black and white” response did not suffice.

The second question was, “Among these strategies [presented], which one has the most potential to facilitate knowledge application in public health practices?” The predominant choice of participants was “capacity building within health services and health delivery organizations.” Within the small group discussions, the rationales for selecting this response were based on the beliefs that capacity building would provide health professionals with more time to think through ideas, support utilization of diverse types of knowledge, and allow organizations to increase human resources. Other groups concluded that “networks and communities of practice” and “face to face exchanges” had the most potential. The range of responses illustrated the complexity of this question.

The final question was, “What is your preferred term for describing the use of evidence in decision making for practice and policy?” The majority of participants identified “knowledge utilization” as the preferred term. However, the small group discussions produced little consensus. In one group, an informatics specialist stated that her recent research indicated that there are 99 terms currently being used in the literature to describe the use of evidence in decision-making. Although there was disagreement about which term to use, if any, groups often chose “knowledge utilization” because it implies knowledge use and it facilitates communication, since it is the most commonly used term. “Knowledge to action,” the Canadian Institute for Health

Research's term, and "knowledge transfer" were also proposed as possibilities because they incorporate the idea of knowledge exchange. This interactive session demonstrated that the challenges facing public health actors involve complex exchanges about complex problems.

### ***Plenary panel***

#### **Public Health Collaboration: Various Ways of Working Together**

In the second plenary panel of the day, Jacques Bourgault, a professor at the Université du Québec à Montréal, and Roz Lasker, a Clinical Professor at Columbia University, both addressed the question of how different types of collaboration dynamics can facilitate the development of better health practices.

Jacques Bourgault focused on collaboration at the government and policy level. He highlighted two pieces of Quebec legislation, Section 54 of the *Public Health Act* and Section 19 of the *Act to Combat Poverty and Social Exclusion*, as examples of collaborative approaches. He explained that collaborative management among various types of health actors is essential because the relevant fields are all interrelated and involve multiple actors. According to Bourgault, these actors are becoming increasingly fragmented and, therefore, it is imperative that synergies be created.

Also recognizing the importance of collaboration and synergy between individuals and groups, Roz Lasker spoke of the importance of engaging the public. She pointed out that although academic expertise is useful, it is limited. She suggested that collaboration with external actors, such as the public, allows for the inclusion of complementary sources of

knowledge in the decision making process.

Using the example of emergency preparedness, she illustrated how the public, when not involved in developing an emergency plan, would not follow the plan in the case of an emergency. She then addressed the need to involve the public in the production of knowledge and proposed a process grounded in the principles of thoughtful and trusting communication.

In response to these presentations, two issues pertaining to collaboration were raised. The first was the issue of how to collaborate with the enemy (for example, working with the food industry to deal with obesity). Roz Lasker suggested making the public an ally to raise support for action. The second issue involved the challenge of bringing actors together when there is limited time, as, for instance, in the case of H1N1. In response, Lasker emphasized that actors need to be involved throughout the process, in meaningful ways, when urgent matters are being addressed.

The concurrent showcasing sessions furthered the discussion of collaboration as a tool for achieving better public health. The Centres provided diverse examples of collaboration that prompted the exchange of ideas between conference participants.

### ***Concurrent sessions***

#### **NCCAH**

#### **A Chronicle of the Engagement Process for the Social Determinants of Indigenous Health**

In the NCCAH concurrent session, Academic Leader Margo Greenwood, explained how to collaborate with Indigenous groups in Canada and ensure

that their voices are heard. She first explained how important it is to be specific and make distinctions between First Nations, Inuit and Métis peoples, because of the diversity between and within these groups.

Then, speaking of health, Greenwood described how the individual has to be contextualized within the population and how holistic, creative, and culturally competent models must be employed for health action. For example, the *Web of Being* reflects the fact that no child exists by themselves – families and communities are at the very centre of the web and determine levels of food security, income, and social support. Therefore, context-specific collaboration is crucial when working with Indigenous communities.

In conclusion, Greenwood pointed out that while collaborating with Indigenous groups, it is critical to accept and utilize knowledge from outside the traditional academic settings. First Nations, Inuit and Métis peoples need to be involved in the design, delivery, and development of the services that affect them. The NCCAH tries to open doors to make this possible.

### **NCCID Benefits of an Integrated Knowledge Exchange Model Involving Partners – The NCCID Experience**

The concurrent session hosted by the NCCID focused on the challenges of doing knowledge translation related to two priority groups: men who have sex with men (MSM) and sex workers.

The challenges identified to doing knowledge translation involving MSM included lack of infrastructure for discussion and community building, difficulty in monitoring and evaluating

interventions targeting the priority group, linguistic and regional diversity of this community, and the absence of a national strategy for the health of MSM. Given these challenges, the presenters suggested that a knowledge exchange network is needed and indicated that one is currently being developed.

The challenges of knowledge translation involving sex workers included finding and gaining access to the priority population, monitoring interventions targeting the priority population, and recognising that the priority population is composed of many unique populations with their own social determinants of health that are separate from their occupation. Given these challenges, the presenters suggested that national and international knowledge networks, which already exist, need to be strengthened.

In response to these challenges, a workshop participant suggested offering a standardized bundle of services to the priority populations. The presenters clarified their view that both priority populations are too diverse to be offered a generic bundle of health services. Collaboration through knowledge exchange networks is needed to overcome the challenges of working with both these populations.

### **NCCHPP The Methods Used by Non-Profit Organizations (NPOs) to Influence Public Policy and the Implications of these for Public Health Actors Working Toward the Development of Healthy Public Policies**

Developing healthy public policies involves intersectoral action; this fact underpinned the concurrent session hosted by the NCCHPP, which examined the role played



by Non-Profit Organisations (NPOs) as “non-traditional” public health actors in the public policy process. More specifically the NCCHPP presented the results of a project involving five Canadian not-for-profit organizations that examined their processes and methods for influencing public policy. The session presented summaries of three short documents to be published later this year by the Centre.

Among other things, François Gagnon and Val Morrison, Research Officers for NCCHPP, highlighted the ways that NPOs integrate health knowledge into their projects and can work in close partnership with public health officials. The project involving NPOs also suggested that these organizations are interested in epidemiological studies when these serve to illustrate their points and bolster their proposed solutions, but that these studies may be framed by NPOs somewhat differently than they were by the original public health actors.

In response to this presentation, a Professor from Columbia University remarked that the lobbying performed by NPOs, in certain circumstances, ensures a more equitable and efficient sharing of resources.

**NCCDH  
WHO Commission on the Social  
Determinants of Health: Early Child  
Development as a Determinant of  
Health**

In the NCCDH concurrent session, the Honourable Landon Pearson shared her experiences working in the area of early child development (ECD). She described an experience she had while living in India where she saw many children begging on the streets and was unsure of how to respond. She decided to start a Non

Governmental Organization (NGO) to provide care for children. In providing this care, her relationship with the children changed; they went from calling her “madam” to calling her “auntie” – indicating she was a part of the family.

In Canada, as a senator, Pearson continued her work on various child rights initiatives. Through these experiences, she came to understand the importance of listening to children and respecting their voices even in early childhood. She advocates for young people to be engaged in ensuring their own health. Building trusting relationships with children and adolescents allows for the sharing of experiences, which is essential to improving ECD.

To further discussion of the importance of collaboration in the field of ECD, Dr. André Dontigny provided a brief presentation on integrated services in Quebec for children and their families living in vulnerable situations. Dr. Dontigny provided an example of an integrated service, *Naitre Egaux-Grandir en Santé (NEGS)*, whose evaluation results have been positive.

NEGS works with pregnant women and young mothers who are under the age of 20 or who live in poverty. The primary goal of the program is to maximize the potential for health and wellbeing of children and their families. The integrated service consists of providing personalized care to families and mobilizing a large number of actors, who collaborate with the goal of working with the families and their communities to create healthy living environments.

Following the presentations, a participant explained the complexities of working with Aboriginal youth to help them connect with their culture or identity. The Honourable

Landon Pearson described and reinforced the importance of recognizing and respecting the diversity between and among Aboriginal communities.

## **NCCEH**

### **Process for Knowledge Translation**

The NCCEH concurrent session described the process through which they engage in knowledge translation with their client group. Their knowledge translation process began in 2005 when the NCCEH performed its first environmental scan to establish activities for the Centre. The scan revealed that there was a wide variety of delivery settings, scant evidence and evaluation for programs, and a lack of trained personnel. In response, the NCCEH produced centrally available knowledge translation documents (which can be accessed online), fostered relationships and exchanges, and created a cross-Canada advisory panel of practitioners, policy makers, and researchers.

The knowledge translation documents produced by the NCCEH were described as especially important products. Their value derives from the fact that their design was based on the responses of client groups, who were asked to prioritize potential review topics and thus directed the type of document produced. The NCCEH actively sought to keep the document relevant to clients' needs by incorporating feedback from its clients collected through peer and user reviews, web statistics, and course evaluations.

The future for the NCCEH will entail continuing to develop the knowledge translation process, while identifying what does and does not work. A participant from the workshop asked about the possibility of an NCCEH LISTSERV. The

presenters responded that they aim to continue to provide evidence-based information, and suggested the possibility of implementing a wiki space where users can post content.

## **NCCMT**

### **Finding, Sharing, and Using Evidence with New Tools and Skills You Can Use**

The NCCMT concurrent session presented useful tools for facilitating further collaboration among public health actors. The first presentation, given by Christina Catalo, Research Coordinator for the NCCMT, focused on the Registry of Methods and Tools for Public Health, provided by the NCCMT. This resource is an interactive online database that contains methods and tools that have been critically appraised for quality. Resources are categorized as relevant to the "planning, doing or evaluating" stages. Thus far, both front line public health workers and decision makers have used the registry. The registry allows such individuals to perform various levels of searches to identify which methods and tools are relevant to their line of work. Future plans for the registry include the addition of a discussion forum.

The second presentation, given by Pamela Forsyth, Knowledge Broker for the NCCMT, shared the results of an online survey that was conducted to guide the development of DialoguePH, the NCCMT's network. In the past DialoguePH simply distributed information, but it is now moving towards providing an opportunity for dialogue. This tool is useful to public health professionals and decision makers because it creates opportunities to link to other public health workers, provides access to expertise, supports information sharing, and provides opportunities for skills development.

The final presentation, given by Larry Hershfield, Manager of the Health Communication Unit, at the Centre for Health Promotion, University of Toronto outlined the uses of the Online Health Program Planner. He described three tools that the program makes available. The first tool can assist in planning a program in a systematic evidence-informed way. This tool provides a straightforward, stepped process that includes sections for facilitating project management, situational assessment, definition of goals, strategies and activities, and development of indicators. The second and third tools are programs designed to assist public health professionals in creating logic models and defining program objectives.

### ***Opening reception***

#### **The Public Health System in Quebec: Learnings and Challenges**

Dr. Luc Boileau, the Chief Executive Officer of the Institut national de santé publique du Québec, briefly presented Quebec's public health system, the links that unify the different organizations and actors, as well as the challenges connected to their development during the coming years.

Participants then had the opportunity to meet and exchange during a welcome dinner.



### 3 NETWORKING FOR A CHANGE

#### *Keynote*

#### **Networks: How Can They Be Useful to Public Health Actors?**

The second day of the 4<sup>th</sup> Summer Institute was focused on networking. This topic was introduced by Brint Milward, Associate Dean and Director of the School of Public Administration and Policy at the University of Arizona. He opened his keynote address by stressing the importance of social networks, which make it possible for people from different groups or organizations to work together. The presentation provided a snapshot of Milward's extensive research on network effectiveness.

He outlined 10 characteristics of effective networks:

- Collaboration at multiple levels both inside and outside the network
- Focused integration: this means targeting network links to the actors you think you need to be connected to
- Mix of strong and weak ties
- Appropriate form of governance
- Network involvement is built gradually through trust
- Legitimacy, built both internally and externally
- Sufficient resources
- Focus on specific goals
- Stability
- Centralization, stability and resources

In summary, Milward reminded participants that while current research on networks is informative, many research questions remain to be explored, for

understanding of networks to be deepened.

An NCCMT representative asked Milward for clarification of the differences and similarities between networks and communities of practice. He replied that "What we are talking about are ideal types. Communities of practice [...] go back to the work that Diana Crane did on invisible colleges – people around the world who communicated with one another. This is a very particular kind of network. And the purpose of communities of practice is to work on a particular issue. The name is not as important as what you are trying to do; linkages for a particular purpose – call it what you want!"

#### *Plenary session*

#### **Knowledge Fair**

During this session, participants were guided through the exhibition hall to visit with the NCCs, discover the different tools and resources they have to offer, and meet and discuss diverse projects and areas of interest.

This activity created an opportunity for participants and NCC staff to engage in a pan-Canadian exchange across various public health sectors in order to share practices, outline interests and develop potential collaborations.

As one participant stated "I didn't know anything about the NCCs before, so everything I know about them is from this fair." Following the fair, another participant commented, "I know a lot of people working at my home institution whose interests overlap with Centre objectives

but who are unaware of the NCCPH. I can at least now go back home and mention this to others.”

An NCC staff member acknowledged that she also learned a lot at the knowledge fair, especially about other organizations working in public health and about all “the work that is going on out there.”

### ***Concurrent training sessions***

#### **NCCDH**

#### **Taking Action on the Determinants of Health and Building on the Evidence for Healthy Child Development: The Total Environment Assessment Model for Early Child Development (TEAM – ECD)**

The goal of the NCCDH concurrent session was to explore the utility of the Total Environment Assessment Model for Early Child Development (TEAM-ECD) as a conceptual framework for guiding public health practice and program and policy development, and for identifying gaps in research evidence. Dr. Ziba Vaghri from the Human Early Learning Partnership (HELP) at the University of British Columbia presented the TEAM-ECD model as an equity-based approach and a framework for understanding the environments that contribute to nurturing conditions for children in their early years. The framework highlights how the socio-economic circumstances in which a child lives form an important determinant of ECD.

Hope Beanlands, Scientific Director of the NCCDH, provided an overview of the current state of ECD in Canada. She described the unsettling influence of poverty on ECD, underlining the need for public health to apply knowledge about social determinants to improve outcomes. The TEAM-ECD model was proposed as a

potentially useful conceptual framework to consider as we work toward health equity for children in Canada.

At the conclusion of the workshop, there was a discussion about what meaningful activities could be undertaken in the next six months in the area of ECD. A participant suggested that there is a need to connect communities to families with young children so they can access social programs and resources. Another participant suggested that ECD needs all of society – community and government – to work together to support families because children are the centre of our society and our society’s future. TEAM-ECD was therefore seen as a potentially useful tool for fostering networking and collaboration within society, with the ultimate goal of promoting healthy ECD in Canada.

#### **NCCHPP**

#### **Using Deliberative Processes to Inform the Development of Healthy Public Policies**

In the NCCHPP concurrent session, Elisabeth Martin, PhD(c) Université Laval, and Dr. François-Pierre Gauvin, Research Officer for the NCCHPP, familiarized participants with the use of deliberative processes as a tool for democratic governance and knowledge transfer in the area of public health. A “deliberative process” was defined as a process during which a policy issue is critically examined by a group of people. The objective of the process is to arrive at a rationally-motivated decision that considers all relevant forms of evidence. The presenters discussed the various types of deliberative processes, which can be chosen on the basis of the issue and context at hand.

During this session, participants were asked to debate the advantages and challenges of using such a process. An interesting conversation emerged from this discussion when a group of participants “against” this approach expressed concern over the duration and potential inefficiency of the process. Concern was also expressed over the challenges of selecting the correct participants and the problem of participants not having the necessary knowledge or communication skills to discuss the policy issue. The other group of participants, who were in favour of using deliberative processes, emphasized the advantages, such as the opportunity for knowledge translation, the potential to include various opinions in the discussion and the benefits of bringing the participants together.

The presenters concluded their session by insisting that although further research is needed to understand the usefulness of the deliberative process, it holds promise as a tool for critically examining policy issues.

### **NCCMT LESS is MORE – Efficient Search Strategies for Everyday Work Life**

The objective of the NCCMT concurrent session was to offer participants a method for finding the best available research evidence. The presenters reviewed different types of resources that are available to assist with evidence informed decision making. They also provided useful tips on where to look for other resources.

During the workshop, specific databases were explored to provide participants with hands-on experience. The databases included Turning Research into Practice (TRIP), Database of Reviews and Effects

(DARE), Health-evidence.ca, and PubMed. During the workshop the presenter offered various tips and hints on how to use the database tools and choose appropriate keywords.

### **NCCID Mapping for Public Health**

This NCCID concurrent session explored the often neglected third component of the epidemiological triad – place. This workshop consisted of four presentations.

The first presentation reviewed the field of Geomatics and the various components of spatial data. Emphasis was placed on the ability of Geographic Information Systems (GIS) to layer concepts. This layering has allowed GIS to be applied to health concepts, such as disease mapping, risk assessment, and health service provision and planning. An extensive series of examples where GIS has been used in health was also provided. They included an antibiotic resistant hospital infection tracking system, mapping mammography screening services, mapping the optimal route for mobile health services, as well as community health profiling. The presentation concluded with the comment that, although GIS has been used in health, it has not reached its potential as a tool.

Cory Neudorf, Chief Medical Officer of the Saskatoon Health Region, continued the workshop by explaining how to use GIS in local and regional health units. He detailed how GIS is useful in a practical setting and the steps involved in using GIS and provided examples of how GIS has been used in his workplace. In the Saskatoon Health Region, GIS has been used for mapping infectious disease outbreaks, food insecurity, safe needle exchange sites, and immunization coverage. In

conclusion, Neudorf promoted the use of GIS in the health sector because of its ability to foster knowledge translation.

A presentation was given by David Buckeridge, Assistant Professor at McGill University, on the use of spatial information for communicable disease control. He described how to bring spatial information into disease control by using DraconesPH, a tool that spatially maps live cases of reported communicable diseases. Although spatial information can be useful, Buckeridge highlighted reasons why it can be challenging, such as the fact that address collection is generally limited and the fact that spatial analysis does not fit into the workflow within a healthcare setting. In response to these challenges, DraconesPH was developed. Its main function is to provide Montreal's Public Health System with a visual representation of public health cases and daily statistical analyses.

Nina Wesch, Program Advisor for GeoConnections, concluded the workshop with an overview of GeoConnections, a national program that facilitates the use of location-based information by decision-makers to improve public health. She reviewed four different projects that represent the types of program supports that GeoConnections provides.

During the discussion section of the workshop a representative from the NCCID asked where organizations who are interested in using Geographic Information Systems (GIS) would be best to begin. Cory Neudorf suggested that it would be useful to purchase a low cost set of mapping software, for which you just have to supply data. He also mentioned the importance of training existing staff in the use of GIS.



## 4 EVALUATING FOR A CHANGE

The final day of the 4<sup>th</sup> Summer Institute shed light on the importance of evaluation as a tool for improving public health in Canada. The diverse applications of evaluation in the public health field were brought forward in the keynotes addresses, plenary sessions and concurrent training sessions.

### **Keynote**

#### **Ability of Non-Clinical Professionals to Absorb Scientific Research**

Mathieu Ouimet, Assistant Professor at Université Laval, opened the discussion on evaluation by presenting the results of a study that reviewed the use of scientific publications by government ministry employees. Characteristics of employees that increased the likelihood of their using scientific publications included academic training, access to data banks, the ability to read English and a preference for quantitative research. These results led the researchers to conclude that physical and cognitive access to research constitute two principal factors that it is important to address in the attempt to increase the use of scientific knowledge by ministry employees.

In response to the presentation, a conference participant asked about practical ways of increasing the use of scientific publications by ministry employees. Ouimet suggested that investments be made in both continuing education for ministry employees and, for students, academic training in the manipulation of banks of scientific publications. A conference participant also suggested that scientific articles should be made more attractive and accessible.

### **Concurrent training sessions**

#### **NCCHPP-Public Policy Development Processes: What Role Can Public Health Actors Play?**

The purpose of the NCCHPP concurrent session was to discuss how public health actors can participate effectively in public policy development. Patrick Fafard, Assistant Professor at the University of Ottawa, began the session by asking participants why public health professionals should be involved in the policy process. Participants suggested that involvement is important to effecting social change and to countering the influence of lobby groups, such as tobacco companies.

Fafard explained how public health evidence can be used to further science, or as a tool for advocacy. Indeed, researchers provide recommendations based on scientific findings. However, from an advocacy standpoint, the goal of science is to create change in society.

The workshop participants were urged to consider a “non-academic perspective”. The predominant academic perspective is characterized by a linear model in which a problem leads to evidence, which elicits knowledge transfer that results in action. A paradox emerges, however, when we consider that a lot of policy is not based on evidence. Therefore, we must acknowledge that there are other factors involved. The predominant model only works when there are few actors involved and there is limited value conflict.

The participants were then asked to give examples of when public health has affected policy in the past. An example

given was the adding of iodine to salt. The presenter commented that public health is successful when the scope of choice is determined by a clearly-defined technical question and there is high consensus on values; however this is rare.

It was therefore suggested that public health professionals can play various roles depending on the context. In a situation involving low value conflict where one wants to reduce the scope of choice, the role to play is that of an arbiter. If you do not want to reduce the scope of choice, then the role to play is that of a pure scientist. In a situation involving high value conflict, where one wants to reduce the scope of choice, the role to play is that of an issue advocate. Finally, if you do not wish to reduce the scope of choice related to a high value conflict issue, the role to play is that of an honest broker.

In concluding the workshop, Fafard stressed the importance of public health professionals being able to present options and to go beyond merely providing evidence, to further conversation in the policy making world. Evidence begins the conversation but does not end it.

### **NCCEH How Do You Make Evidence-Informed Decisions in the Absence of Sufficient Evidence?**

The NCCEH concurrent session reviewed what steps can be taken to inform decision makers when evidence-based literature is limited. In such circumstances, the NCCEH refers to the grey literature as well as to databases, catalogues, search engines, government documents, websites, personal communication, LISTSERVs, and websites for evidence.

During the presentation, the NCCEH gave three examples of situations from their experience, where there was insufficient evidence-based literature to inform decision makers. These research situations included marijuana grow-ops and pesticide use, the health affects of wind farms, and the health outcomes of consuming raw milk. In each case, the NCCEH learned that breaking down the issue into separate components is essential. Approaching other health units and actors for evidence and input also proved to be invaluable. The presenters affirmed that sometimes you have to settle for the next best surrogate.

To conclude the workshop, participants were asked to use a tool to compare two programs based on their use of evidence. The program themes were banning pesticides and an organic food educational campaign. The participants said that they valued the exercise but that it is hard to promote programs when there is little or no evidence to support them.

### **NCCAH Finding Your Way in First Nations, Inuit and Métis Health**

In the NCCAH's concurrent session, Margo Greenwood, Academic Leader of the NCCAH, provided background information on First Nations, Inuit and Métis peoples in Canada. The objective of the presentation was to assist public health professionals, policy makers, and researchers in working with Indigenous groups in Canada. She talked about the importance of differentiating between the Inuit, First Nations and Métis peoples, and of listening to the diverse human stories behind the public health issues, as this helps to develop useful interventions.

In addition, any framework that is used to design interventions has to take into account the holistic thinking that is a part of Aboriginal cultures. Greenwood introduced two models that have been inspired by holistic thinking: the *Web of Being* model, and the *Life Course* approach.

Greenwood suggested that the solution to the problem of how to improve public health programming for Indigenous groups is more complex than simply changing one component of a program. She proposed that public health professionals begin by asking, “How can we support Aboriginal communities in taking charge of their own lives, of their own health, and of the issues that affect their own lives?”

In the small group discussions, a participant working in policy said, “It’s so hard to write policy with self-determination in mind because - what do I know about what it means to be First Nation or Inuit? - and it’s difficult because governments want all this ‘evidence-informed’ work but there isn’t always the evidence to do such work. But we still know there is a problem and the government and policy structure limits what we can do.” In response to the challenges faced by participants in their workplace, the workshop participants unanimously agreed that the NCCAH needs to have a section on their website to link people to success stories – what has worked in Aboriginal communities?

### **NCCMT The Online Health Program Planner (OHPP)**

During this NCCMT concurrent session, participants were taught how to use the Online Health Program Planner (OHPP), a tool for individuals involved in health program planning at the community level.

The OHPP was developed by the Health Communication Unit at the Centre for Health Promotion, in the University of Toronto, with support from the NCCMT.

The OHPP helps health professionals to plan a program in a systematic, evidence-informed way, to create a logic model, to write program objectives, and to develop a plan to collect situational assessment data. The program also provides accessible links to research and other evidence for use in the context of program planning and community practices. Workshop participants were also introduced to complementary resources, such as the Canadian Best Practice Portal (CBPP) and the NCCMT methods and tools search engine.

### ***Plenary panel***

#### **Evaluation and Knowledge Translation in Public Health: Why and How?**

The Summer Institute’s final plenary panel highlighted tools that can assist professionals, policy makers and researchers in understanding and practicing evaluations in the public health sector.

The first panellist, Kelly Skinner, a PhD candidate from the University of Waterloo, talked about developing a tool to measure knowledge exchange outcomes. She explained that one of the goals of research in evaluating knowledge translation is to find quantitative models or scales that can measure the reach and uptake of disseminated practices. As part of her research, she has developed a practical and usable measurement tool.

The second panellist, Louise Potvin, a professor at the Université de Montréal, discussed the importance of assessments

in public health. She demonstrated that, in theory, evaluation is a social practice and public health interventions are social by nature as well.

Potvin continued, explaining how progress in public health and community-based interventions has been hampered by the lack of comprehensive evaluation frameworks that are appropriate for such programs. She reinforced the idea that multilevel interventions that incorporate policy, environmental, and individual components should be evaluated using measurements suited to their settings, goals, and purpose. She further explained the importance of evaluation by pointing to its ability to increase the effectiveness of public health interventions and to provide evidence in support of innovative health policy.

Janice Popp, former Director of the Southern Alberta Child & Youth Health Network (SACYHN), was the third panellist. First, she introduced SACYHN as a network that focuses on the health and well being of children and youth. She provided an overview of the process by which a recent evaluation of the network was conducted and presented the lessons learned from the evaluation.

In response to the lessons learned, Popp suggested that network evaluations should use a matrix approach, which includes operational and impact levels of analysis. Evaluations should gather evidence that demonstrates the network's impact at the community, network, and participant level, and it should also collect both qualitative and quantitative data to allow for a deeper understanding of how a network is positioned with respect to its members and its community.

### ***Closing keynote***

#### **Does Science Matter? Analysing Research-policy-practice Interactions in the Dutch Academic Collaborative Centres for Public Health**

The 4<sup>th</sup> Summer Institute's closing keynote by Marleen Bekker, Assistant Professor at the Institute of Health Policy and Management in the Netherlands, provided an overview of research-policy-practice interactions in the Dutch Academic Collaborative Centres for Public Health (ACCPH). The presentation was centred on whether science is useful to both practice and policy. Bekker started this debate by looking at the opportunities and risks that exist within the Dutch ACCPH.

In a recent evaluation of the Dutch ACCPH, the primary risk was found to be the occurrence of misunderstandings between policy makers, practitioners and researchers. Two particular cases referred to in the evaluation highlighted this risk. The first instance was drawn from the Nurse-Family Partnership Program and provided insight into how misunderstandings can arise between policy makers and practitioners. The second case was drawn from the Science as Policy Advice Program, where misunderstandings arose between policy makers and researchers.

In conclusion, Bekker suggested that for collaboration between public health researchers, policy makers and practitioners to be successful, it is important to recognize that both back-stage and front-stage conversations are influential in preventing misunderstandings between program actors, that the effectiveness of a program is dependent

on the people applying the intervention and not solely on the intervention, and that all three types of actors – policy makers, researchers, and practitioners – are knowledge co-producers.



## 5 CONCLUSION

The 4<sup>th</sup> Summer Institute, *Knowledge for a change*, reflected the NCCs' aim of providing a forum for sharing knowledge so that, together, public health stakeholders could discover practical opportunities for inspiring change.

Building and strengthening Canada's public health information exchange system was identified as a priority for improving public health. This need was further stressed by François Chagnon, who highlighted the fact that the health of communities is being adversely affected by the insufficient exchange of information. Collaboration, networking and evaluation, the conference sub-themes, were explored as tools for influencing the exchange and use of knowledge aimed at improving public health practices in Canada.

The sessions discussing collaboration as a tool for knowledge exchange and use shed light on the importance of collaborating with diverse groups and of listening to their voices to improve public health practices. These voices include those of the public, young people, public health actors, marginalized groups, Indigenous people, and non-profit organizations.

Workshops on networking as a means of

improving public health provided participants with methods for using networking to initiate change. They included methods such as the deliberative process, Geomatics, and TEAM-ECD.

Discussions on the use of evaluations as a tool highlighted the various ways in which evaluation can be applied to improving public health practices. Louise Potvin emphasized that progress in the field of public health has been stunted due to the lack of comprehensive evaluation frameworks. To improve public health practices, Potvin recommended that appropriate evaluation frameworks be developed and applied.

The 4<sup>th</sup> Summer Institute fostered pan-Canadian exchanges between 200 public health practitioners, policy makers, researchers and other actors. Participants engaged in discussions and brought forward their perspectives and experiences to build knowledge about how collaboration, networking and evaluation can foster change in the public health field. These discussions produced the momentum needed to create sustainable exchanges that can inspire change. As François Chagnon remarked, "We need to capture the energy of this dynamic time, when knowledge exchange is a hot topic."