

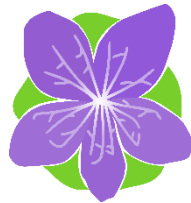


**Report of the New Brunswick Children's Environmental Health  
Collaborative Conference**

**Wednesday, February 6, 2019**

**New Maryland Centre, New Maryland, NB**

**Presented by the New Brunswick Environmental Network**



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## Summary

The conference “Tipping the balance: Cumulative Impacts on Children’s Health” was held at the New Maryland Centre, in New Maryland, on Wednesday, February 6, 2019. This conference was organized by the New Brunswick Environmental Network (NBEN), under the umbrella of the New Brunswick Children’s Environmental Health Collaborative (NB-CEH). A total of 21 people from a range of different sectors attended the conference, including provincial government, public health, environmental, and family service non-governmental organizations, as well as post-secondary institutions.

This year’s theme focused on cumulative impacts on children’s health. The outcomes of the conference were the following:

- To promote a better understanding of positive and negative cumulative impacts on children’s health;
- To learn from other regions in Canada through the ECHO Network in order to further the NB-CEH’s work;
- To explore ways in which to address negative cumulative impacts and promote positive cumulative impacts through education and policy change;
- To provide an opportunity for networking;
- To learn about past and present cumulative impacts in northern New Brunswick and explore how they affect children; and
- To provide an opportunity for Teams to update participants on their work and to meet.

In order to meet these outcomes, the agenda included various presentations, workshops, group discussions and themed panels. All the outcomes were achieved thanks to the support of the NB-CEH Strategic Committee, the participants’ engagement and the speaker’s dedication and interest.

The day started with a round of welcome and introductions. This was followed by presentations from each NB-CEH Collaborative Team Leads (Team Education and Team Nurses), during which they presented summaries of their recent achievements, and also gave a preview of the exciting work they have planned. Barbara Mackinnon, chair of the NB-CEH Strategic Committee, presented on their work over the course of the last year.

Dr. Céline Surette then provided an update on the Environment, Communities, Health Observatory Network (ECHO Network). The theme of the conference was inspired by the NBEN’s participation in the ECHO Network. This was followed by a multi-part and layered interactive workshop to help participants understand the complex and integrative nature of negative and positive cumulative impacts led by Dr. Anne Fauré, Dr. Chris Buse, and Dr. Céline Surette. The workshop proved to be a highlight of the conference demonstrating the importance of integrative approaches when addressing positive and negative cumulative impacts on communities and health and the need for collaboration between sectors and individuals.

Another high point of the conference was the panel “Perspectives on positive cumulative impacts and children’s health” moderated by Serge LaRochelle of the Groupe de développement durable du Pays de Cocagne in which Michelina Mancuso of the New Brunswick Health Council and Paula Wood of the Fredericton Family Resource Centre shared their organisations’ work and tools. Both acknowledged that there are many factors at play when it comes to the health of children and stressed the importance of collaborating with communities to understand unique local needs.

Dr. Mélanie Lemire was invited to talk about the First Nation Youth Environment and Health Pilot Study (YEH!), a biomonitoring initiative examining exposure to environmental contaminants, evaluating the nutritional status, health indicators and other determinants of health in children and young adults in First Nations communities in Québec. The study aimed to rectify the lack of data on First Nations populations, especially children, living in rural and remote locations and highlighted the importance of understanding the determinants of healthy eating environments promoting the harvesting, sharing and consumption of traditional foods.

To wrap up the day, Barbara Mackinnon highlighted some key takeaway messages. She spoke of the importance of integrative and inter-sectoral collaborative work to address complex and layered impacts on children’s health. In addition, she mentioned the value of the platform for dialogue provided by the Children’s Environmental Health Collaborative.

## Agenda

8:30	Registration	
9:00	Welcome Introductions	Raissa Marks and Annika Chiasson, <i>New Brunswick Environmental Network</i>
9:20	Update from active Children's Environmental Health Collaborative Teams  Update on ECHO project	CEH Steering Committee, Barbara Mackinnon, <i>NB Lung Association</i> Team Education, Liz Smith, <i>NB Lung Association</i> Team Nurses, Susanne Priest, <i>Nursing Association of N.B.</i>  Dr. Céline Surette, <i>Université de Moncton</i>
9:50	An introduction to cumulative impacts	Dr. Chris Buse, <i>University of Northern British Columbia</i> Dr. Anne Fauré, <i>Université de Moncton</i>
10:40	Break	
11:00	Belledune Case Study	Dr. Anne Fauré, <i>Université de Moncton</i>
11:20	Workshop: Mapping out impacts	Dr. Céline Surette, <i>Université de Moncton</i> Dr. Anne Fauré, <i>Université de Moncton</i> Hara Saadia, <i>Université de Moncton</i>
12:10	Lunch	
1:00	Panel: Perspectives on cumulative impacts and children's health	Paula Wood, <i>Fredericton Family Resource Centre</i> Michelina Mancuso, <i>New Brunswick Health Council</i>  Moderator: Serge LaRoche, <i>Groupe de développement durable du Pays de Cocagne</i>
1:40	Breakout discussions	
2:10	Break	
2:30	First Nations Youth Environment and Health	Dr. Mélanie Lemire, <i>Laval University</i>
3:15	Team group discussions	
3:55	Wrap and moving forward	Raissa Marks and Annika Chiasson, <i>New Brunswick Environmental Network</i>

## Workshop: Cumulative Impacts and Health

The first part of the day was devoted to a four-part workshop divided equally into presentations and interactive activities. The goal of the workshop was to bring people from different sectors (health, environment and natural resources) across New Brunswick to reflect together on cumulative impacts on the health of children. Objectives identified for this workshop were:

1. To promote inter-sectoral exchanges on ways to address cumulative impacts;
2. To identify the difficulties in addressing the issue of cumulative impacts and the conflicts they generate; and
3. To foster the emergence of approaches, processes, and means to understand cumulative impacts.

### Interactive Activity: Defining Cumulative Impacts

The workshop began with an interactive activity in which the participants defined what cumulative impacts meant to them in their professional or personal lives. This was followed by a discussion at their tables of similarities and differences in their definitions and of the challenges and opportunities that arise when addressing cumulative impacts. Overall, cumulative impacts were defined as complex interactions between multiple aspects such as physical, psychological and eco-systemic over a stretch of time be it short, long or intergenerational. Challenges identified by the participants included cumulative impacts' large scale, difficulty of measurement, lack of information or lack of people able to translate data into understandable information and the need for inter-sectorial action in which people may have different mandates and constraints. Participants also noted that often it is the people who are most vulnerable that are affected negatively by cumulative impacts. Opportunities identified by participants included knowledge mobilisation, collaborative action and promotion of the pragmatic application of programs such as school gardens and healthy eating initiatives.

### Presentation: Cumulative Health Impacts: Beyond toxicological risk and toward the integration of environmental and community determinants of health – Dr. Chris Buse, University of British Columbia

Dr. Chris Buse set the stage by introducing participants to cumulative impacts. Defining cumulative impacts as “changes to social, economic and environment conditions caused by the combined impact of past, present and potential human activities or natural events,” he stressed the importance of recognizing that past decisions are foundational to our health today and our health in the future and that environments are also foundational to our wellbeing and the health of our population. Governing cumulative effects is often done through the governing of resource development and is thus regulated through environmental assessments. However, the environmental assessment process is largely set up to evaluate a single project which means that the consideration of



multiple impacts across several projects is limited. The Cumulative Impacts Research Consortium (CIRC), a pan-University of British Columbia initiative, emerged as a response to community concerns over the future of rural and remote environments, communities and health whose history have largely been driven or influenced by resource development activities in Northern British Columbia. One of the CIRC's studies sought to learn about the story of cumulative impacts; engaging with communities to collaborate on prioritizing what to track and monitor at a regional level. Using these indicators, they then used data to fill in those values, thus creating a retrospective story of cumulative impacts at a regional level over the last 30 years: an integrated regional profile. These profiles can then be used to inform decisions on a landscape scale.

### **Presentation: Cumulative Impacts of Natural Resources Development on Health: The Case of Belledune, Dr. Anne Fauré, Université de Moncton**

Dr. Anne Fauré shared the results of research on the history of and understanding of cumulative impacts of natural resource development on health in Belledune, NB, over the last 60 years. Belledune had one of the highest concentrations of heavy industry in the province over the last 50 years. Starting with the discovery of metals in the region in 1963, Belledune has been the home to the construction and development of mines, foundries, thermal and chemical plants. This heavy industrialisation has resulted in health impacts on the workers and the inhabitants of the region, yet this there has been little



conversation regarding this from government. However, this industrialisation has resulted in a push for more consideration of environmental health and the creation of multiple projects such as wind farms and healthy eating programs. Belledune has also been named one of the most beautiful bays in the world. These programs and projects really demonstrate that even in industrialised areas the environment is not just a source of contamination, but contributes in positives ways to our health.

### **Interactive Activity: Mapping Out Impacts, Dr. Céline Surette, Dr. Anne Fauré, and Hara Saadia Université de Moncton**

In this activity, participants at their tables looked at different maps of New Brunswick (touristic, natural protected areas, watersheds) and, taking into account the examples of cumulative impacts in Belledune and Northern British Columbia presented earlier in the workshop, they were asked to answer the following questions:

1. How does this map help you think about cumulative impacts?
2. What actions could we do to take cumulative impacts into account?

Participants then circulated around the room to look at the other tables' maps and answers.



In plenary, several key learnings emerged, the most prevalent being that the maps show only a part of the story and were quite “siloed” in the information they provided. Participants concluded that there is a need to shift our thinking and to use multiple lenses when discussing or addressing cumulative impacts on health. They also remarked on the importance of learning from history and capacity building to understand data and information.

## **Panel: Perspectives on positive cumulative impacts and children's health**

Two guest speakers were invited to provide their input and talk about the ways in which they promote positive cumulative impacts in their professions. The session was moderated by Serge LaRoche of the Groupe de développement durable du Pays de Cocagne.

Michelina Mancuso, executive director of the New Brunswick Health Council (NBHC), presented the organisation's work. The NBHC has a dual mandate of engaging citizens and reporting on health system performance and focuses on the health status of the population and on the effectiveness of health services. In order to monitor and measure the population's health, the NBHC has developed 451 indicators. Using the data they collect, the NBHC has developed Community Profiles. The profiles provide a comprehensive view of the people in a community through a multitude of factors such as nutrition, activities, exposures, and much more. To protect children's health from exposures, understanding and collaborating with their communities is vital. These profiles empower individuals with information about their region and stimulate interest in building healthier communities.





Paula Wood, programs director of the Fredericton Family Resource Centre, shared information about the Centre's many programs and how they address parents' and children's need. Their programs range from post-natal to preschool programs as well as fitness programs for both adults and children. They are also involved with many different initiatives such as school gardens and helping to inform the public about proper nutrition. The Centre is dynamic and attentive, always listening to the needs of their parents and developing new programming in order to respond to them.

## Breakout discussions

Participants were invited to participate in group discussions at their tables to reflect on the conference day. Groups discussed the following questions:

1. What have you learned today? What surprised you?
2. What will you do differently in your professional life based on what you learned today?

From these discussions emerged a few key messages, the most crucial being the need to collaborate and network between organisations and individuals to foster positive cumulative impacts and address negative cumulative impacts on the health of children and communities. Other key messages that came up in the various groups were:

- Rethinking our way of seeing development;
- Providing education to children in school and other places;
- Importance of considering the historic aspects of a place when discussing the impacts of health and the environment;
- Making connections between our mental health and the environment;
- Framing data with stories and narratives;
- Change is possible (New Brunswick Health Council Community Profile data).



## Team Group Discussions

The existing Children's Environmental Health Collaborative Teams (Team Education and Team Nurses) were invited to reflect on what they had learned during the day and discuss their next steps and workplans. Topics for the potential creation of new teams were also presented. These were mental health and the environment, cumulative impacts, and indicators. A team centered around cumulative impacts and indicators emerged. The following next steps were identified by the teams:

### Team Education

- To look at the information from the New Brunswick Health Council on municipalities and how to tell stories using it

## **Team Nurses**

- To look at telling stories using the information from the New Brunswick Health Council on municipalities
- To learn more about and get the Chemical Awareness Learning Module Training
- To do more outreach with First Nations registered nurses

## **Team Cumulative Impacts and Indicators**

- To look at possible tools to develop

## **Evaluations**

The evaluations were completed by 20 out of 21 participants. On a scale of 1 (poor) to 5 (excellent), the conference received an overall average rating of 4.8, indicating a high satisfaction rate among participants. Highlights of the conference indicated by the participants included the various speakers, tools presented, connections and networking and the workshops.

Some participant's comments on the conference's highlights:

*“Networking, the excellent exercises re Belledune map, learning about the NB Health Council info as a tool”*

*“Networking, learning about tools, eg “Chemical awareness learning module” Health Canada”*

*« Présentations qui aident à mieux comprendre les enjeux »*

*« Impacts cumulatifs sur la santé des enfants et les communautés »*

## **Acknowledgments**

The New Brunswick Environmental Network would like to sincerely thank those providing financial support for the conference: Health Canada, New Brunswick Department of Health, ECHO Network, and the Canadian Institutes of Health Research.

Thank you to the planning committee: Céline Surette, Barbara MacKinnon and Fausta Fonju Ndemesah, as well as all of the speakers and guests who contributed to the success of this conference.

## Appendix A: Participants

First Name	Last Name	Organisation
Chris	Buse	Canadian Institutes of Health Research
Lynn Ann	Duffley	Department of Social Development of New Brunswick, Wellness Branch
Paula	Wood	Fredericton Family Resource Centre
Jill	Chenard	
Serge	LaRoche	Groupe de Développement Durable du Pays de Cocagne
Fausta	Fonju Ndemesah	Health Canada
Rick	O'Leary	Health Canada
Jennifer	MacDougald	Meduxnekeag River Association
Todd	Arsenault	New Brunswick Department of Environment and Local Government
Raissa	Marks	New Brunswick Environmental Network
Annika	Chiasson	
Dorice	Pinet	
Michelina	Mancuso	New Brunswick Health Council
Barbara	MacKinnon	New Brunswick Lung Association
Liz	Smith	
Kimberly	Greechan	Public Health
Patty	Cox	
Rachelle	Poirier	Semences de vie
Susanne	Priest	
Pam	Burton	Retired from UNB Nursing Faculty
Hara	Saadia	Université de Moncton
Céline	Surette	
Anne	Fauré	
Wanzor	Beaubrun	