



Healthy Environments, Healthy Minds

Report of the Children's Environmental
Health Collaborative Annual Conference

New Brunswick Environmental Network
January 23, 2020



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SUMMARY

The conference “Healthy Environments, Healthy Minds” was held at the New Maryland Centre, in New Maryland, on Thursday, January 23, 2020. 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 58 people from a range of different sectors attended the conference, including provincial government, public health, environmental non-governmental organisations, family service organizations, as well as post-secondary institutions.

This year’s theme focused on children’s mental health and the environment. The outcomes of the conference were the following:

- Provide an opportunity for networking
- Educate participants on:
 - How environmental exposures affect mental health
 - Climate change anxiety and mental health
 - Positive effects of the environment on mental health
- Explore how mental health fits into indicators and cumulative impacts work
- Explore indigenous perspectives on mental health and the environment
- Provide an opportunity for teams to update the collaborative 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 welcome and a round of introductions. This was followed by an introduction to the NB-CEH as well as an update on the NB-CEH’s Steering Committee’s work by its Chair, Barbara Mackinnon. The NB-CEH’s teams leads (Team Education, Team Nurses, and Team Indicators and Cumulative Impacts) then presented summaries of their work over the course of the last year and gave small previews of the exciting work to come. Bonnie Hamilton Bogart of Voices for Sustainable Environments and Communities provided an update on the work of the New Brunswick Environmental Network’s Environmental Rights Caucus. Dr. Céline Surette also provided an update on the Environment, Community, Health Observatory Network (ECHO Network).

This was followed by an hour long workshop on coping with eco-anxiety led by Marie Reinsborough-Wadden and Krista Royama of IRIS Community Counselling & Consulting that aimed to give the participants resources as well as a chance to express themselves on the subject. The workshop proved to be a highlight of the conference, clearly demonstrating the importance of self and community care.

Dr. Cathy Vaillancourt of the Institut national de la recherche scientifique was invited to speak about the effects of contaminants on children’s mental health. She gave a great overview of the current medical research linking the two. However, she finished her presentation by highlighting that the negative effects of contaminant exposures are preventable and can be reduced through education and easy every day actions.

Jonna Karhunen of Learning Outside spoke to the benefit of outdoor play for children. She spoke of the increasing disconnect children are feeling in regards to nature and attention difficulties and higher rates of physical and emotional illness this brings. She emphasized that children need unstructured outdoor play and hands-on exploration for healthy development.

Another highlight of the day was the Success Stories Panel where Laure Bourdon of ACCESS Open Minds, Paula Wood and Jessica Lee of the Fredericton Regional Family Resource Centre, and Jeannie Bartibogue of the Eel Ground Health Centre presented on their initiatives and programs and the successes they have had with them. It was a great showcase of New Brunswick initiatives that are currently working towards bettering children and youth’s mental health.

To wrap up the day, Barbara Mackinnon shared some key takeaway messages of the day. She spoke about the structure of the day allowing for time to breathe and the benefits of being able to share with like minded individuals at conferences such as these.

AGENDA

8:30	Registration and Networking	
9:00	Introduction	Annika Chiasson, <i>New Brunswick Environmental Network</i>
9:10	Update from the Children's Environmental Health Collaborative's Teams and Steering Committee and ECHO Network	Barbara MacKinnon, <i>New Brunswick Lung Association</i> Céline Surette, <i>Université de Moncton</i> Liz Smith, <i>New Brunswick Lung Association</i> Kim Greechan, <i>Public Health</i> Bonnie Hamilton Bogart, <i>Voices for Sustainable Environments and Communities</i>
9:35	Dealing with Eco-anxiety in the Face of Climate Change	Marie Reinsborough and Krista Royama, <i>Iris Community Counselling</i>
10:35	Break	
10:50	Contaminant Exposure and Mental Health in Children	Dr. Cathy Vaillancourt, <i>Institut national de la recherche scientifique</i>
11:30	Wonder and Adventure: How Outdoor Play Benefits Children's Mental Health	Jonna Karhunen, <i>Learning Outside</i>
12:10	Lunch	
1:00	Workshop: Children's Mental Health Indicators in New Brunswick	Dr. Céline Surette et Hara Saadia, <i>Université de Moncton</i>
2:00	Break	
2:20	Success Stories: Panel Discussion	Jeannie Bartibogue, <i>Eel Ground Health Centre</i> Paula Wood & Jessica Lee, <i>Fredericton Regional Family Resource Centre</i> Laure Bourdon, <i>ACCES Open minds</i>
3:00	Working Together and Moving Forward	
3:45	Wrap up	Barbara MacKinnon, <i>New Brunswick Lung Association</i> Annika Chiasson, <i>New Brunswick Environmental Network</i>

DEALING WITH ECO-ANXIETY IN THE FACE OF CLIMATE CHANGE

**Marie Reinsborough-Wadden & Krista Royama, IRIS Community
Counselling**

Marie Reinsborough-Wadden and Krista Royama of Iris Community Counselling, an organisation offering mental health counselling for individuals, families, couples, and youth with the mission of building community through counselling, led the participants through an hour long workshop on eco-anxiety. They began by sharing their own experiences working in schools and the importance of self-care. They then invited the participants, first in groups at their tables and then to the larger group, if they chose to, to share acts of personal and community self-care. The participants were also then invited to reflect on how climate change affected them and again share at their tables and then the larger room. The participants were also given a number of resources and activities to help cope with eco-anxiety to take home with them.

CONTAMINANT EXPOSURE AND MENTAL HEALTH IN CHILDREN

**Dr. Cathy Vaillancourt, Institut national de la recherche
scientifique**

Dr. Cathy Vaillancourt of the Institut national de la recherche scientifique presented on the links between contaminant exposure and mental health in children. She gave an overview of several research studies on the subject. One of these was a study in France that observed that children who attended schools in more polluted areas experienced more learning and memory problems than their counterparts in less polluted areas. Dr. Vaillancourt also made the point that particulate matter and other chemicals can traverse the placenta and have an effect on the fetus and shared that the first 1,000 days between a woman's pregnancy and her child's 2nd birthday offer a unique window of opportunity to build healthier and more prosperous futures. It has been shown that widely used chemicals such as lead and mercury can contribute to learning, behavioural or intellectual impairment, as well as specific neurodevelopmental disorders such as ADHD or autism spectrum disorder. However, Dr. Vaillancourt emphasized that such consequences are preventable and gave the anti-smoking campaigns as an example of a successful environmental health campaign. She also gave some tips on how to avoid exposures to toxic chemicals such as eating fresh, organic, and unpackaged foods, minimizing use of pesticides around the home, avoiding cosmetics, fingernail polish, and lotions, supporting bans on smoking public places and cosmetic pesticides and supporting efforts to update chemical management policies and reduce industrial pollutants. She finished by stating that education is usually the starting point of any effort to prevent exposure to toxins, highlighting that attending events such as this conference is a good start.

WONDER & ADVENTURE: HOW OUTDOOR PLAY BENEFITS CHILDREN'S MENTAL HEALTH

Jonna Karhunen, Learning Outside

Jonna Karhunen from Learning Outside began her presentation by asking the participants about their favourite memories of childhood. Many of these memories were in nature with limited adult supervision and included some risk. There has been a shift away from this in today's society. Children are spending more time isolated inside and more time on screens. There are more scheduled activities and parenting is more "hands on" which has resulted in children being alienated from nature and higher rates of physical and emotional illness. In fact, New Brunswick has the highest provincial rate in teen depression, anxiety, and suicide. Studies show that children need unstructured time to play outdoors and explore. Time outdoors lowers blood pressure and pulse, decreases stress hormone concentration, reduces inflammation, and benefits eyesight. Green environments also improve self-esteem and moods and stimulates the imagination. By helping children and teenagers get outside, we are helping them develop self-confidence and resilience: Time outdoors is crucial for human health.

WORKSHOP: CHILDREN'S MENTAL HEALTH INDICATORS IN NEW BRUNSWICK

Dr. Céline Surette & Saadia Hara, Université de Moncton

Dr. Céline Surette began the workshop by introducing the participants to the CalEnviroScreen, a relativist, science-based mapping tool developed by the Office of Environmental Health Hazard Assessment and the California Environmental Protection Agency (CalEPA) in 2017 to help identify California's most environmentally burdened and vulnerable communities and assist the CalEPA's boards and departments with decision-making, such as prioritizing resources and cleanup activities.

The CalEnviroScreen is made of 20 indicators of pollution burden and population characteristics associated with increased vulnerability to population health. A weighted scoring system is then used to create scores for pollution burden and population characteristics in each geographical unit. These two scores are then multiplied by each other to give the final score for the geographical unit. The tool is not a risk assessment tool, but rather a tool that helps measure the relative pollution burden and vulnerability in one area and guide action. Colleagues in the ECHO Network in British Columbia have also adapted this tool to their context.

Keeping this in mind, the participants, led by Saadia Hara, were then asked to answer the following two questions in groups at their tables:

1. What are the environmental effects on children's mental health? (effects can be both positive and negative)
2. What indicators could be used to measure these?

Then the participants were asked to look at all the answers provided and choose the answers that they believed were most important using dotmocracy.

Access and connectedness to nature emerged as the two most important environmental effects and indicators of mental health in children. Exposure to contaminants was also another important factor.

SUCCESS STORIES IN NEW BRUNSWICK

Three guest speakers were invited to present on ongoing initiatives related to the environment and children and youth mental health in New Brunswick.

Laure Bourdon presented on ACCESS Open Minds, a pan-Canadian project aiming to transform the current mental health system of service delivery for youth 11 to 25 years, in different parts of Canada. The model is non-prescriptive in nature and as such is adapted to each region or community, using the community's strengths and already available mental health services. Youth involved in the project get a say in how the services are delivered to them and what activities are organized, giving them a voice and fostering confidence and maturity. In many cases, youth report the natural environment as a personal coping mechanism, stating that it helps calm and ground them.

Paula Wood and Jessica Lee of the Fredericton Regional Family Centre spoke about the creation of the Down by the Brook Forest School; an outdoor school with the mission of fostering rich learning experiences, ecological literacy, and healthy living by connecting children to nature through the use of the Forest School model in the early, primary, and secondary years. Since its inception the school has seen tremendous popularity with both parents and children. Children are more engaged, focused and curious when outdoors. The Centre also runs an outdoor program called Li'l Hikers where parents and grand-parents can come enjoy outdoor activities or the forest with their children and grand-children.

Jeannie Bartibogue presented on the Mawlugutineg Mental Wellness Team, an indigenous-community based team that consists of five northern New Brunswick First Nations (Eel Ground, Metepenaiaq, Esgenoopetitj, Pabineau, and Eel River Bar), the Vitalité and Horizon Health Networks and the Rising Sun Treatment Centre. The goal of the Mawlugutineg MWT is to provide accessible, timely, and culturally appropriate mental health support and services to its partner First Nation communities. They have been establishing healing teams within the communities and drawing on the knowledge of elders to address the gaps First Nation communities have been experiencing. Jeannie

emphasized the importance of recognizing the strength and talents of youth and connecting them to their culture as well as the land.

WORKING TOGETHER AND MOVING FORWARD

The existing Children’s Environmental Health teams were invited to reflect on the day and discuss next steps in their work plans. The floor was opened to the creation of new teams, but no new teams emerged. The topic of the Minister of Education’s Green Paper was suggested for a group discussion. The following next steps were identified by the teams and the discussion group:

Team Indicators and Cumulative Impacts

- Continue work on the adaptation of the CalEnviroScreen to the New Brunswick Context.
- Explore how citizen science can be used
- Explore how to use qualitative data

Team Nurses

- Explore partnerships between nurses
- Reach out to Team Education for their factsheets
- Explore the creation of a family visit tool

Team Education

- Explore how to better serve low-income families with factsheets

Green Paper Discussion Group

- Encourage the public to write to the Minister of Education
- Encourage physical activity in children to ensure proper development

EVALUATIONS

The evaluations were completed by 41 out of 58 participants. On a scale of 1 (poor) to 5 (excellent), the conference received an overall average rating of 4.5, indicating a high level of satisfaction with the day among participants. Highlights of the conference as indicated by the participants included the various presentations, workshops and discussions throughout the day.

Here are some of the participants’ comments on the conference’s highlights:

“Collaborating and meeting other professionals with same interest and goals”

“Excellent all around-success stories, looking inward, outdoor workshop”

« Les conséquences profondes des contaminants environnementaux sur la santé mentale surtout la transmission transgénérationnelle »

« Activités extérieures jouent un rôle majeur dans la santé mentale et physique des enfants »

ACKNOWLEDGMENTS

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

Thank you to the planning committee, Céline Surette, Barbara MacKinnon, Kevin Gould, Paula Wood and Isabelle Mélançon, as well as to all of the speakers and guests who contributed to the success of this conference.

APPENDIX A: PARTICIPANTS

First name	Last Name	Organisation
Laure	Bourdon	ACCESS Open Minds
Claire	Labelle	Centre de Ressources Familiales à la petite Enfance de Westmorland-Albert inc
Sophie	Haché-Poirier	Centre de ressources familiales Chaleur
Stéphanie	Richard	
Jonna	Karhunen	Conservation Council of New Brunswick
Nadine	Ives	
Samantha	Brewster	Ducks Unlimited Canada
Jeannie	Bartibogue	Eel Ground Health Centre
Paige	Hambrook Storey	
Charlotte	Flores	Falls Brook Centre
Sima	Saadati	
Tracy	Stewart	Forest Hill School
Rebecca	Lovely	Fredericton Downtown Community Health Centre
Tina	Morneault	
Jessica	Larocque	Fredericton Public Library
Rose	Morton	
Christine	Wilkins	Fredericton Regional Family Resource Centre
Jessica	Lee	
Paula	Wood	
Alexandra	Francis	Gagetown School
Isabelle	Mélançon	Health Canada
Lance	Richardson	
Katherine	Houser	Horizon Health Network
Caleigh	Dunfield	Independent School District Charlotte County
Cathy	Vaillancourt	INRS-Centre Armand Frappier
Krista	Royama	IRIS Community Counselling & Consulting
Marie	Reinsborough	
George	Peabody	Meduxnekeag River Association Inc
Melissa	Fulton	Nature NB
Cheryl	Brown	NB Department of Education and Early Childhood Development
Tanya	Thibeau	
Jennifer	Bishop	NB Department of Environment and Local Government
Todd	Arsenault	NB Department of Environment and Local Government
Tracey	Wade	NB HealthADAPT
Deanna	Price	New Brunswick Aboriginal Peoples Council
Annika	Chiasson	New Brunswick Environmental Network
Raissa	Marks	
Tzomi	Burkhart	
Anne	Henderson	New Brunswick Lung Association

Barbara	MacKinnon	
Liz	Smith	
Melanie	Langille	
Tamela	Carroll	Office of the Chief Medical Officer of Health
Chelsea	Currie-Stokes	Public Health
Melissa	Deap	
Sheena	Matchett	
Tara	Gaudet	
Kimberly	Greechan	
Ainslee	MacMillan	The Gaia Project
Jane	Burchill	
Asha	Bear	Tobique Climate Change Committee
Mariah	Sockabasin	Tobique First Nation Youth Climate Action Committee
Céline	Surette	Université de Moncton
Hara	Saadia	
Onitriniaina	Rakotorahalahy	
Wanzor	Beaubrun	
Bonnie	Hamilton Bogart	Voices for Sustainable Environments and Communities
Jocelyn	Whalen	