

Oral Abstract Program
Programme des résumés oraux

# ORAL PRESENTATION 1 – PUBLIC HEALTH WORKFORCE

Tuesday 6 June 13:45-15:30 Room 204 & 205

Sustainably scaling workforce development to build public health workforce capacity: A network model – Ilya Plotkin

**Background:** The Public Health Foundation (PHF) launched a public health learning network in 2003. The TRAIN Learning Network has since grown to connect over 1.3 million health workers to thousands of training opportunities. TRAIN is a collaborative effort among non-profits, academia, and governmental health agencies to train the health workforce.

## **Objectives:**

- Describe the learning network model
- Demonstrate how the TRAIN Learning Network builds the capacity of health workers
- Identify opportunities to collaborate with the TRAIN Learning Network

Target Groups: The target groups for this presentation are:

- Staff responsible for training health workers
- Staff responsible for convening stakeholders in public health

**Activities:** The TRAIN Learning Network convenes stakeholders across public health and healthcare. Partners work together to build the capacity of workers who protect and improve the public's health by sharing resources, content, training plans, and data on a centralized online training platform. This model functions through economies of scale by ensuring that health workers are trained in an efficient and cost-effective manner.

**Deliverables:** The learning network model provides health workers with a centralized and easy-to-access platform to deliver quality trainings, while working collaboratively with partners to share training resources and limit duplication.

What are the implications of your policy or practice initiative to inform future research? The TRAIN Learning Network's model allows for the collection of uniform data across the health workforce. Future research can draw on data from the TRAIN Learning Network to compare health workforce training and structure across geographic location, work setting, and job roles in order to inform policy. Additionally, the learning network model offers a multi-stakeholder approach that encourages cooperation and collaboration instead of silos.

Leadership competencies for public health practice in Canada and LEADS: A comparison – Ardene Robinson Vollman

Co-author: Ms Tina Strudsholm

**Background:** The Leadership Competencies for Public Health Practice in Canada (LCPHPC) were released in 2015 after an environmental scan and Delphi process. The LEADS Framework (Canadian College of Health Leaders (CCHL), 2010) was used to organize the 49 LCPHPC into five domains of leadership: Lead self; Engage others; Achieve results; Develop coalitions; and System transformation.

#### **Objectives:**

- To compare the leadership competencies developed for public health practice in Canada with the LEADS capabilities developed for health leadership in general.
- To identify gaps and overlaps between the two sets of leadership competencies.
- To suggest opportunities for development of public health leadership capacity in Canada.

**Target Groups:** Those working in public health in Canada, particularly those from the seven disciplines for which PHAC supported the development of discipline-specific competencies: dentistry, biostatistics/epidemiology, health promotion, inspection, medicine, nursing, and nutrition.

**Activities:** The main activity is an analysis of two sets of leadership competencies. The analysis involves direct comparison of LCPHPC and LEADS competencies comprising the shared domains of leadership. We will also use the domains to suggest how LCPHPC can inform organizational change and public health action.

**Deliverables:** Insight into public health leadership competencies required for public health practice in Canada. Public health practitioners will be able to recognize how their practice context shapes their competency requirements in ways that are both similar and different from health leadership in general. Guidelines for the use of the competencies will inform both personal and organizational leadership development.

# What are the implications of your policy or practice initiative to inform future research?

- To identify gaps in LCPHPC to be addressed in future research.
- To inform translation of the LCPHPC into practice in public health settings.
- To set the stage for personal development and organizational change efforts.

# Health Promotion Canada, Atlantic Chapter engagement and establishment – Amanda Hudson-Frigault

Co-author: Morgane Stocker

**Background:** Health Promotion Canada (HPC) (formerly the Pan-Canadian Network for Health Promoter Competencies), has a goal "to enhance health promoter competency development by providing guidance, leadership and expert advice through collaboration, consultation and research and resource development". In the summer of 2016, HPC encouraged the Atlantic Provinces to mobilize their ongoing Health Promotion work and establish a local chapter.

**Objectives:** Within the Atlantic region, engage those working in the field of Health Promotion and advance the profession, while raising the profile of Health Promoters.

Aligning with the objectives of HPC:

- Enhance the capacity of health promoters by furthering the development, implementation and usage of health promoter competencies.
- Create and disseminate resources supporting the application of health promoter competencies to produce a well-equipped and effective health promotion workforce.

### **Target Groups:**

- Those currently in a Health Promotion or allied health education program at the University Level.
- Those with extensive professional experience in several Pan-Canadian Health Promoter Core Competencies
- Organizations/Associations advancing the professional of Health Promotion and employing practicing health promoters.

# **Activities:**

- To enhance relationships between university programs in allied health fields, and Health Promotion.
- To develop Pan Canadian Health Promoter Competencies Professional development Opportunities and local resources.
- Establish an Executive Board
- Developed meaningful engagement strategy to connect with Leaders in Health Promotion field.

# **Deliverables:**

- To increase the number and skills of health Promotion professionals
- An effective network for those working in Health Promotion.
- Registered Bi-laws and Board.
- Innovative and foundational collaborative approach to health promotion across the Atlantic Provinces.
- Credible body for the sustainability of the HealthCare System.

What are the implications of your policy or practice initiative to inform future research? Health Promotion Atlantic will work to enhance health promoter practice in the Atlantic Provinces through: providing guidance,

leadership of collaboration and support, advocating around the Pan-Canadian Health Promoter Competencies and the practice of health promotion.

Exploring global health competencies through the voices of nursing students – Christina Faye Murray,

Co-authors: Pat McPail-Darrach, Rosemary Herbert

**Background:** Awareness of global health issues is an integral part of providing culturally competent care. The goal of this study was to critically examine the international health experiences of nursing students who participated in a public health experience in developed and developing countries.

## **Objectives:**

- To explore undergraduate nursing students' perceptions regarding global health competencies through reflection on their international health experiences.
- To compare and contrast students' perceptions of global health competencies to those identified by Wilson et al., (2012).
- To analyze how perceptions of global health competence changed over time as students returned to Canada, acclimatized, and practiced nursing again in a Canadian health care system.
- To gain a deeper understanding of global health competencies that could be adopted to guide the development of nursing curricula in Canada.

**Methods:** Three focus group interviews were conducted with participants pre-departure, upon return, and six months following an international health experience. Participants reflected on their experiences and compared their international health experiences to Wilson's competencies.

**Results:** Students verified the value of Wilson's Global Health Competencies, and emphasized the importance of the competency concerning social and environmental determinants of health. They identified knowledge of culture as essential, and articulated that culture needs to be more explicit in Wilson's competencies. They discussed the importance of being informed about country-specific information such as causes of morbidity and mortality.

**Conclusions:** Study findings address a gap in the literature by reporting nursing students' perspectives about Wilson's global health competencies.

What are the implications of your research to inform future policy or practice initiatives? Findings from this longitudinal study will help inform curriculum development in nursing education and assist with the preparation of nursing students who are engaging in international health experiences. Having students well informed about global health will enhance outcomes for both students and clients.

Preparing students for future careers in healthy public policy – New tools to support course instruction by Schools of Public and Population Health – Kendall Tisdale

Co-author: Michelle Halligan

**Background:** For many faculty members of graduate schools of population and public health across Canada, balancing research, grant-writing, teaching and publishing is a challenge. By providing online, bilingual, centralized access to municipal, provincial/territorial, and federal cancer and chronic disease prevention policies across Canada, the <u>Prevention Policies Directory</u> (the Directory) can support faculty of schools of population and public health in developing lectures and assignments for healthy public policy courses to prepare students for their future career in public health. To assist with this, the Canadian Partnership Against Cancer (the Partnership) has developed new resources to support uptake and use of the Directory by healthy public policy/public health/population health course instructors in Canada.

# **Objectives:**

- Prepare students for future careers in public health by building core competencies in effectively choosing options, and planning, implementing and evaluating public health policies
- Create lectures and coursework for public health students on healthy public policy using the Prevention Policies Directory and new tools for faculty members and course instructors

Target Groups: Faculty members from Canadian schools of population and public health

**Activities:** A small Expert Working Group with representation from the Network of Schools and Programs of Population and Public Health was convened to inform development of new resources to support uptake and use of the Directory by healthy public policy course instructors, as well as graduate students.

**Deliverables:** Bilingual, downloadable resources include: a video promoting the value of the Directory in healthy public policy course instruction, a video for students on the value of using the Directory in school and as a public health professional, quick facts on available resources, slides to integrate into lecture materials, and four sample assignments for coursework.

What are the implications of your policy or practice initiative to inform future research? These tools will support future public health practitioners and researchers in more easily finding and using existing policies to inform their research, practice or policy work.

Enhancing quality and safety through the creation of standard operating procedures (SOPs) - Nadine Romaine

**Objectives:** To establish standardized and consistent procedures for Public Health (PH) work to support workforce development, improve efficiency, increase quality and ensure safety.

## **Target Groups:**

PH professionals

**Activities:** Through a review of PH's administrative and operational processes, PH Leadership Team identified the development and implementation of SOPs as a priority. PH set forth to document procedures and their alignment with provincial legislation, regulations, standards and protocols, as well as the Accreditation Canada Standards. An SOP working group was created to guide development and to champion the work within PH and an employee was assigned to coordinate the SOP project. A secure SOP site was created to provide employees with easy access to the most recent version and to house the SOP Manual. Lessons learned were captured and process improvements continually occur. SOPs continue to be developed and ongoing improvements to the development and maintenance process occur.

**Deliverables:** Public Health is committed to ensuring that its employees are consistent in delivering high quality programs and services. To date 60 SOPs have been approved and 100 more are in development. SOPs continue to be a priority for pH as they support workforce development and improve efficiency, safety and quality. PH employees have documented procedures which are clear and in alignment with applicable legislation, regulations, standards and protocols. Foundational SOP processes and tools were created to support SOP development. SOPs provide valuable instructions for many organizational and program specific procedures for current and new employees.

What are the implications of your policy or practice initiative to inform future research? SOPs support workforce development, provide guidance to employees in their roles and have improved consistency and quality within our work.

# ORAL PRESENTATION 2 - FIRST NATIONS, INUIT, AND MÉTIS COLLABORATIVE STRATEGIES

Tuesday 6 June 13:45-15:30 Room 200 C1

Where do we start? Meaningfully involving Indigenous people in public health decision-making – Alycia Fridkin

**Background:** Including Indigenous people in public health decision-making is essential for making decisions that are relevant and beneficial to Indigenous people, as well as effective in improving health and addressing inequities. Yet despite the repeated call to be meaningfully involved in decisions that impact health, Indigenous people are still often excluded.

**Objectives:** Drawing on a research study that investigates what constitutes meaningful involvement of First Nations people in health policy decision-making, this presentation offers practical insights for involving Indigenous people in public health decision-making processes in more meaningful and influential ways.

**Methods:** This exploratory, qualitative study involved a critical analysis of twenty in-depth, open-ended interviews (n=20) with leaders and decision-makers in Indigenous health and other public health settings, on their experiences with and perspectives of meaningfully involving Indigenous people in health policy decision-making.

**Results:** The analysis points to seven key elements of meaningful involvement: Recognizing and Representing Indigenous Peoples and Lands; Interrupting and Re-imagining Relationships; Preparing Agreements; Practicing Protocols; Leveraging Power; Exerting Community Authority; and Shifting Social Structures. Based on these identified elements, a framework for working towards meaningful involvement is offered as a heuristic device to stimulate thinking around what meaningful involvement could look like in various health organizations and decision-making contexts.

**Conclusions:** Fostering meaningful involvement requires attuning to the underlying power dynamics inherent in decision-making and taking action to decolonize and transform the decision-making structure itself. The findings are applied to public health organizational settings to provide practical suggestions on more meaningfully involving Indigenous people in public health organizations and decision-making processes.

What are the implications of your research to inform future policy or practice initiatives? This research can inform thinking on what actions could be taken to involve Indigenous people in public health settings and organizations in more meaningful and influential ways.

Effective knowledge translation approaches and practices in Indigenous health research: Findings from a systematic review – Melody E Morton Ninomiya

**Co-authors:** Donna Atkinson, Simon Brascoupé, Michelle Firestone, Nicole Robinson, Carolyn Ziegler, Raglan Maddox, Jeff Reading, Janet Smylie

**Background:** Knowledge translation (KT) is about sharing knowledge in contexts where the knowledge is both relevant and valued. Effective KT is critical to implementing program and policy changes that require shared understandings of knowledge systems, assumptions, and practices. Mainstream KT initiatives and concepts however do not necessarily resonate with Indigenous ways of knowing and doing.

**Objectives:** This systematic review examined literature on KT initiatives in Indigenous health research to identify wise and promising Indigenous KT practices in Canada and abroad.

**Methods:** The review was guided by Indigenous health researchers, engaged Indigenous Elders, and used an Indigenous research critical appraisal tool. The search included published literature from indexed and non-indexed databases globally and grey literature from Indigenous health research funders (government and Indigenous organizations) within Canada only. To be included in the review, documents had to meet the following criteria: 1) focused on primarily Indigenous people; 2) linked to Indigenous health and well-being;

3) document KT goals, activities, and rationale; 4) evaluated the KT activities or outcomes; and 5) scored six or more in their critical appraisal.

**Results:** Findings from this review reveal wise KT approaches and practices for researchers and Indigenous communities. The presentation will discuss ways in which effective Indigenous KT is conceptually and operationally different from mainstream KT concepts and practices.

**Conclusions:** While this systematic review adhered to standard protocols, it was also designed and conducted using Indigenous health research principles throughout (such as being guided by Indigenous scholars and appraising literature based on Indigenous community relevance).

# What are the implications of your research to inform future policy or practice initiatives?

This study will inform wise/best practices KT in Indigenous health research and will be used to inform an evaluation framework for Indigenous KT for research and funding institutions alike.

## The transformation of governance in First Nations health care in BC – John O'Neil

Co-authors: Mr. Joe Gallagher, Lloy Willie, Brittany Bingham, Josee Lavoie

**Background:** First Nations health governance in British Columbia (BC), Canada has undergone a historic transfer of operations from the federal government to the new First Nations Health Authority (FNHA). A Tripartite Framework agreement guided this transformation and established formalized partnerships between: FNHA, the provincial government and the regional health authorities.

**Objectives:** The main purpose of the research was to examine this partnership in order to understand key features of its approach, its impacts, and its challenges.

**Methods:** This qualitative case study was a joint initiative between Simon Fraser University and the BC First Nations Health Authority (FNHA), involving interviews with senior leaders within the BC health system, First Nations Health Authority and First Nations communities. In addition, a policy roundtable was held in February 2015 which gathered 60 participants for further dialogue on the process.

**Results:** Findings indicate that significant transformational changes have happened in the relationship between First Nations and the mainstream health system. The creation of the First Nations Health Authority has led to more representation for First Nations people at all levels of governance and health service planning, which will ultimately lead to more culturally safe health services that incorporate a First Nations perspective of wellness.

**Conclusions:** This study describes a transformative health governance process in First Nations communities that is an historical first in Canada. The transformation of First Nations health governance in BC can serve as an example in other Indigenous health settings both within Canada and internationally.

What are the implications of your research to inform future policy or practice initiatives? Ongoing partnerships and co-decision making will have its challenges and successes. The partnership accords allow partners to come to a consensus, build trust, have clear expectations and good communication.

"I feel safe just coming here because there are other Native brothers and sisters": Findings from a community-based evaluation of the Niwin Wendaanimak Four Winds Wellness Program – Jessica Syrette

**Co-authors:** Wanda Whitebird, Vivian Recollet, Michelle Firestone, Tessa Jourdain, (WEAAC) West End Aboriginal Advisory Council

**Background:** Urban Indigenous populations in Canada are increasing and represent a diverse and culturally vibrant community. Disparities between Indigenous and non-Indigenous peoples' experiences of the social determinants of health are a growing concern. Under the guidance of the West End Aboriginal Advisory Council (WEAAC), Queen West Central Toronto Community Health Centre (QWCTHC) launched a project called the

Niwin Wendaanimak Four Winds Wellness Program (FWP) that seeks to enhance health and community services for homeless and at-risk Indigenous populations in Toronto.

**Objectives:** Objectives of the evaluation were: 1) to assess the collaborative service delivery model; 2) to identify service gaps and issues for homeless and at-risk Indigenous populations; and 3) to develop recommendations for how non-Indigenous organizations can provide culturally responsive services for Indigenous populations.

**Methods:** In consultation with the WEAAC, a mixed methods approach was used including: 1) an analysis of administrative client data; 2) an environmental scan of models of care; and 3) a thematic analysis of 2 focus groups with community members who access FWP and 17 key informant interviews with staff and peers.

**Results:** FWP bridges the teaching of non-interference and the practice of harm reduction to create a non-judgmental space where community members' dignity and autonomy is respected. Strengths of the program include Indigenous leadership, access to activities that promote wellness and community building.

**Conclusions:** As a non-Indigenous service provider, QWCTHC is meeting the needs of homeless and at-risk Indigenous populations in Toronto. Program strengths, system gaps and challenges including policy recommendations were identified.

What are the implications of your research to inform future policy or practice initiatives? The evaluation will contribute to evidence that links wellness and healing with integrated community and culture-based approaches as well as the bridging of non-interference and harm reduction practice. Ultimately, this will support the identification of collaborative strategies as well as policy and advocacy efforts that support reconciliation, strengthen partnerships and address ongoing inequities experienced by Indigenous people.

Hardwiring First Nations perspectives on health and wellness in indicator selection and reporting: A renewed population health and wellness – Evan Adams

Co-authors: Jennifer May-Hadford, Anya Smith

**Background:** The First Nations Regional Health Survey (RHS) is a national survey that measures health and wellness of on-reserve First Nations people, facilitating planning and advocacy by First Nations communities. The RHS is a repeated cross-sectional survey using a two-staged stratified, random sampling strategy. Factors influencing health, health conditions and the social determinants of health are queried. In BC, the First Nations Health Authority (FNHA) has responsibility for RHS administration (targeted >7,500 individuals, 145 communities); analyses and reporting are driven by First Nation communities. Indicators relevant to traditional perspectives on health and wellness are married with conventional, western medicine focused measures. It's anticipated that including both types of indicators will represent First Nations in a more culturally safe manner and facilitate the measurement and evaluation of the First Nations health gap.

#### **Objectives:**

- To describe the process for selection of health and wellness indicators relevant to BC First Nations.
- To discuss the use of a First Nation's lens in presenting RHS information.

#### **Target Groups:**

- BC First Nations communities
- Individuals and institutions working with and reporting on First Nations information.

### **Activities:**

- 1. Regional indicator selection based on sub-regional health priorities, informed by sub-regional First Nations expertise, subject matter and technical experts.
- 2. Roll-up of regional indicators to a provincial report.
- 3. Application of indicators to surveillance activities.

#### **Deliverables:**

- 1. Five regional health and wellness reports.
- 2. One provincial report.
- 3. Surveillance indicator selection

What are the implication of your policy or practice initiative to inform future research? The inclusion of First Nations communities in the visioning and selecting of indicators increases the richness of reporting and knowledge, allowing better representation of the First Nations perspective on health and wellness. First Nations social and health-focused research is increasingly gaining significance in Canada. First Nations driven indicators and data presentation will help direct research into areas prioritized by First Nations people, influencing researchers to examine issues valued by First Nations communities.

Closing the gap: The significance of culturally relevant community health reporting and data collection in First Nations communities – Laura McQuillan

**Background:** While a large body of research currently highlights inequities between First Nations and non-First Nations populations, limited empirical research examines disparities among First Nations communities. Recognizing that First Nations, Métis and Inuit communities face both unique and diverse challenges which impact overall health and wellbeing, this project examines the significance of providing culturally relevant health data and reporting to Indigenous communities.

# **Objectives:**

The following objectives focus on addressing inequities among First Nations communities:

- To disaggregate data beyond treaty, sex and age in order to better tackle health inequities;
- To highlight culturally relevant health indicators which can be used to identify, measure and address community-based health inequities;
- To draw attention to the importance of culturally relevant health reporting and data collection.

# **Target Groups:**

- Federal Government
- Provincial Governments
- Indigenous Communities

Activities: Methodology: Scoping literature review

Key terms were combined with the use of Boolean Operators to scan both qualitative and quantitative studies. The search was limited to English literature, with a publication date between 2000 to present, and a publication/research location restricted to Canada, Australia, New Zealand and the United States of America. This choice was made due to the historical similarities of Indigenous populations in these locations.

**Deliverables:** Culminating report entitled: *The Disaggregation of Alberta First Nations Data and Reporting A Literature Review Focused on the Identification and Assessment of Health Inequities Between Alberta's First Nations Communities* 

What are the implications of your policy or practice initiative to inform future research? Examining the variations between communities provides a base from which decision and policy-makers can create targeted health interventions. This project highlights the significance of culturally relevant data collection and health reporting while providing a foundation to inform and promote further research on the subject.

# ORAL PRESENTATION 3 – PUBLIC HEALTH AND TOBACCO

Tuesday 6 June 13:45-15:30 Room 200 C2

Evaluating the impact of changes in school-based tobacco programming on smoking susceptibility outcomes among never smokers between Year 2 and Year 3 of COMPASS study – Sarah Aleyan

Co-authors: Scott Leatherdale, Ashok Chaurasia, David Hammond

**Background:** Despite the positive potential of school-based tobacco programming, a weak evidence base currently exists on what constitutes effective programming for susceptible never-smokers.

**Objectives:** To examine how changes in school-based tobacco programming impact student-level changes in smoking susceptibility over time.

**Methods:** Using longitudinal data from Year 2 (Y<sub>2</sub>: 2013-2014) and Year 3 (Y<sub>3</sub>: 2014-2015) of the COMPASS study, quasi-experimental methods were used to examine how changes in tobacco programming influenced the relative risk of a student becoming susceptible to smoking/initiating smoking behaviour.

**Results:** Between Y<sub>2</sub> and Y<sub>3</sub> of the study, 22 (out of 77) Ontario schools implemented a new tobacco intervention. Of the 22 schools, one intervention significantly increased the likelihood of a susceptible never smoker becoming non-susceptible. One intervention significantly decreased the likelihood of a non-susceptible never smoker trying cigarettes after one year. In contrast, two interventions significantly increased the likelihood of a non-susceptible never smoker trying cigarettes.

**Conclusions:** The evidence presented here indicates that the majority of programs do not show promise in reducing smoking susceptibility and initiation among students over 1 year. This study provides preliminary evidence that one intervention (involving comprehensive programming implemented in collaboration with community partners and a focus on youth engagement) showed promise in reducing smoking susceptibility one year later. This type of intervention should be explored in future work using a larger sample of schools.

What are the implications of your research to inform future policy or practice initiatives? Moving forward, there is a need for additional collaboration between schools, community and provincial stakeholders to inform the design and implementation of effective programming that address susceptible never smokers. Our data suggests that progress in preventing smoking initiation among susceptible youth will require comprehensive efforts.

Effect of a mobile phone intervention "Crush the Crave" on quitting smoking in a young adult population of smokers: Randomized controlled trial- N. Bruce Baskerville

Co-authors: David Hammond, Cameron Norman, Robyn Whittaker, K. Stephen Brown

**Background:** Digital mobile technology presents a promising medium for reaching young adults with smoking cessation interventions. Young adults are the heaviest users of this technology.

**Objectives:** The primary aim of this trial was to determine the effectiveness of an evidence-informed smartphone app for smoking cessation, Crush the Crave (CTC), on reducing smoking prevalence among young adult smokers in comparison to an evidence-informed printed self-help guide On the Road to Quitting (OnRQ).

**Methods:** A parallel randomized controlled trial (RCT) with two arms was conducted in Canada to evaluate CTC. In total, 1599 young adult smokers (19 to 29 years old) intending to quit smoking in the next 30 days were randomized to receive CTC or the control condition OnRQ for a period of 6 months. The primary outcome measure was 30-day point prevalence abstinence at the 6-month follow-up.

**Results:** 56% (n=891) of participants completed six-month follow-up. Overall, 83.4% of young adult smokers downloaded CTC or OnRQ with 83% of those using CTC or OnRQ at least once per month. 67.6% evaluated CTC and 76% OnRQ as user-friendly (p = 002). Intention-to-treat prolonged self-reported abstinence was 12.1% and

12.6% for OnRQ and CTC respectively. Overall, 26% reported 30-day point-prevalence abstinence (28% OnRQ vs 24% CTC). Extent of use of either CTC or OnRQ predicted increased abstinence at 6 months (p = .001).

**Conclusions:** CTC was feasible for delivering cessation support but appeared to be no more effective in helping motivated young adults to quit smoking as a printed self-help guide. Digital mobile technology smoking cessation interventions may serve as useful alternatives to traditional self-care printed guides.

What are the implications of your research to inform future policy or practice initiatives? Practitioners can consider evidence-based mobile apps as an alternative to traditional paper-based self-help guides. Findings regarding lower levels of usage and satisfaction with an app suggest opportunities for improvement and implementation research to understand what features work and do not work to change behavior and for whom.

# A novel approach from tobacco control for documenting public health practice for learning, improvement and impact – Jennifer Boyko

Co-authors: Barbara Riley, Lisa Stockton, Aneta Abramowicz

**Background:** Documenting public health knowledge and experiences can help others build on past experiences when planning and implementing future activities. Documentation of Practice (DoP) is a knowledge exchange activity of the Program Training and Consultation Centre (PTCC), a resource of the Smoke-Free Ontario Strategy. An evaluation of PTCC's DoP approach was undertaken in 2016.

**Objectives:** This presentation will: 1) explore approaches for documenting practice-based public health knowledge; and, 2) present evaluation findings pertaining to the ways in which public health practitioners use DoPs and perceive their usefulness.

**Methods:** Public health practitioners whose work relates to tobacco control were invited to complete an online survey regarding the use and usefulness of DoPs. A small sub-sample was invited to participate in a telephone interview to explore key themes arising from the survey. Data collection will be completed in December 2016, and a mixed methods analysis carried out in January 2017.

**Results:** The survey response rate was 29% (n=61). The majority of respondents (60%) were aware of at least one DoP. DoPs were used in many ways including discussion with colleagues, to confirm choices already made, and to prompt new thinking. The practice-based insights outlined in the DoPs were perceived as useful for reasons including ease of understanding, theory/evidence base, and credibility of the source. At least 10 individuals are expected to participate in interviews. Preliminary interview findings reinforce the survey results and provide insights about key aspects of DoPs that support different types of knowledge use.

**Conclusion:** DoPs are a useful approach for sharing practice-based knowledge among tobacco control practitioners in Ontario and for supporting concrete actions towards impact.

**Implications for policy or practice:** The DoP approach offers important insights for sharing best practices in tobacco control (programs and policy). Given the dearth of effective evidence-based public health knowledge exchange programs, there is a need to share this approach.

# Evaluating the susceptibility construct for cigarette, e-cigarette, and any tobacco or e-cigarette use among Ontario youth – Adam G Cole

Co-authors: Ryan D Kennedy, Ashok Chaurasia, Scott T Leatherdale

**Background:** The smoking susceptibility construct, which is commonly used to identify youth susceptible to future cigarette smoking, has not been tested within the Canadian context. Additionally, given the expansion of the tobacco and nicotine market, it is unknown whether the current construct could serve as a proxy for identifying students susceptible to other tobacco and nicotine product use.

**Objectives:** To examine the ability of the susceptibility construct to predict the use of cigarettes, e-cigarettes, and any tobacco or e-cigarette use among a sample of Ontario youth.

**Methods:** Using three waves of data from the COMPASS study, changes to self-reported smoking status were identified among a baseline sample of never-smoking students. The positive predictive value, sensitivity, and specificity of the susceptibility construct were calculated for cigarettes, e-cigarettes, and any tobacco product or e-cigarette use.

**Results:** At baseline 29.4% of never-smokers were identified as susceptible to future smoking. At follow-up, 17.0% of never-smokers tried a cigarette (10.8% non-susceptible, 32.0% susceptible), 10.4% used e-cigarettes (7.3% non-susceptible, 17.7% susceptible), and 25.0% used any tobacco product or e-cigarette (17.7% non-susceptible, 42.3% susceptible). The positive predictive value, sensitivity, and specificity of the construct were highest for any tobacco or e-cigarette use while the sensitivity was highest for cigarettes. The positive predictive value, sensitivity, and specificity differed by gender.

**Conclusions:** The ability of the susceptibility construct to identify future cigarette, e-cigarette, and tobacco or e-cigarette use was variable, but the sensitivity and specificity of the construct was consistent and relatively high, even between genders.

What are the implications of your research to inform future policy or practice initiatives? The susceptibility construct can be used to predict more than cigarette use. This measure can identify students who are at risk of using e-cigarettes and any tobacco product or e-cigarette.

Do young adults represent a missed opportunity? Trends in smoking initiation in Canada – Thierry Gagné

Co-author: Gerry Veenstra

**Objectives:** Young adults face high prevalence rates for smoking. Recent evidence suggests that many people initiate smoking during young adulthood, but little is currently known about trends in initiation rates for this age group.

**Methods:** We examined rates of initiation to first cigarette (FC) and daily smoking (DS) during youth (5-17) and young adulthood (18-25) using nationally representative data from the 2001, 2003, 2005, 2007, 2009, 2011, and 2013 cycles of the Canadian Community Health Survey. We used all participants aged 25-26 to obtain seven mutually exclusive retrospective cohorts (n = 16,216). We used logistic regression models to examine four correlates of smoking – sex, education, poverty status, and immigration status – and then whether these factors modify time trends in smoking.

**Results:** We found that initiation rates decreased during youth (p < .001 for FC, p = .02 for DS) but not young adulthood (p = .94 for FC, p = .28 for DS). We found that men and respondents with fewer educational credentials had relatively higher odds of initiating during young adulthood. Trends in young adulthood stayed constant across subgroups. Trends in youth were modified by education: participants who did not complete high school had no decrease in initiation to FC and DS while those with post-secondary education experienced a decrease in both outcomes.

**Conclusions:** Tobacco control has failed to address smoking initiation during young adulthood. Given the considerable amount of initiation that occurs during this period, practitioners and policy makers should incorporate young adults into their planning.

What are the implications of your research to inform future policy or practice initiatives?: Canadian researchers and policy-makers aiming to reduce smoking initiation should systematically include young adults in their target objectives. They should also examine how young adults' unique circumstances may promote differently smoking initiation and design their interventions and policies accordingly.

Adopting tobacco-free campus policies: The power of champions, partnerships and shared vision – Irene Lambraki

Co-authors: Alison Kernoghan, Nathan Honsberger, John Garcia

**Objectives:** This study aimed to understand how post-secondary institutions have partnered with local Public Health Units (PHUs) and other stakeholders to adopt 100% tobacco/smoke-free (TF/SF) policies, and why some campuses have succeeded in these efforts and others have not.

**Methods:** We used a multiple case study design and a realist-inspired approach. Three campuses were studied: one that adopted 100% TF policy and two that developed 100% SF policy but did not adopt it. Key informant interviews and supplementary documents served as data sources. Cross case analysis identified the key mechanisms associated with adopting campus policies and the conditions that enabled or constrained these mechanisms from operating.

**Results:** Persuasive policy champions capitalized on circumstances that triggered key mechanisms, which in turn contributed to adoption of 100% TF policy in the one case. Key mechanisms associated with policy adoption included commitment from campus administrators to get TF/SF campus on the policy agenda and see it through, a shared understanding and vision among stakeholders involved in policy development, broad identification with a policy brand, and policy ownership by the campus community. In the other cases, certain conditions, such as lack of engagement of important stakeholders, impeded the above mechanisms from operating, which led to the 100% SF policies they developed not being adopted. Instead, they adopted policies that designated smoking in certain campus locations.

**Conclusions:** Adopting 100% TF/SF campus policy requires policy champions like public unit practitioners who can build and sustain campus administrators' commitment, effectively frame issues for engaged stakeholders and guide them to collectively negotiate a policy with strategies and messaging that reflects the goals and culture of the campus.

What are the implications of your research on practice or policy? Findings identify strategies PHUs can employ to cultivate partnerships with campuses and help them create healthy environments that are tobacco-free.

# ORAL PRESENTATION 4 - PUBLIC HEALTH AND FOOD

Tuesday 6 June 13:45-15:30 Room 301

Thirteen Muesli: A qualitative study of a food-based social enterprise program for marginalized youth – Aganeta Enns

Co-authors: Elizabeth Kristjansson, Melanie Bania, Jennifer Brierley

**Background:** Social enterprise (SE) activities, which involve business activities with social purposes, have been growing in popularity. Social enterprises have the potential to improve several social determinants of health, including income. Involvement in SEs has been associated with positive outcomes, such as increased social support and confidence. Participation in SEs has been linked with enhanced vocational skills, employability, self-esteem, reduced stigma, and can contribute to building social capital.

**Objectives:** Thirteen Muesli was a year-long SE for marginalized youth facilitated at a community Food Centre in Ottawa, Ontario. We aimed to assess outcomes in the following domains: (1) employment-related skills, (2) self-confidence, (3) social capital, and (4) hope for the future.

**Methods:** Thirteen participants involved in the Thirteen Muesli program were recruited for this qualitative study. Research tools included semi-structured interviews conducted at baseline and at the end of the one year intervention as well as a participatory Photovoice project. Thematic analysis was conducted to synthesize themes from the data.

**Results:** The majority of participants reported increased confidence in food-industry and entrepreneurship skills. Several themes emerged, such as, self-efficacy, self-esteem, sense of community, social skills, career aspirations, and education goals. Many participants also discussed eating healthier foods since beginning the program.

**Conclusions:** SE participation was associated with improved employment-related skills and self-confidence, which may contribute to decreasing social vulnerability and improving overall health and well-being.

What are the implications of your research to inform future policy or practice initiatives? Few studies have examined the outcomes associated with SEs for marginalized youth and the potential impact on social determinants of health, the present findings contribute to building upon this emerging research area. These findings can be used to inform decisions on expanding social enterprise programs, particularly for marginalized youth.

The role of context in Canadian food retail environment interventions: Results from a realist review of the literature – Rebecca Hasdell

**Background**: The role of dynamic contexts is an integral aspect of population health intervention research, and an important lens to explore under what conditions interventions achieve their intended effects. Food environments are a growing focus of population health interventions to promote healthier environments, however the role of context mediating and/or moderating behaviors, and in shaping interventions, remains largely unexamined.

**Objectives**: To examine how context is taken into account in retail food environment research and practice in Canadian cities.

**Methods**: This study comprised a realist synthesis of the food retail environment literature. Articles were extracted from recent (i.e. <10 years) systematic reviews of food retail environments and health. Abstracts were reviewed by two researchers; articles were included that report on studies in the Canadian context, and that focus on population-level interventions. Articles were coded for intervention design, features of the intervention context, and theories or mechanisms that explain the relationship between exposure and outcome. Results were entered into an Excel spreadsheet for analysis, and analyzed using interpretive approaches.

**Results**: Three domains of context are relevant to consider in food retail environment interventions. These include: 1) population and place-based factors, including demographic factors and access to health promoting assets; 2) social, political and economic processes that shape place; and, 3) institutional factors impacting implementation such as funding, inter-organizational dynamics, governance, and the presence of local champions.

**Conclusions:** The complex interaction between domains of context offer insights into variable outcomes in food retail environment interventions within and between populations.

What are the implications of your research to inform future policy or practice initiatives? Environmental and policy solutions have been identified as the most promising strategy for achieving population-wide improvements in health. This research can help inform what factors should be considered in policy and programmatic interventions to promote healthier environments.

Eating out: frequency of consuming foods prepared away from home, reasons for food outlet selection, and associations with dietary and weight outcomes in a population-based sample from Waterloo Region – Leia Minaker

**Background**: Eating foods prepared away from home is a growing trend in Canada, and has implications for long-term health. The types of restaurants and other sources of prepared foods where people usually go can influence their overall diet quality and health.

**Objectives:** This study will describe the frequency with which Waterloo Region residents eat out, reasons for choosing different outlet types, and the extent to which eating out is associated with diet quality, fruit and vegetable intake, and weight outcomes.

**Methods:** A stratified random sample of households in Waterloo Region were recruited in 2009/2010 to participate in the NEWPATH study. Data from 2223 household (n=4102 individuals over 10 years of age) were used to examine associations between participants' frequency of eating out and dietary- and weight-related outcomes using generalized linear models to account for the nested structure of the data. Analyses accounted for participants' age, sex, education level, and household income.

**Results:** About 30% of residents ate at a fast food restaurant at least once per week. Almost half (49%) ate at a coffee shop and 18% ate at a sit-down restaurant at least once per week. The most popular reasons for people patronizing fast food outlets were: 1) a lack of time to prepare food, 2) convenience (easy to get to), and 3) the taste of the food. Diet quality and fruit and vegetable consumption were poorer among those who frequently patronized fast food outlets compared to those who did not. People who frequently patronized fast food outlets and coffee shops had significantly higher BMI and waist circumference than those who did not.

Conclusions: Dietary and weight outcomes vary significantly by participants' eating-out behaviours.

What are the implications of your research to inform future policy or practice initiatives? Fast food outlets and coffee shops might be especially relevant settings for health promotion interventions, which should consider 1) convenience (in terms of proximity and time), and 2) taste of the food.

The failure of the Children's Food and Beverage Advertising Initiative on children's preferred websites – Monique Potvin Kent

Co-author: Elise Pauzé

**Background:** Childhood obesity has doubled since the late 1970's and food/beverage marketing to children has been identified as a contributor. In Canada, marketing to children is mostly self-regulated by the food industry through the Canadian Children's Food and Beverage Advertising Initiative (CAI).

**Objectives:** To determine children's exposure to food/beverage marketing on their preferred websites, and to determine the nutritional quality of the products featured in this marketing.

**Methods:** Syndicated Internet advertising exposure data for June 2015 to May 2016 were purchased from comScore, a company that maintains a large Internet audience measurement panel. The most popular 10 websites for children 2-11 with advertising for March-May 2016 were determined by using comScore's Media Metrix Key Measures Report. The comScore Ad Metrix Advertiser Report was used to determine children's exposure to food/beverage banner and pop up ads on these sites between June 2015 and May 2016. A nutritional analysis of all advertised foods/beverages was completed using the PAHO Nutrient Profile Model and foods were classified according to whether they were excessive in fat, saturated fat, trans-fat, sodium, and free sugars.

**Results:** Children viewed 25,314,366 food/beverage ads on their preferred sites over the 12 month period, and the most frequently advertised product categories were restaurants (31%), cakes, cookies and ice cream (25%), and cold cereal (11%). A total of 95% of all viewed food/beverage products were classified as processed or ultraprocessed, and 97% of these were excessive in total fats, saturated fats, trans fats, sodium, or free sugars.

**Conclusions:** The CAI is not limiting food/beverage advertising on children's preferred websites and the majority of advertised products viewed are contrary to recommended nutritional guidelines.

What are the implications of your research to inform future policy or practice initiatives? The federal government clearly needs to restrict the marketing of foods/beverage to children through regulation.

Restricting food advertising to children: What's being proposed and what's possible? - Jacob Shelley

Co-authors: Melanie McPhail

**Background:** In the 2015 Minister of Health Mandate Letter, Justin Trudeau identified "introducing new restrictions on the commercial marketing of unhealthy food and beverages to children, similar to those now in place in Quebec" as a top priority for protecting public health. In Quebec, the *Consumer Protection Act* prohibits, with some exceptions, all commercial advertising to children less than thirteen years of age. In 1989, the Supreme Court of Canada (SCC) upheld the Quebec ban in the seminal case of *Irwin Toy v Quebec*, finding that the restriction was a constitutionally valid limitation on the freedom of expression, protected by the *Charter of Rights and Freedoms*. In 2016, two separate federal bills addressing advertising to children were introduced (one in the House of Commons and one in Senate), Health Canada announced a "Healthy Eating Strategy", and the Stop Marketing to Kids Coalition increased its advocacy for the government to adopt its consensus position, the Ottawa Principles.

**Objectives:** To provide a legal review of the proposed approaches to restricting food and beverage advertising to children.

**Target Groups:** Policy-makers, public health advocates, public health nutrition & chronic disease prevention researchers

**Activities:** This project will review existing case law concerning advertising restrictions and apply these findings to the proposed policy recommendations.

**Deliverables:** This presentation will rely on legal analysis and comparative policy analysis to highlight the need for coordinated advocacy for public health policies.

What are the implications of your policy or practice initiative to inform future research? In *Irwin Toy*, the SCC upheld the ban on advertising on the grounds that it was a reasonable policy that could be justified by the evidence. The proposed approaches can overcome *Charter* scrutiny if they demonstrate that the limitations were reasonable and justified by the evidence. Multiple policy recommendations may serve to impede this objective.

### ORAL PRESENTATION 5 – REFUGEE AND IMMIGRANT PUBLIC HEALTH PROGRAMS

Tuesday 6 June 13:45-15:30 Room 302

How are we responding to the health concerns of Syrian newcomers to Ontario? – Sepali Guruge

Co-authors: Souraya Sidani, Rania Younes, Huda Bukhari, Jason Altenberg

**Background:** The civil war in Syria has created an international humanitarian crisis. Canada has admitted approximately 32,000 Syrian refugees; 80% are women and children. Little information exists about how their intermediate and long-term health needs are being addressed in Canada.

**Objectives:** Our study aimed to clarify the health needs and concerns of Syrian refugee women in the Greater Toronto Area.

**Methods:** Building on new and existing academic and community collaborations, this qualitative study was conducted with 58 Syrian refugee women living in Canada for 6–9 months. Focus group discussions conducted in Arabic were audio-recorded, translated and transcribed into English, coded, and thematically analyzed.

**Results:** According to the participants, some of their immediate health concerns were addressed during the initial resettlement period, however, many were not (i.e., non-communicable diseases, musculo-skeletal problems, and reproductive health issues). Most participants had experienced war-related trauma, and require mental health care and support beyond the initial resettlement period. Participants reported that the Canadian health care system was slow, in general, and unresponsive to their concerns, in particular. The lack of

linguistically and culturally appropriate information and services was a key issue that turned many to rely on other Syrian newcomers for health-related information and support.

**Conclusions:** How Canada is responding to the health care needs and concerns of Syrian refugee women should be critically examined.

**Implications:** A more coordinated intermediate and long-term approach is key to addressing the existing and new health concerns of Syrian refugee women in Canada.

The Canadian Refugee Child, Youth and Family Research Coalition: Bringing research, services and policy together to create a rapid response to the health needs of young refugees – Kristin Hadfield

Co-authors: Lisa LaChance, Howard Ramos

**Background:** With the arrival of almost 35,000 Syrian refugees in Canada in the past year<sup>1</sup>, of whom approximately half are <18<sup>2</sup>, there is a pressing need for intersectoral, multidisciplinary research to identify the factors threatening young refugees' integration while building the protective interventions that can support their resilience.

**Objectives:** The Canadian Refugee Child, Youth and Family Research Coalition is a national coalition of social scientists, Service Provider Organizations and government departments that formed to examine to four areas of refugee young people's lives:

- 1) broader economic, social and political factors;
- 2) language, literacy and learning;
- 3) social integration, rights, culture and security; and
- 4) child, youth and family wellbeing.

**Methods:** Each research cluster will undertake four overlapping applied research activities: (1) analyze data (survey, census, and administrative data, and expand those datasets to include more information about refugee children and youth); (2) conduct focused studies with refugee children and their families (3) help to design, implement and evaluate interventions and policies; and (4) creatively mobilize knowledge.

**Results:** To date, the Coalition has applied for research support and started small-scale projects through rapid-response funding. We intend to present details of these projects' progress at the CPHA meeting.

**Conclusions:** The Coalition has recently formed in response to the need for national research on this vulnerable population.

What are the implications of your research to inform future policy or practice initiatives? The Coalition includes representatives from all levels of government responsible for settlement as well as all major settlement organizations from across Canada, thus ensuring that our research is grounded in current service and policy priorities. Furthermore, we are supported by the knowledge mobilization capacity of the CYCC Network, who are already engaged in the issue of providing services to young refugees through a CYCC Network community of practice.

The Monarch Collaboration: An international research program to promote immigrant and refugee health through immunization – Cindy Jardine

**Co-authors:** S. Michelle Driedger, Charles Hui, Shelley Canning, Nikki Turner, Frederic Bouder, Anita Heywood, Lesley Gray, Barbara Rath

**Background:** Recent outbreaks of vaccine preventable diseases have underscored the urgent need to improve immunization rates internationally to reduce adverse health impacts and achieve herd immunity targets.

<sup>1.</sup> http://www.cic.gc.ca/english/refugees/welcome/milestones.asp

<sup>2.</sup> http://open.canada.ca/data/en/dataset/ca243c40-a6d3-4a46-a578-b4fad4369df0?\_ga=1.195913708.1160847559.1477482414

Concurrently, increasing globalization is resulting in escalating levels of population mobility and immigration. International conflict and poverty are also giving rise to large numbers of refugees from places such as Syria. New immigrants and refugees are often particularly susceptible to vaccine preventable diseases because they may be lacking adequate immunization and may be more vulnerable to disease. However, understanding of immigrant and refugee immunization uptake and decision-making is generally incomplete, inadequate and/or ambiguous, thus hampering efforts to improve vaccination rates. A group of researchers from Canada, Europe and Australasia, known as the Monarch Collaboration, are working together to fill this void.

**Objective:** To protect and improve the health of immigrant and refugee populations through an empirically grounded understanding of the factors associated with immunization access and uptake.

**Methods:** A strategic plan for this international initiative has been developed that includes: a scoping review; focus groups to better understand the factors associated with immunization decision-making in different subpopulations; development and testing of targeted messaging; and development of protocols to determine immigrant immunization rates.

**Results:** Addressing this issue through an international collaboration guided by a common research strategy allows for collective results to be analyzed both nationally and collectively to determine similarities and differences, and best practices within and among countries.

**Conclusions:** An international approach to this issue allows for optimal learning and supranational change. Distribution of research activities across countries allows for an effective and efficient approach.

**Implications for practice and policy:** This international project will help identify the strategies and policies that will maximize immigrant and refugee immunization access and uptake on both a national and international basis.

# Insights into the "healthy immigrant effect": Variation over time? – Nasim Khatibsemnani

**Background:** A growing body of evidence suggests that immigrants are typically healthier than the Canadianborn population at the time of arrival; the so-called healthy immigrant effect. Yet after settling, some immigrants lose this advantage over time. Non-European immigrants, particularly women, are more likely to experience a deterioration in their health.

**Objectives:** To investigate the impact of immigration on the health and well-being of Iranian immigrant women residing in the Ottawa-Gatineau area.

**Methods:** The research was guided by an intersectional approach employing an anti-oppression lens. Semi-structured interviews with twelve Iranian women were conducted. Rerecorded proceedings underwent thematic analysis. Several strategies for establishing the rigor including collecting and analyzing data concurrently, member check, audit trail, thick description, and reflexivity were utilized.

**Results:** The results revealed that the majority of participants had been in good health before migration, supporting the healthy immigrant effect. While eight women reported that their health/well-being had remained stable or even improved after immigration, four participants experienced health deterioration that resulted in permanent disability for one of them.

**Conclusions:** The findings illustrated that the health of respondents was shaped by a complex web of intertwined determinants beyond individual health behaviours. While participants shared some similar experiences as Iranian immigrant women, the realities of their lives and reasons for change or stability of health status were not identical. Uprooting was associated with enormous difficulties and considerable socioeconomic hardship that deteriorate four women's health/wellbeing. Yet, immigration also offered new opportunities and resources that resulted in maintaining or improving the health/wellbeing of the other two-thirds.

What are the implications of your research to inform future policy or practice initiatives? As the percentage of the population made up of immigrants continues to grow and because the findings reveal the heterogeneity within an immigrant subgroup, one-size-fits-all policies may not be effective for addressing immigrants' health.

# Refugee public health in Canada: A knowledge exchange and translation initiative – Sheikh Muhammad Zeeshan Qadar

**Background:** In November 2015 the Government of Canada released its initial plan to welcome 25,000 Syrian Refugees to Canada, and so far 34,000 Syrian Refugees have arrived. The National Collaborating Centre for Infectious Diseases (NCCID), in collaboration with public health stakeholders across Canada, designed a knowledge exchange and translation initiative for knowledge implementers working in refugee public health. This presentation will briefly describe the project collaboration, introduce the suite of resources and materials designed, and will invite discussion on pressing issues pertaining to refugee health.

**Objectives:** This presentation will provide a timely opportunity to explicate knowledge exchange and translation initiative by NCCID, discussing NCCID's consultations and what we found on the status of key policies and programs, gaps and challenges identified, and emerging issues raised by community-based clinical and public health practitioners.

**Target Groups:** Public health decision makers at all levels: Primary care providers, dentists, nurses, frontline workers, medical officers of health, program managers, program and policy analysts, health researchers, epidemiologists.

**Activities:** Activities included a Canada-wide scan of literature (peer reviewed and grey literature), consultations with stakeholders working in refugee health to identify gaps, followed by tailored knowledge translation products.

**Deliverables:** NCCID's new resources included knowledge sharing across regions and provinces in a variety of formats: podcasts on refugee oral health; webinars on the Interim Federal Health Plan and data management/coordination for refugee public health; a summary of vaccine guidelines for quick reference, handouts on adult vaccine catch-up and development of a case study. This presentation will help build awareness on common understandings in refugee public health and where there are gaps in knowledge. **What are the implications of your policy or practice initiative to inform future research?** The refugee health initiative facilitates access to knowledge translation products for both academic and non-academic (policy and practice). Creating opportunity for knowledge exchange has identified new areas for research, particularly in oral health and in understanding infectious disease risk in refugee populations.

## Working together to prevent adverse childhood events among immigrant and refugee families - Sara Torres

Co-author: Yvonne Chiu

**Background:** Parents and children from immigrant and refugee families, new to the country and experiencing marginalization and vulnerability, need support systems. These need to be both individual and community, fostering a sense of self and better family relations, and assisting in coping with economic, social and cultural factors influencing settlement, adaptation, and integration in Canadian society.

**Objectives:** Illustrate a model of collaboration between a community-based health workers' cooperative and a regional child welfare agency working with immigrant and refugee families.

**Methods:** A qualitative case study design was used, including: participant and direct observation, face-to-face interviews, document review, and analysis of archival records and artifacts. Through these research techniques, data were analyzed to identify how a model of collaboration between child protection agencies and community-based organizations, which engaged immigrant and refugee communities and health and social work practitioners to prevent adverse childhood experiences.

**Results:** Findings illustrate that this model of collaboration fosters relationships between immigrant and refugee families and child welfare authorities that: a) avoid and/or deal with misunderstandings between families and child welfare workers; b) provide culturally-relevant parenting, mental health, and conflict mediation support to families within holistic case management; and c) support training for service providers and front-line staff, and family parenting groups, on culturally-appropriate practices.

**Conclusions:** Several factors supported establishing this collaborative model, including: timeliness, the policy framework, a window of opportunity for encouraging prevention of violence against children and youth in immigrant and refugee communities.

What are the implications of your research to inform future policy or practice initiatives? This collaborative model illustrates that to improve the health and wellbeing of communities in the margins, multiple partnerships between these communities and formal social services systems ought to be promoted and welcomed.

# **ORAL PRESENTATION 6 – SEXUAL HEALTH**

Tuesday 6 June 13:45-15:30 Room 303

# Investigating the medicalization of trans identity – Kinnon Ross MacKinnon

**Background:** The theory of medicalization has been used to explain the addition and removal of "homosexuality" from the Diagnostic and Statistical Manual of Mental Disorders. Literature in the domain of trans studies similarly argues that the identities of transgender/transsexual (trans) people are medicalized and pathologized, to the detriment of respectful healthcare for this vulnerable group. Meanwhile, debates within trans studies and amongst trans communities argue for de-medicalizing trans identities primarily through the obliteration of the psychiatric diagnosis "gender dysphoria". Scholars, however, have yet to conceptually verify if trans identity meets the conditions necessary to make a claim that medicalization has indeed occurred.

**Objectives:** Scholars' claims surrounding the medicalization of trans identity will be substantiated using Sadler and colleague's (2009) three-pronged rubric for identifying when a human experience has underwent medicalization. To this end, trans people's experiences are explored in the context of clinical encounters with healthcare providers.

**Methods:** A literature review of contemporary and historical trans studies research is used in connection with Sadler et al's (2009) three-step rubric to conceptually confirm cases of medicalization. The process is comprised of: (1) historically situating trans identity to ensure it is a recent medical development; (2) identifying medical theories and meanings that are voiced by the larger culture and individuals within the trans population; and (3) a discussion of how explanations of trans experiences primarily use medical theory as a rationale.

**Conclusions:** The positioning of trans identity as a diagnosable and treatable medical condition was completed through complex clinical interactions between trans patients, surgeons, sexologists, and other healthcare providers. Using Sadler and colleague's (2009) rubric, the medicalization of trans identity has been conceptually verified.

What are the implications of your research to inform future policy or practice initiatives? This project contributes analysis of trans people's encounters with practitioners and the medical system, which is timely in the face of new research and policy decisions affecting transition-related healthcare.

## The sex you want: An Ontario response to gay men's sexual health - Dane Griffiths

**Background:** Despite scientific advances in the diagnosis, treatment, and prevention of HIV. Cisgender and transgender gay, bisexual, queer and other men who have sex with men (gbMSM) continue to be overrepresented in the HIV epidemic in Ontario. Launching January 2017, The Sex You Want is a community-driven, sex-positive, and evidence-informed online sexual health intervention.

## **Objectives:**

- To increase *gbMSM* awareness and understanding about different sexual health strategies available to them based on their context and up-to-date biomedical evidence;
- To empower gbMSM to make informed choices about sexual health strategies that are best for them, honoring their unique relationship to desire and pleasure, allowing gay men to integrate their strategies into a quest for better sex, better connections and heightened emotional and overall well-being;
- To empower gbMSM to test and treat HIV/STIs

## **Target Groups:**

- 1. Cis-gender and transgender gbMSM in Ontario
- 2. Gay men's health workers at community based organizations in Ontario

#### **Activities:**

- 1. Two year development with a digital agency while engaging a network of 30 AIDS Service Organizations across Ontario, a campaign steering committee of knowledge experts & community working groups
- 2. Implementation and preliminary evaluation data collection

#### **Deliverables:**

- 1. Online health promotion campaign
  - a. Web content
  - b. Animated video series
  - c. Comics
  - d. Info-graphics
  - e. Self-advocacy tools
- 2. Robust evaluation plan (process and outcomes)

What are the implications of your policy or practice initiative to inform future research? The Sex You Want is the most comprehensive sexual health campaign for gay men developed in Ontario. Its content will assist providers from various health sectors in communicating a complex biomedical landscape of HIV/STI prevention, treatment and care topics. Evaluation data will inform the development of future campaigns for other populations in the province.

Attitudes and beliefs of health professionals regarding lesbian, gay, bisexual, trans, and queer (LGBTQ) populations accessing healthcare: Improving patient-provider interactions – Matthew Lee

Co-authors: Jacqueline Gahagan

**Background:** LGBTQ people face many health inequities and this is an important public health issue. Current data indicate that LGBTQ patients often report receiving poor care, have worse overall health outcomes compared to the heterosexual population, and have reduced rates of access to health services. Research also suggests that many healthcare providers do not feel comfortable or knowledgeable enough to meet the unique healthcare needs of LGBTQ patients. Negative experiences with providers may discourage further healthcare seeking.

## **Key Objectives:**

- 1. Improve patient-provider interactions and cultural competency in medical and nursing students using a 3-module training series.
- 2. Assess opportunities to include additional LGBTQ cultural competency training in health professions curricula

**Methods:** Our study used a survey to measure change in the attitudes and beliefs among a sample of medical and nursing students about LGBTQ populations in healthcare. The survey used validated tools and questions based on clinical cases. In addition, we held focus group discussions with students and faculty to evaluate gaps and opportunities in current health professions curricula.

**Results:** Our findings indicate that the training intervention improved student attitudes toward and knowledge of LGBTQ populations, and also had an effect on the approach to a transgender patient encounter, which may have clinical implications. Students offered positive feedback on the training and felt it was highly relevant.

**Conclusions:** Additional research is needed to expand our training and to offer it more broadly among other health professions. Rectifying gaps in provider training is an important public health intervention aimed at addressing the health inequities in LGBTQ populations.

What are the implications of your research to inform future policy or practice initiatives? Inclusion of LGBTQ cultural competency training into health professions curricula may have an impact on LGBTQ patient care by addressing gaps in knowledge of specific LGBTQ health issues. This session will be of interest to curriculum designers, policy decision-makers, and those practicing in healthcare settings.

Improving pathways to LGBTQ health in Nova Scotia: Implications for public health practitioners – Jacqueline Gahagan

Co-authors: Ashley Harnish, Matthew Lee, Kolten MacDonell

**Background:** Although increasing attention has been paid to the unique primary health and social care needs of lesbian, gay, bisexual, transgender and queer (LGBTQ) populations, ensuring LGBTQ culturally competent approaches in public health remains a challenge. For example, recent research indicates that among LGBTQ individuals who have a primary health care provider, many are not 'out' to their health care provider for fear of transphobia or homophobia from their providers or from within the health care system more generally.

**Objectives:** This paper presents on the 'pathways to health' research partnership between university-based health researchers, LGBTQ community partners, and those working in primary health within public health in Nova Scotia. The objectives of this program of research are to advance our knowledge base on the unique health and social needs of LGBTQ populations in Nova Scotia, and to use this knowledge base to develop evidence-informed and inclusive public health programs and policies.

**Methods:** Community consultations with LGBT populations and health care providers assisted in the development of an online LGBTQ health survey and a scoping review, both of which served as the basis for understanding and addressing the ongoing barriers to primary health as experienced by LGTB populations across Nova Scotia.

**Results:** Our results indicate more needs to be done to address the primary health and social care needs of sexual orientation and gender identity (SOGI) minoritized populations such as LGBTQ populations to address the key social determinants of health that can serve as barriers or facilitators to the uptake of primary health and in improving health outcomes overall.

**Conclusions:** In conjunction with partners in primary health, and within academic training programs for health professionals, we are developing training modules to improve cultural competence among health and social care providers, including transgender health, end of life conversations among older LGBTQ populations, lesbians and breast cancer, among others.

What are the implications of your research to inform future policy or practice initiatives? Additional training opportunities are warranted in public health professional programs, including nursing and medicine, to help address the current challenges faced by LGBTQ populations in accessing culturally competent primary health care and social supports. LGBTQ cultural competences modules and online training tools are being developed for the next generation of primary health and social care providers through research evidence and will be made available to policy and practice decision-makers.

A critical ethnography of the work of case management nurses in the "war on HIV/AIDS" - Linda Juergensen

**Background:** A pressing issue in the management of HIV/AIDS worldwide is how to better engage people at risk or living with the virus (PLWHA) in testing, treatment, and support services.

## **Objectives:**

- 1. Fescribe the strategies case management nurses (CMN) use in public health (PH) in Ontario to engage PLWHA in healthcare, and
- 2. Understand how PH policies influence CMN's practice decisions and experiences with clients.

**Methods:** This study involved a critical ethnographic design with a purposive sample of 22 CMN and fieldwork in 14 PH units spanning the province. Four sources of data were collected at each site: oral interviews, observations, documentary evidence, and field notes. Content analysis with a constant comparative approach was used to analyze the data.

**Results:** CMN perceived a common mandate of meeting every person newly diagnosed with HIV/AIDS and their contacts, providing counseling, and linking clients to healthcare. However, strategies and outcomes varied across health units. Variations reflected a lack of evidence-based policies to guide practice, system-wide constraints on communication, differences among managers overseeing decision-making, and conflicts between CMN's goals and a prevailing biosecurity approach to HIV/AIDS in PH.

**Conclusions:** The study illuminated the skills and processes involved in CMN's central commitment to balancing client-centred care with protecting the public. Within CMN's work lied several novel ideas for how to better engage clients using *supportive* rather than *prescriptive* interventions, largely marginalized in a PH response structured around the concept of the management of epidemics as "war."

What are the implications of your research to inform future policy or practice initiatives? These findings lay the groundwork for future discussions and research about how to build capacity within PH to better support CMN's efforts to establish meaningful and respectful partnerships with clients, foster greater lateral communication, and participate more actively in policy debates about "frontline" practices.

Criminalization of HIV non-disclosure: Narratives from young men living in Vancouver, Canada - Rod Knight

Co-authors: Andrea Krüsi, Anna Carson, Kate Shannon, Jean Shoveller

**Background:** Few studies have examined how the criminalization of HIV non-disclosure, alongside evolving intervention 'landscapes', influences perceptions of HIV-related risk.

**Objectives:** The objective of this paper is to describe the health and social risks that young men associate with an HIV diagnosis in the context of Canada's current legal framework pertaining to HIV non-disclosure.

**Methods:** We analyzed data from 100 in-depth, semi-structured, interviews with young men ages 18-30 in Vancouver on the topic of the criminalization of HIV non-disclosure.

**Results:** Our analysis revealed two dominant narratives in relation to HIV criminalization: *justification* and *interrogation*. Within the justification narrative, participants asserted that criminalization approaches could be justified because they reflect the gravity of the perceived social impacts of unknowingly acquiring HIV from a seropositive partner (e.g., status loss, discrimination, isolation). Justification narratives did not tend to be based on the perceived health implications of becoming infected as HIV was frequently described as a manageable and treatable condition, as opposed to a life-threatening disease. *Interrogation* narratives tended to problematize the idea of criminalizing HIV. First, these narratives emphasized how universal access to HIV prevention, treatment and care has brought HIV into the realm of a chronic – and a preventable – condition that no longer infers a 'death sentence'. Secondly, legal frameworks that criminalize people living with HIV were characterized as creating barriers to HIV testing uptake, as well as impeding access and reducing retention to care for those living with HIV.

**Conclusions:** Our findings reveal how community-situated narratives that justify the criminalization of HIV non-disclosure do so in ways that both draw on and reinforce HIV stigma, rather than in ways that emphasize justice or the realities of young men's contemporary HIV intervention landscapes.

What are the implications of your research to inform future policy or practice initiatives? These findings reveal the need to advance justice-oriented approaches to legal reform that are context-sensitive to the intervention landscapes of today's young men.

## ORAL PRESENTATION 7 – PUBLIC HEALTH PREVENTION AND HARM REDUCTION

Tuesday 6 June 13:45-15:30 Room 304-306

Promoting healthy public policy readiness: Changing knowledge, attitudes, and beliefs of policy influencers in Alberta, Manitoba, and Québec (2009-2014) – Candace Nykiforuk

Co-authors: Jennifer Ann McGetrick, Kim Raine, Cam Wild

**Background:** Policy influencers shape and develop public policies, including members of sub-national governments, municipal authorities, school boards, large workplaces, and the media. In Canada, little is currently known regarding policy influencers' knowledge, attitudes, and beliefs about chronic disease prevention, despite emerging evidence these psychological factors predict readiness for healthy public policy, as the reorientation of public and private services toward population-level health promotion.

**Objectives:** Using data collected in a repeated cross-sectional pan-Canadian survey, we investigated temporal trends in policy influencers' framing of behavioural versus environmental etiology, individual versus societal responsibility, and healthy public policy readiness across healthy eating, physical activity, tobacco control, and alcohol reduction domains, aiming to help evaluate and inform advocacy efforts by the Alberta Policy Coalition for Chronic Disease Prevention (APCCP) and partners across Canada.

**Methods:** Analyzing responses from over 650 policy influencers in Alberta, Manitoba, and Québec in 2009, 2011, and 2014, we statistically tested change in scales from a previously published factor analysis attributable to temporal trends observed in repeated cross-sectional data collections, computing reliability (Cronbach's  $\alpha$ ) and post-hoc longitudinal differences (MANOVA and Tukey's LSD).

**Results:** Scales demonstrated acceptable reliability ( $\alpha$ >0.76). Post-hoc evaluation indicated a significant multivariate effect of the survey time point in both Alberta (Wilks'  $\lambda$ =0.88; F=3.7, p<0.01) and the comparison provinces (Wilks'  $\lambda$ =0.79; F=3.5, p<0.01), with increasing support for tobacco control, healthy eating policies, and physical activity promotion in Alberta.

**Conclusions:** Policy influencers' knowledge, attitudes, and beliefs about chronic disease prevention improved across survey iterations in Alberta, where APCCP advocacy efforts are contributing to greater enactment of healthy public policies for chronic disease prevention.

What are the implications of your research to inform future policy or practice initiatives? This research provides some of the earliest evidence from repeated cross-sectional surveys indicating that advocacy coalitions can help shift policy influencers' knowledge, attitudes, and beliefs about chronic disease prevention, demonstrating the value of a networked approach to fostering healthy public policy.

Equity and education as means of cancer risk reduction: A focus on average Canadians and vulnerable populations – Dor David Abelman

**Background:** To achieve true health equity, we must take into consideration one of Canada's deadliest categories of disease – cancers. Cancer incidence varies significantly across the country, with social determinants of health playing an important role.

**Objectives:** To explore how an individual can reduce their risk of cancer, why cancer varies significantly across the country, and to recommend policy that can provide better and more equitable outcomes for minority populations (focus on Canadian Aboriginal communities). Applications of health promotion models are discussed.

**Methods:** The Canadian Cancer Society's Cancer Prevention Team undertook an extensive literature review on social determinants affecting cancer incidence. Results were shared on the website cancer.ca/prevention and presented to communities across Canada. This is an adaption of this content for poster form, with an added focus on Aboriginal populations.

**Results:** Aboriginal communities had worse outcomes of cancer and unique risk factors that should be considered in prevention programs. Some significant factors were food security, income, diet, land dispossession, alcohol use, smoking behaviour, and environmental pollution. There is much potential to reduce risk and improve disease outcomes.

**Conclusions:** With improvements in health equity and education, Canadians can enjoy a significant reduction in cancer incidence and risk. Today more than ever we understand that social determinants of health are essential for keeping populations healthy and well. The Canadian Cancer Society and recent literature suggests that applying these principles to cancer, with an equity focus, can be the next big significant improvement to public health.

What are the implications of your research to inform future policy or practice initiatives? Recommendations include: using culturally appropriate health education sources, working with priority population to understand their needs (and unique drivers of risky behaviour), and focusing on social determinants of health to address risk factors more effectively (ex/ food insecurity or pollution on reserve).

# Impact of an alcohol-restrictive policy on unintentional injuries in Wetaskiwin, Alberta –

Diana C. Sanchez Ramirez

Co-author: Don Voaklander

**Background:** It is expected that restricting *times* of alcohol sales reduce availability and opportunities for purchasing alcohol, and consequently decrease alcohol-related harm.

**Objectives:** To explore the impact of the alcohol bylaw 1753-09 on unintentional injuries. This alcohol policy implemented on January 1, 2010 directed that all liquors stores must close by 10:00 pm and that all liquor services cease prior to 10:30 pm in the city of Wetaskiwin, Alberta.

**Methods:** Using provincial health records, this research explored visits to the emergency departments due to unintentional injuries according with the ICD-10-CA. Age-sex standardized incident rates (ASSIRs) of unintentional injuries were calculated for Wetaskiwin pre (2006-2009) and post (2010-2015) implementation of the alcohol bylaw, and compared with the rates in the central zone of Alberta during the same period of time.

**Results:** A significant 18 per cent decrease in ASSIR visits to the emergency department due to unintentional injuries (from pre: 21,238 to post: 17,418 per 100,000 population; p=0.015) was found in Wetaskiwin after the implementation of the alcohol bylaw. In comparison, ASSIRs visits to the emergency department due to unintentional injuries in the central Alberta zone decreased a non-significant 13 per cent during the same period (from pre: 15,924 to post: 13,863 per 100,000 population; p=0.152).

**Conclusions:** Results support the premise that policies restricting times of alcohol consumption can contribute to reduce alcohol-related harm. We found that restricting alcohol trading contributed to decrease visits to the emergency department related to unintentional injuries in Wetaskiwin. Future analysis should explore the impact of this alcohol trading policy in other harm outcomes (i.e., assaults, intentional injuries, etc.).

What are the implications of your research to inform future policy or practice initiatives? This results provide policymakers with evidence to support the implementation of this universal cost-effective preventive intervention in order to decrease alcohol-related harm.

How does proximity to alcohol retailers affect binge drinking in Vancouver, BC? – Results from My Health My Community – Maritia Gully

**Co-authors:** Yumian Hu, Tim Chu, Eleni Kefalas, Sara Forsting, James Broesch, Emily Newhouse, Reka Gustafson, Jat Sandhu

**Background:** Since 2015, changes in BC liquor policy have enabled municipalities to permit wine sales in grocery stores, even if they are less than 1km from another liquor-licensed premise. The City of Vancouver currently limits density of liquor stores and does not permit alcohol sales in grocery stores. Local data from the My Health My Community (MHMC) survey was used to inform discussion on this issue.

**Objectives:** To examine the association between binge drinking and physical proximity to liquor stores and establishments with liquor license (on-premise) in Vancouver, BC.

**Methods:** MHMC respondents aged 19+ years (legal drinking age in BC) with a valid Vancouver postal code were included. Binge drinking was defined as having 5+ drinks on one occasion for men and 4+ for women. Multivariate logistic regression was used to examine the relationship between binge drinking (1+ times per month) and distance to two types of retailers (liquor stores and on-premise, using ©ArcGIS). Models were weighted by age, gender, education and neighborhood, and were adjusted for socio demographic variables.

**Results:** Compared with those who lived within 250m of liquor stores, people who lived 1 km+ away had 45% (95%CI: 29% - 57%) lower odds of binge drinking. For proximity to on-premise, people who lived 500m+ away had 39% (95%CI: 23% - 51%) lower odds of binge drinking, compared to those who lived within 150m.

**Conclusions:** Our local health data suggests that living in closer proximity to liquor-licensed premises may lead to increased binge drinking.

What are the implications of your research to inform future policy or practice initiatives? As the City of Vancouver's jurisdiction enables it to set parameters on the density of liquor-licensed premises, these findings can inform the City's alcohol policy development.

A municipal alcohol policy guide for Nova Scotia municipalities: Speaking the language of communities and municipalities to inspire alcohol policy action – Kate Johnston

Co-author: Gwenyth Dwyn

**Background**: Alcohol consumption is an established public health concern. Municipal Alcohol Policies (MAPs) are proven to be an effective population health approach to reducing alcohol related health burdens. Nova Scotia has taken a unique relationship-oriented approach and has worked to translate best practice alcohol control measures for community and municipal engagement on policy action.

#### **Objectives:**

- 1. Support strong and prosperous communities where moderate and lower-risk alcohol use is the accepted norm
- 2. Create an accessible resource for municipal alcohol policy action
- 3. Establish health staff as trusted policy advisors
- 4. Dedicate health resources to provide practical supports to municipalities to implement alcohol policies.

**Target Groups:** Municipal leaders (elected and staff); Health leaders; Community leaders; Injury Prevention leaders; Police

#### **Activities:**

- Developed a policy document, Progressive and Prosperous, to translate best practice alcohol policy actions and recommendations from health jargon to language accessible to communities and municipalities.
- Working with the Union of Nova Scotia Municipalities, municipal leaders, Nova Scotia Health Authority and the IWK Health Centre to design and implement policy knowledge to practice sessions.
- Partnering with community stakeholders to develop community level policy advocates.

### **Deliverables:**

- Progressive and Prosperous: Municipal Alcohol Policies for a Balance and Vibrant Future (2015).
- Municipal engagement -- knowledge to practice sessions.

What are the implications of your policy or practice initiative to inform future research? Becoming fluent in the day-to-day language and jargon of partners is critical to effective intersectoral collaboration. By taking a relational approach and re-orienting our use of language, we can more effectively strengthen communities to take health action.

Reducing alcohol-related cancer: What can public health advocates, policy makers, cancer charities and researchers do? – Marcia Bassier-Paltoo

Co-authors: John Atkinson, Dannie Steeves, Drew Bethune

**Background:** Alcohol causes cancers of the oral cavity, pharynx, larynx, esophagus, colon and rectum, female breast, liver, and possibly pancreas. In 2010, excessive drinking affected one in four Canadian males and one in ten females aged 15 and older. More than 3 million Canadians drink enough to risk immediate injury and harm.

**Objectives**: Highlight the low awareness of alcohol as a carcinogen amongst the general public and discuss programs and policies that can address this growing public health burden.

**Target Groups:** Session will discuss how to leverage support for effective alcohol control programs and policies specific to public health practitioners, policy makers and cancer charities.

**Activities and Deliverables:** Participants will learn about the public health burden and the societal and individual effects of alcohol. The association of alcohol to several cancers is not well-known among the general public. In a 2015 survey by the Canadian Cancer Society, involving 1.204, respondents, only 28% of Ontario respondents and 30% from Quebec thought that alcohol could cause cancer.

Evidence-based policies will be discussed, including population level policies and access to brief counselling interventions. Initiatives and experience in leveraging support for interventions to reduce the risks of alcohol-related cancers will be highlighted, especially relevant for public health practitioners, policy makers and cancer charities. Cancer charities, public health experts and policy advocates have unique opportunities to enhance awareness, and promote effective interventions through their networks and associations.

What are the implications of your policy or practice initiative to inform future research? Future research should assess the potential to reduce alcohol-related cancers, using evidence-based policies, including minimum pricing, controls on alcohol availability and alcohol marketing, as well as education/prevention and access to brief counselling interventions.

### ORAL PRESENTATION 8 – PUBLIC HEALTH CAPACITY

Wednesday 7 June 13:45-15:30 Room 101

Public health investments in Quebec: Trends over the past 10 years - Mme Julie Fiset-Laniel

Co-authors: Ak'ingabe Guyon, Robert Perreault, Erin Strumpf

**Background:** Quebec is consistently put forward as the Canadian jurisdiction that has the most solid public health infrastructure. In 2015, massive public health cuts occurred in Quebec. Yet, apart from overviews of public health expenditures (CIHI 2015), very few in-depth analyses of Canadian public health investments have been performed by researchers.

**Objectives:** As a first step towards assessing the impact of the 2015 cuts to public health budgets in Quebec, we describe public health investments over the past ten years across Quebec in terms of crude investments, per capita investments and changes in investments relative to inflation.

**Methods:** Our analysis is based on publicly available data from the Quebec Health Ministry, which includes public health program expenses, but excludes physician remuneration and budgets from the Institut national de santé publique. Our analysis is based on available data (2004-2014) and will be further strengthened by upcoming 2015-16 data.

**Results:** We observe a tendency towards disinvestment in public health program expenses which precedes the major 2015-16 cuts: from 2011-12 to 2014-15 public health programs expenses, as a percentage of total health care program expenses, decreased from 2.16% to 2.03%. Furthermore, over the same period, public health program expenses did not keep up with inflation, and relative per capita public health program budgets decreased in 7 of the 16 Quebec administrative regions studied.

**Conclusions:** We observe that disinvestments in Quebec public health programs were already taking place prior to the abrupt 2015 cuts. Such public health disinvestments go against Canadian recommendations (Naylor report, 2003) and current Public Health Systems and Services research evidence

What are the implications of your research to inform future policy or practice initiatives? Our analysis provides an independent academic assessment of public health disinvestments in Quebec over the last decade. It sets the foundation for further research on the impacts of the abrupt 2015 public health budget cuts in Quebec, and for future pan-Canadian comparisons.

# Enhancing healthy public policy capacity at the Montreal Public Health Unit: Lessons from of a multidisciplinary community of practice – Ak'ingabe Guyon

Co-authors: Richard Lessard, Nicole Beaudet, Simon Tessier, Mathieu Masse-Jolicoeur

**Background:** Health promotion's first pillar is the elaboration and promotion of healthy public policy (HPP). High quality interventions in HPP are part of public health accreditation standards (Accreditation Canada, 2016). Yet, best practices and organizational structures that can strengthen public health capacity to promote HPP are seldom documented. In order to improve its HPP interventions, the Montreal Public Health Unit has been leading and evaluating a HPP multidisciplinary community of practice since 2014.

# **Objectives:**

- 1. Increase professional competencies in HPP;
- 2. Improve HPP organizational development;
- 3. Improve the outcomes of HPP interventions led by the Montreal Public Health Unit.

**Target Groups:** Public health practitioners and managers; medical officers of health; health promotion, public administration and political science academics.

**Activities:** The community of practice entails holding a monthly discussion forum; monitoring relevant political sciences, public administration and public health publications; sustaining a network of peers; and carrying out annual process evaluations.

**Deliverables:** This community of practice has developed:

- 1. A framework for analyzing and readjusting the course of HPP interventions;
- 2. An empirical list of practical professional HPP skills;
- 3. A compendium of relevant academic references and practical tools for HPP work in public health.

Process evaluations of the community of practice also reveal high satisfaction among participants, as well as self-reported improved knowledge and skills.

What are the implications of your policy or practice initiative to inform future research? The Montreal Public Health Unit HPP community of practice currently generates high interest from multiple Canadian public health practitioners. Furthermore, it is facilitating the development of case studies of HPP interventions in public health, which are already in use for continuous professional development and post-graduate medical teaching. Future research will allow more in-depth evaluations on the impact of this initiative on organizational development and HPP interventions. This type of practice initiative is likely to support public health organizations in their capacity to fulfill accreditation standards and health promotion mandates.

# **Building evaluation capacity in Ontario public health units – Louise Simmons**

Co-author: Melanie Fournier

**Background:** Public Health Units (PHUs) in Ontario are required to evaluate their programs and services, yet they face many challenges conducting program evaluations. These challenges demonstrate the importance of building evaluation capacity (EC) to support effective program and service delivery in the public health setting.

**Objectives:** The objectives of this research project are to determine effective themes and strategies to strengthen evaluation capacity building (ECB) in Ontario PHUs and to disseminate these effective strategies to the broader public health and evaluation community.

**Methods:** The 34 PHUs who completed an assessment of their PHUs ability to do and use evaluation were eligible to participate in this exploratory mixed method design research project. A call for participation was sent all eligible PHUs and a total of 12 PHUs agreed to participate. Participating PHUs were required to select an ECB strategy (i.e. using a knowledge translation framework to increase the dissemination and utilization of evaluation results), complete an action research project based on this strategy, and submit an implementation plan, progress report and final report to the Project Coordinator. PHUs were also required to re-assess their PHUs ability to do and use evaluation as well as undergo key informant interviews.

**Results:** Ten of the 12 PHUs who agreed to participate in the project at onset actually completed the project and all of its requirements. Regardless of the strategy selected, all ten participating PHUs indicated an increase in EC.

**Conclusions:** This was one of the first research studies to determine effective strategies for building EC in a public health setting and provides a baseline for future studies.

What are the implications of your research to inform future practice initiatives? The findings and tools developed through this research project can be used by other public health units and organizations looking to build their evaluation capacity.

Supporting the use of Continuous Quality Improvement (CQI) in public health units (PHUs) - Madelyn Law

Co-author: Sam Jibb, Nicole Stefanovici, Alex Berry, Meighan Finlay

**Background:** CQI is a process for organizations to improve organizational effectiveness, capacity and the services they provide. The use of CQI is relatively new in PHUs in Ontario. There are no general standards and PHUs are implementing CQI differently.

**Objectives:** This study:

- 1. Describes the current state of CQI in Ontario by surveying PHUs using a validated Ontario-version of the Quality Improvement (QI) Maturity Tool.
- 2. Identifies attributes and drivers that have been consistently shown to support CQI through a scoping review of the literature.

**Methods:** This parallel mixed methods design relied on a collaborative research model that involved academics, PHU professionals and students. Local Site Champions supported implementation of the QI Maturity Tool to all staff within participating PHUs. Data was analysed by academic partners at the PHU and aggregate level. A team of subject matter experts completed a scoping review of the literature, supported by the academic partner and 2 public health librarians.

#### **Results:**

- 34 of 36 Ontario health units participated in the survey, with a 48% staff response rate. Descriptive CQI maturity scores were examined by PHU. Differences in CQI scores were noted based on the structure of the organization.
- 148 articles met the criteria for the scoping review study. Preliminary themes identified were: leadership; training and education; organizational structure; QI culture; team; and funding.

**Conclusions:** The major themes identified through this project could assist PHUs in developing and supporting their CQI maturity.

What are the implications of your research to inform future policy or practice initiatives? Our findings will enable public health practitioners to assess and integrate CQI methods into their work to maximize agency and system capacity and effectiveness. Results will subsequently be used to develop a future research proposal to identify tools, systems and structures that supports CQI practice across all Ontario PHUs.

Relational ethics: A promising approach to address everyday tensions of public health practice – Wanda Martin

Co-authors: Bernie Pauly, Marjorie MacDonald, Tina Revai, Lenora Marcellus

**Objectives:** The purpose of this study is to understand the specific ethical issues and the social processes involved in the experience of ethical uncertainty faced by public health (PH) practitioners as they work to reduce health inequities.

**Methods:** In this constructivist Grounded Theory study, we conducted open-ended qualitative interviews with 32 PH practitioners working in programs that address mental health promotion and prevention of harms of substance use regarding their efforts to reduce health inequities. Data were analyzed using constant comparison methods.

**Results:** PH practitioners, working at the client interface with the system, are often witness to systemic failures to address the determinants of health in any substantive way. Moreover, when they engage with their clients relationally, PH practitioners themselves become vulnerable to the impact of these experiences. Enacting their advocacy role was often difficult because of the stigma associated with substance use and mental health problems. Practitioners felt frustrated by the lack of action on health inequities and by the framing of the few resources available around biomedical ethics, which did not adequately address their ethical issues pertaining to PH practice.

**Conclusions:** Despite increased expectation and opportunities for PH practice to take action on social justice issues, practitioners routinely experience ethical concerns with few organizational resources available to support ethical PH practice. This highlights the need for resources that are specific to their unique concerns. Relational public health ethics as defined by Baylis, Kenny, and Sherwin (2008) emphasizing solidarity and the processes of mutuality, collaboration, and transparency, provides a promising approach for developing PH ethics education and resources.

What are the implications of your research to inform future policy or practice initiatives? PH practitioners facing systemic failures to address determinants of health require strong organizational support for relational practice and for ethical decision-making that is unique to PH practice.

Measurement and collaboration to inform progress on Choosing Wisely Canada recommendations – Sara Grimwood

Co-author: Michelle Parker

**Objectives:** Choosing Wisely Canada is a grassroots campaign to help clinicians and patients discuss unnecessary tests and treatments and make smart and effective choices to ensure high-quality care. To provide a baseline for CWC in Canada, we have collaborated with groups across Canada to report analytical findings and highlight success stories, innovative approaches and facility based initiatives.

**Methods:** Our analyses of CWC recommendations use administrative data to examine primary care, specialist care, emergency care, and hospital care. Coverage varies by recommendation but may include data from Canadian provinces and territories between the years 2006 and 2016. Additionally, partnerships with several organizations across Canada allow us to showcase their CWC findings and successes to date.

**Results:** We analyzed CWC recommendations that cover a range of healthcare settings and found that 10 to 30% of tests and procedures performed are potentially unnecessary. For example, 22% of Canadian women aged 40-49 received a screening mammogram despite being of average risk for breast cancer, and 30% of patients with low back pain had an avoidable imaging scan. Variation between jurisdictions, regions, and facilities was as much as five fold, suggesting that there are opportunities for improvement and reinforces the concerns over resource stewardship. Through strong stakeholder engagement and collaboration, we were able to find exemplar initiatives, innovative approaches, and process changes that have been successful to support peer learning and move beyond data to action.

**Conclusions:** The process for engagement in this large scale, multi-faceted project has been successful and faced challenges – we intend to discuss taking a leadership role to set a baseline for CWC within the context of our Pan-Canadian findings.

What are the implications of your research to inform future policy or practice initiatives? Our findings and partnerships with organizations across the country will help to standardize reporting on CWC to track improvements over time, support evidence based decisions and informed conversations, ultimately contributing to improved quality of care.

# ORAL PRESENTATION 9 – PUBLIC HEALTH AND TECHNOLOGY

Wednesday 7 June 13:45-15:30 Room 204 & 205

Webinars are an effective knowledge translation strategy to build capacity for evidence-informed public health – Emily Clark

Co-authors: Maureen Dobbins, Donna Ciliska, Susan Snelling

**Background:** The National Collaborating Centre for Methods and Tools (NCCMT) hosts an online registry of methods and tools that support the planning, implementation and evaluation of public health policies and practices. Webinar series are one knowledge translation strategy utilized by NCCMT.

**Objectives:** The main objective of the NCCMT's webinar series is to provide a forum for public health professionals to build individual and, in turn, organizational capacity for evidence-informed public health and decision making.

**Target Groups:** Webinars are widely promoted and reach a large audience across Canada. Participants include public health nurses, health promoters, policy analysts, dietitians, nutritionists, epidemiologists and program managers/directors.

**Activities:** The Spotlight webinar series features monthly presentations by developers of methods and tools. User stories for the featured resource are sought to demonstrate real-world examples of the resources application to policy or practice. Another webinar series features evidence-informed decision making methods and tools tailored to specific content areas in public health (i.e. injury prevention, mental health).

Webinars are ninety minutes long and include participant engagement through polling and chat-based question and answer sessions. Survey questions gauge participants' opinions on the applicability of the featured resource to their own practice as well their planned next steps.

**Deliverables:** High quality, actionable methods and tools to enable evidence-informed public health are disseminated to end users. Access to Registry pages on featured resources increases by an average of 167% following webinars. Participants gain knowledge and increased capacity for evidence-informed public health practice.

What are the implications of your policy or practice initiative to inform future research? Evaluation of webinar data helps shape recommendations for implementing this knowledge translation strategy to build capacity for evidence-informed public health practice. This online form of learning is an effective teaching strategy with high satisfaction from participants since remote access allows time and cost savings. Increasing collective awareness of high quality methods and tools effectively streamlines efforts by public health organizations to implement evidence informed practices.

# Engaging public health decision makers with interactive Twitter infographics disseminating actionable messages from systematic reviews – Olivia Marquez

Co-authors: Lina Sherazy, Maureen Dobbins

**Background:** Health Evidence<sup>™</sup> hosts an online repository of 4,800+ quality-rated reviews evaluating effectiveness of public health interventions. Social media presents new interactive opportunities to disseminate actionable findings to global public health audiences.

**Objectives:** To dissemiante actionable messages from high-qualtiy systematic reviews through a 10-week infographic Twitter campaign.

**Methods:** A 10-week Twitter campaign posted two interactive infographics each week, disseminating an actionable message from a methodologically-strong systematic review. Each infographic highlights the Canadian relevance of the health topic/issue and presents an actionable message with supporting review results. Tweets include a link to the review abstract on healthevidence.org and campaign hashtag "HE\_Infographic". Twitter and Google Analytics will compare engagement of sharing actionable messages with infographics versus Tweets without infographics.

**Results:** The @HealthEvidence Twitter account, launched in 2009, has 6,300+ global followers. Preliminary campaign data from Google Analytics reveal an average 265% increase in access to a review on the day-of Tweeting compared to average daily views the month prior. Twitter Analytics show a single infographic Tweet will be viewed by up to 2,200+ followers, and can engage up to 60 people through an average 8 retweets, 6 likes, and 13 link clicks. Compared with text only Tweets, Tweets with infographics attract an average 732 more views and reveal a 26% improvement in engagement and 48% increase in link clicks.

**Conclusions:** Disseminating actionable findings from systematic reviews via engaging infographics that integrate statistical, graphical, and text descriptions of data increase public health decision makers' engagement with review-level evidence, versus text only social media posts.

What are the implications of your research to inform future policy or practice initiatives? This campaign provides insight on how social media can transform how research evidence is disseminated to Canadian and global public health audiences. Lessons learned offer effective strategies for writing and creating engaging infographics, and for utilizing social media as a knowledge translation mechanism to increase access to public health evidence.

Capacity building in knowledge translation and evidence-informed public health decision making using online learning – Jennifer Salerno

Co-author: Maureen Dobbins

**Background:** Since 2012, the National Collaborating Centre for Methods and Tools (NCCMT) has offered free online educational modules within a 'Learning Centre' to respond to and address the needs of our target audience. Currently, the NCCMT offers twelve modules that support the seven steps of evidence-informed decision making (EIDM) for public health practice.

**Objectives:** The objectives of the presentation are to highlight module use and the impact of the modules on learning for users who complete pre and post-testing.

**Methods:** The content, practical examples and assessments of each module were developed collaboratively between McMaster faculty and NCCMT staff, and pilot tested among public health practitioners. Quantitative and qualitative evaluation data are collected for users who access the modules. Outcome data include demographics, knowledge, self-efficacy, and user satisfaction.

**Results:** As of September  $30^{th}$ , 2016, the modules have been accessed by 5,118 learners; 44% of whom accessed the modules multiple times. NCCMT's modules are being used by public health professionals engaged in various roles and positions within Canada (61%) and >75 countries worldwide. The modules are used predominately by students in public health and nursing undergraduate and graduate programs (37%), and public health practitioners (25%). The modules have increased user's knowledge (10 of 10 certificate modules, p < 0.001 for all) and self-efficacy (10 of 12 modules, p < 0.05). User feedback is positive and accreditation of the modules is currently underway.

**Conclusions:** NCCMT's online educational modules are beneficial to users. The global reach of the modules is substantial, and the positive feedback demonstrates our ability to facilitate learning to public health professionals using an online format.

**Implications:** Online learning is an effective strategy to build capacity among public health practitioners, and NCCMT's Learning Centre helps to cultivate EIDM in public health practice and policy worldwide.

Connecting culture: A review on the relationship between organizational culture and organizational change – Kristin Read

Co-authors: Leanne Bekeris, Maureen Dobbins

**Objectives:** This review aims to explore the relationship between organizational change and organizational culture, specifically the role of culture in the implementation of change efforts that promote and support evidence-informed decision making within health care organizations.

**Methods:** A systematic search of five electronic databases was conducted to identify articles published on organizational change from January 2000 to July 2014; the results were then refined to identify articles with a focus on organizational culture. Two reviewers independently screened the articles for relevance using predefined inclusion/exclusion criteria. Following screening, articles were grouped based on research design and

critical appraisal was performed by two independent reviewers where appropriate. Data was extracted from each article and a thematic analysis conducted. Findings from the analysis have been summarized in a narrative.

**Results:** Several major trends were identified throughout this body of literature including: 1) organizational culture has been defined in many ways; 2) there are a variety of approaches for measuring organizational culture; and 3) there are a multitude of models, frameworks, and theories that either focus on or incorporate organizational culture. Several concepts of organizational culture emerged in relation to organizational change, including: leadership, communication, values, collaboration, teamwork, organizational commitment, environment, experience, organizational learning, organizational support, resistance, time, flexibility/stability, sub-cultures, and assumptions.

**Conclusions:** This research highlights the complex relationship between organizational culture and organizational change and identifies specifics concepts of culture that need to be considered within change initiatives.

What are the implications of your research to inform future policy or practice initiatives? The concepts identified in this review can help organizations conduct assessments as well as develop organizational change initiatives, taking into account key factors related to culture. Organizations considering implementing an evidence-informed approach to program planning and decision making, may find the identification of concepts related to culture helpful in planning change initiatives.

# The Carrot Rewards app: Multi-sectoral partnerships and new technologies drive effective public health practice – Lauren White

**Objectives:** Carrot Rewards, an incentive-based mHealth application was developed by a unique multi-sectoral coalition. Program partners include the Public Health Agency of Canada, British Columbia (BC) and Newfoundland and Labrador (NL) Ministries of Health, leading health charities, as well as several important private sector companies. The purpose of this presentation will be to describe the unique multi-sectoral approach that was used to deploy financial health incentives on a population scale.

**Target Groups:** Carrot Rewards leverages the pervasiveness of smartphone technology in Canada (73% and growing) and loyalty point program membership (over 90% of Canadians) to provide health and wellness information as well as promote walking among BC and NL residents. Carrot Rewards targets individuals 13 years and older who have a valid BC or NL postal code.

**Activities:** Carrot Rewards was developed to reward Canadians with their favourite loyalty points for learning about health and wellness, engaging in 'stepping stone' health behaviors (e.g., tracking, goal setting, barrier identification) and walking more (by striving for tailored, graded daily step goals).

**Deliverables:** This presentation will allow delegates to: 1) compare the various roles and contributions of the multi-sectorial partners; 2) assess the benefits of multi-sectoral coalitions for improved health impact; 3) appraise the scale and significance of a national wellness rewards program in Canada; 4) estimate the possible health impact of incentive programs and the impact Canada-wide; and 5) discuss pay-for-performance systems related to health promotion.

What are the implications of your policy or practice initiative to inform future research? By exploring the effectiveness of new partnership models to improve the impact of health promotion programs, delegates will gain a better understanding of the unique contributions offered through strategic partnerships – including how these partnerships helped create a more sustainable model for public health interventions.

# ORAL PRESENTATION 10 – FIRST NATIONS, INUIT, AND MÉTIS COMMUNITIES

Wednesday 7 June 13:45-15:30 Room 200 C1

Post-secondary school supports for Indigenous students in Canada: A scoping review – Bridget Irwin

**Background:** As part of the reconciliation process and in response to the Truth and Reconciliation Commission's Calls to Action, there is a need to understand how Indigenous students are being supported and how they can be better supported at post-secondary institutions. This is important because education and educational systems are key social determinants of Indigenous health.

**Objectives:** This research aimed to understand from the peer-reviewed literature what types of PPI are recommended and/or implemented to support Indigenous students attending post-secondary education in Canada.

**Methods:** A scoping review using the Arksey and O'Malley (2005) framework was conducted of the academic literature on existing or recommended supports for Indigenous post-secondary students in Canada. 31 peer-reviewed articles were collected using inclusion and exclusion criteria and search strategies that included database searching and hand searching. Data from the articles were extracted into a table. Data collection and analysis was an iterative thematic process.

**Results:** The scoping review found 47 PPI because some articles described more than one PPI. Three overall types of PPI were found: those that addressed academic issues, non-academic issues, and a mix of academic and non-academic issues. The PPIs also targeted different populations: Indigenous students, non-Indigenous students, faculty and staff, and community members. While some PPIs addressed incorporating Indigenous ways of knowing, no comprehensive efforts exists.

**Conclusions:** Supporting post-secondary Indigenous students is a collaborative process involving numerous groups. PPIs must continue to address both academic and non-academic issues and improve the integration of Indigenous ways of knowing into academic institutions.

What are the implications of your research to inform future policy or practice initiatives? This scoping review is a preliminary scan; it can inform an environmental scan. It can also serve as evidence for developing affirmative action policies and improving programming and supports for post-secondary Indigenous students in Canada.

School food programs in Indigenous communities: An instrument of decolonization? – Mary McKenna

Co-authors: Christopher George, Christine Pentland

**Background:** An increasing number of Indigenous communities in Canada are taking positive steps to improve food in schools. Working together, and using a combination of traditional and non-traditional approaches, their innovations are improving the health of young people while making progress towards decolonization.

**Objectives:** Assess experiences from Indigenous communities to improve school food through the lens of decolonization

**Target Groups:** Groups working to improve and support improved school food in Indigenous communities, program evaluators

**Activities:** Stories collected through interviews with representatives from 11 communities from across Canada about school food, revealed numerous actions, including: improved the nutritional quality of food; offered school food programs at no cost; increased the availability of culturally appropriate foods; involved students in hunting, fishing, gathering, preparing, and preserving food; educated students about food and health and used food to help students learn about Indigenous languages, traditions, and culture; partnered with communities to run school-based programs and used schools as a base for community programs, and harnessed the expertise of health professionals, community members, Elders, and others to support healthy school food.

**Deliverables:** All initiatives contributed to decolonization – providing communities with a sense of accomplishment, identity, and self-esteem; strengthening the schools and communities; and helping to reinforce sovereignty within their territory. The availability and consumption of healthy food increased, as did school attendance. Documented decreased risk of Type 2 diabetes among students occurred in two communities.

What are the implications of your policy or practice initiative to inform future research? The success of these initiatives provides a positive model for Indigenous communities as part of their ongoing cultural reawakening. Their accomplishments make the case for:

- 1) providing additional resources to expand initiatives, and
- 2) including decolonization in the design of future research and evaluations.

## The Nuluaq Project – Mapping Inuit community-based food security initiatives – Lauren Goodman

Co-author: Shylah Elliott

**Background**: Food insecurity is a critical issue for Inuit throughout Canada. With up to 69 percent of Inuit households living with food insecurity, the impacts on the health and well-being of the population are severe.

**Objectives:** There are many community-based initiatives that are playing a critical role to improve Inuit food insecurity. The Nuluaq Project (nuluaq.itk.ca) was developed for policy makers, researchers, community members and the general public to highlight and promote the work of these important community-based initiatives; facilitate partnerships and improve coordination between initiatives; bring attention to the food insecurity situation in Inuit communities; and help guide decisions and inform policy work in the area.

**Methods:** The Nuluaq Project was developed by the Inuit Food Security Working Group. The working group is coordinated by Inuit Tapiriit Kanatami, the national representational organization for Inuit in Canada. It includes representatives from the Inuit Lands Claims Organizations or a designate – Inuvialuit Regional Corporation, Nunavut Tunngavik Incorporated, Nunavik Regional Board of Health and Social Development, Nunatsiavut Government as well as representatives from Pauktuutit Inuit Women of Canada, the National Inuit Youth Council and the Inuit Circumpolar Council – Canada.

**Results:** This project features the first online interactive mapping tool of Inuit community-based food security initiatives. Visitors to the site can explore the location of initiatives, learn detailed project information and make connections with initiative representatives. Complimentary content is also available on the website, including information on Inuit food security, important resources and funding opportunities.

**Conclusions:** The Nuluaq Project is a unique project developed to share information on food security initiatives that are being implemented in Inuit communities.

What are the implications of your research to inform future policy or practice initiatives? The Nuluaq Project was developed to identify gaps in programming at the community level. Additionally, it has the ability to connect initiative representatives to share best practices.

"Mama, I eat junk food. I sneak it!" Uptake of public health messaging and priority setting practices in urban Indigenous family contexts – Elizabeth Cooper

**Background:** Indigenous females experience disproportionate rates of chronic and infectious diseases, violence and a myriad of other public health concerns. Although many interventions have targeted Indigenous health, disparities continue to be disproportionate in comparison to the general population.

**Objectives:** This research explored the uptake of public health messaging and priority setting among Urban First Nations and Metis women and girls (age 8-12) in Winnipeg, MB.

**Methods:** This qualitative study used an asset-based decolonizing, participatory action methodology. A series of three programs were offered spanning a seven week period. Participants gathered together weekly to explore

the question: what do you do to be happy, healthy and safe and how do you try to make sure your girls grow up to be happy, healthy and safe. Between September 2015 and March 2016, 60 people participated in this project (women n-=24, girls n=36).

**Results:** Weekly themes were determined in collaboration with participants. These included nutrition, neighbourhood safety, oral hygiene, mental health and self-care. Although participants identified themes as important, data showed significant gaps in health messaging uptake in all areas of health and wellbeing.

**Conclusions:** Women and youth are hopeful about the future, but are uncertain about the best way to ensure health and safety within family contexts. Participants identified the need for first-aid training, improved oral health outreach services, nutritional support, and mental health support. They saw all of these as essential to combat experiences, or potential experiences, of violence.

What are the implications of your research to inform future policy or practice initiatives? There is a desire for programming and training opportunities for family units conducted in a culturally safe way. This research demonstrates some of the priorities that urban Indigenous families identified, and tangible ways to improve health outcomes of Indigenous women and girls.

# Providing Aboriginal dental services –Including a new funding model – Nancy Kennedy

**Background:** Ottawa Public Health built a dental clinic at the Wabano Centre for Aboriginal Health to provide preventive and treatment services. Priority clients are aboriginal children and youth and, as capacity allows, aboriginal adults. This clinic will pilot a new funding model.

**Objectives:** This session will outline the project from determining the aboriginal oral health needs, developing the concept with our aboriginal partners, aligning to the provincial strategy to improve aboriginal oral health, creating a unique business model based on a revenue stream from other dental plans, to launching the clinic in the summer of 2016.

**Target Groups:** This session will be of interest to those working with aboriginal groups, health care and oral health professionals and provincial and municipal leaders exploring new ways to establish dental services with this high needs group.

**Activities:** Aboriginal adults and children are covered under various dental plans including, among others the Non-Insured Health Benefits (NHIB) funded by the federal government for First Nations patients. Revenue received through the NHIB and other dental plans provides the opportunity to reduce the annual provincial operating costs of the programs which is currently 100% funded through the Province of Ontario.

**Deliverables:** This session will outline how this project:

- 1. Engaged the aboriginal community to develop an aboriginal dental logo and other resources;
- 2. Increased the cultural competency of our dental staff;
- 3. Developed and evaluated a new revenue stream funding model.

What are the implications of your policy or practice initiative to inform future research? To demonstrate that provincial government funding to establish aboriginal dental clinics could be used to expand the reach of the program, through revenue streams obtained from other insurance and benefit plans.

#### ORAL PRESENTATION 11 – PUBLIC HEALTH PROMOTION AND COLLABORATION

Wednesday 7 June 13:45-15:30 Room 200 C2

From knowledge to action: Increasing mental health supports for Ontario's at-risk Métis population – Lisa Pigeau

Co-authors: Wendy Stewart, Cody Carmody, Jennifer Kong, Storm Russell

**Background:** Little is known about mental illness and addictions among Métis people in Canada, nor how Métis receive and access mental health and addictions services. Such information is essential for effectively targeting resources, reducing risk, and improving mental health outcomes for Métis.

#### **Objectives:**

- Address known knowledge gaps in mental health and addictions among Métis.
- Promote evidence-based decision-making in mental health and services for Métis.
- Improve mental health and addictions services and outcomes for the Ontario Métis.

Methods: A collaborative study involving the Métis Nation of Ontario (MNO) and the Institute for Clinical Evaluative Sciences (ICES) linked health data from five provincial databases to MNO Citizenship Registry data (n≈14,000). This research was complemented by a community-based study of provincial Métis mental health and addictions needs conducted to inform MNO's programming and the Mental Health and Addictions for Ontario's Open Minds, Healthy Minds Strategy.

**Results:** Results showed that Métis Ontarians suffer from significantly higher rates of mental disorders than the general provincial population, including higher prevalence of bipolar disorder, mood and anxiety disorders and drug related disorders, and higher incidence of schizophrenia and bipolar disorders.<sup>3</sup> Results from the community-based research highlighted specific service gaps and programming needs for the Métis, many of whom live in more rural and remote parts of the province.

**Conclusions:** Action-focused, collaborative research involving Indigenous, academic, and government partners has the potential to significantly increase our knowledge of key factors impacting mental health and wellness outcomes among Métis and other Indigenous populations, and the effectiveness of mental health programming for these at-risk populations.

What are the implications of your research to inform future policy or practice initiatives? Informed by the results of this work, MNO is has expanded its range of mental and addictions supports to include both telehealth and community-based programming which aims to increase access for MNO clients to timely mental health assessments, psychiatric and other mental health services and supports.

Engaging Indigenous community participation when conducting research using health administrative data – Sarah Funnell

**Background:** Chapter 9, the Tri-Council Policy Statement on Ethical Conduct for Research (TCPS-2) describes ethical research with Indigenous people. First Nations principles of OCAP® (ownership, control, access, possession) further highlight the significance of engagement and governance. How these key documents apply to studies using administrative health data is less clear.

#### **Objectives:**

- Collaborate with the Canadian Indigenous Nurses Association (CINA) in the design, delivery and evaluation
  of an end-of-life care research project.
- Apply Indigenous community based research processes to a study using administrative health data.

<sup>3. (2015)</sup> Mental Health and Addictions in the Métis Nation of Ontario: Technical Report.

 Establish a trusting partnership between research scientists and CINA that is mutually beneficial while acknowledging UNDRIP (United Nations Declaration on the Rights of Indigenous Peoples).

**Methods:** *Two-eyed Seeing* is an approach which recognizes the importance of both Indigenous ways of knowing and Western knowledge in understanding and interpreting the meanings of data considered within research. Used in the development of the research agreement, protocol, ethics application, and Terms of Reference for this study, this concept is also aligned with the principles of the TCPS-2, Chapter 9 in working to meet the unique needs of this project.

**Results:** The CINA Research Committee and an advisory team of nurses, physicians and administrators have developed a research agreement that will guide the use of administrative health data to study Indigenous end-of-life care.

**Conclusions:** Engaging Indigenous people is essential to research that focuses on issues of Indigenous health, and which are derived data from health administrative databases. Such engagement will ensure that cultural perspectives are central and reflected in the research.

What are the implications of your research to inform future policy or practice initiatives? This research will contribute to best practices in using health administrative data to describe issues of health for Indigenous people.

#### BC Observatory for Population and Public Health: The new kid on the block - Kate Smolina

**Background:** The BC Observatory for Population and Public Health (Observatory) was established in 2015 in response to a recommendation from the Population and Public Health Surveillance Plan for British Columbia (BC). It is a partnership between the BC Ministry of Health, BC Centre for Disease Control (BCCDC), First Nations Health Authority, and the five Regional Health Authorities to address existing surveillance gaps in BC.

**Objectives:** The Observatory's initial focus is to provide collaborative leadership in the development of provincial and regional surveillance capacity in non-communicable diseases, injuries, risk and protective factors, and environmental health. This includes support to Chief Medical Health Officers (CMHOs) in regional health authorities to systematically report on their populations' health status, as required by BC's *Public Health Act*.

**Target Groups:** The Observatory will provide support to provincial, regional, and local public health staff working in surveillance, program planning, and policy-making. Over time, the Observatory will have a greater public presence, providing access to data to support local and provincial governments, communities, non-governmental organizations, and academia.

**Activities:** The Observatory is in early start-up phase. Staff include core resources situated at the BCCDC and epidemiologist resources embedded in the regional health authorities, following a hub-and-spoke model. Once fully operational, key functions of the Observatory will include: generating population health situation analyses, surveillance and intelligence; knowledge translation and exchange; working with local and regional partners to support evidence-based decision-making; collaborating with provincial, national and international partners.

**Deliverables:** Key deliverables for the Observatory over the next five years include: annual regional health status reports; development of methodological hub for standardized surveillance tools and approaches; and timely, informative, relevant and actionable surveillance products.

What are the implications of your policy or practice initiative to inform future research? The Observatory will seek to establish formal collaborations with the research community to support the application of novel approaches to routine public health surveillance activities.

Quality improvement as a health promotion opportunity to re-orient the health system – Julie Kryzanowski

Co-authors: Sharon Clarke, Lara Murphy

**Background:** The Ottawa Charter calls for health promotion (HP) action to re-orient health systems' focus beyond its responsibility for healthcare services. Health equity is a key domain of healthcare quality improvement (QI), but it is often overlooked within QI frameworks. QI presents a strategic opportunity for HP practitioners to influence healthcare thinking beyond improving clinical services to creating systems that improve population health and health equity outcomes.

**Objectives:** In the Saskatoon Health Region, an interdepartmental team led by Population and Public Health and First Nations and Métis Health and Representative Workforce engaged in a 90-day QI initiative for patient safety for the purpose of making explicit links between equity, patient-centredness and safety, including cultural safety, and other dimensions of healthcare quality.

**Target groups:** The target for this particular initiative was senior leadership within a healthcare service organization, modeling an approach to QI applicable to HP practitioners working within healthcare systems.

**Activities:** Activities included modifying existing QI tools and developing and testing new tools to measure, monitor and improve cultural safety and health equity; providing cultural competency education and training for staff and trainees; promoting awareness of cultural safety among patients/clients and families; and monitoring awareness of equity and cultural safety among healthcare providers and organizational leaders.

**Deliverables:** Health equity and cultural safety were included in the QI initiative as domains of quality and safety in the healthcare system. New tools included knowledge translation tools, experience surveys and interview guides to collect social determinants of health data. HP engagement served to shift perspectives and dialogue among senior leadership, and references to the terms "health equity" and "cultural safety" increased throughout the initiative.

**Implications:** Re-orienting healthcare systems to prioritize population health and health equity outcomes is an ongoing process. QI can be a strategic and potential area of leverage for HP perspectives.

#### Applying quality improvement within health promotion – Julie Kryzanowski

Co-authors: Candace Bloomquist, Tanya Dunn-Pierce

**Background:** Health promotion (HP), as a sub-sector of the health system, lacks a common lexicon with the broader healthcare system. Because clinical service terminology does not apply directly to their work, HP practitioners struggle to articulate what it is they do and the unique role they play within the health system. Within systems strategically investing resources to achieve the 'Triple Aim' —better population health, improved patient care, and lower system costs — it is critical that HP communicate the value of its work.

**Objectives:** Without quality improvement (QI) frameworks for HP, how can health systems successfully navigate the transition from a focus on providing healthcare to optimizing population health? This question prompted a journey of discovery within the HP department in Saskatoon Health Region. HP leadership sought to understand who HP serves, what services HP practitioners provide, and are creating tools for planning, assessing, evaluating, and communicating the work HP does.

**Target groups:** The learnings from this ongoing journey are relevant to HP departments and health systems attempting to scope the broad vision of their work, to understand where to invest or target services offered.

**Activities:** HP has been exploring the context of the department's work, starting by defining "partnership," identifying services provided to partnerships by HP practitioners to see where resources are allocated, and mapping the processes for these services to identify QI opportunities.

**Deliverables:** HP leaders adapted QI tools to capture the concepts of their work, adapting and generating new tools where necessary. Strategic plans were determined for all partnerships in which HP played an anchoring

role. The team is now working on indicators and knowledge translation tools to evaluate and communicate impact.

**Implications:** Rather than be stalled by a lack of alignment with traditional health system models, it is urgent that HP adapt relevant frameworks to improve and communicate the value of their work.

Patient advocacy: Building positive networks and relationships between patients, families, and healthcare professionals in Alberta – Angelica Martin

**Background:** Open Arms Patient Advocacy Society (OAPAS) is dedicated to empowering patients and professionals to encourage their active collaboration in managing health concerns. OAPAS works with patients and health professionals to support positive relationship-building through direct system navigation, advocacy, and health education.

#### **Objectives:**

- 1. Identify barriers to accessing health care. Determine how to reduce or remove these barriers to improve the patient's experience and health-seeking behavior.
- 2. Apply the basic principles of patient advocacy identified in the workshop to support patients in addressing their concerns and building positive relationships and experiences through appropriate navigation and communication with medical professionals.
- 3. Highlight the most common reasons why patients may seek support from individuals or groups outside of their personal (family, friends) or primary care networks.

**Target Groups:** Health Care Professionals (Physicians, Nurses, Paramedical, etc.), Policymakers, Patients, Public Outreach Groups.

**Activities:** Participants will be given the opportunity to analyze, discuss and critique three (3) case studies based on actual cases that Open Arms Patient Advocacy has been involved with.

**Deliverables:** By the end of the presentation, audience participants will be able to critically examine many common and contrasting themes among a variety of patient experiences that arise across several demographics. These themes include the cultural specificity of treatment plans, patient and staff approaches, barriers in communication, and any co-occurring internal and external psychosocial factors, to name a few. Participants will also be able to extrapolate OAPAS' Alberta-based data to compare it within a wider Canadian context.

What are the implications of your policy or practice initiative to inform future research? Open Arms Patient Advocacy describes key tools and positive behavioural approaches for successful system navigation and patient-professional interaction. This is achieved by illustrating common themes in patient experiences that indicate important patterns of previously unmet needs, as reported by individuals and groups of patients across various demographics and medical diagnoses in Alberta.

## ORAL PRESENTATION 12 - MENTAL HEALTH AND PHYSICAL HEALTH PROMOTION

Wednesday 7 June 13:45-15:30 Room 301

Everybody Present: Using mindfulness meditation to promote positive mental health among university students – Paula Gardner

Co-author: Kaitlyn Kerridge

**Background:** Despite the growing mental health crisis among the post-secondary student population in Canada and the health promoting promise of mindfulness and meditation to help to address this problem, the recognition and integration of contemplative practices as effective public health interventions is limited. While campuses ramp up their efforts to support and treat students in crises, there is a simultaneous need for 'upstream' preventative approaches to the problem.

**Objectives:** To examine the impact of an in-class meditation practice on university students and the classroom environment.

**Methods:** The study employed a cross-sectional survey design. Participants were undergraduate students in health sciences at a mid-size Canadian university. The intervention consisted of an in-class group meditation at the start of every lecture over a 12-week semester led by the professor. Data was collected via anonymous self-reported questionnaires that included both scale-rated and open-ended questions.

**Results:** A total of 435 students completed the questionnaires. Most participants were female (79%) and under the age of 24 (88%). Results show the in-class meditation helped to reduce student anxiety and enhance their listening and attention skills. Findings also demonstrate the intervention created a classroom environment that was calm, conducive to participation, and where students felt a sense of connection to each other and the instructor.

**Conclusions:** In summary, the in-class meditation practice had a positive impact on student's mental health and learning. Taking time at the beginning of each class to pause and pay attention to the present moment helped students cope with daily life and prepared them for a successful learning experience.

What are the implications of your research to inform future policy or practice initiatives? Findings from this research will enhance current efforts to address the mental health crisis on campuses across Canada by offering an 'upstream', public health approach to the problem.

Measuring positive mental health in Canada: Psychometric analyses of the Mental Health Continuum – Short Form – Heather Orpana

Co-author: Gayatri Jayaraman

**Background:** The public health community is increasingly focusing on positive mental health (PMH) and salutogenic approaches to promoting health. In order to monitor PMH in the population, valid and reliable measures of this concept are required. The Mental Health Continuum – Short Form (MHC-SF) has been included on the Canadian Community Health Survey (CCHS) – Mental Health and annual cycles, but has not yet been validated in the Canadian context.

**Objectives:** The purpose of this study is to examine whether the MHC-SF is a valid and reliable measure of PMH for Canadian adults.

**Methods:** Confirmatory factor analysis (CFA) of a three-factor model was conducted in in MPlus with data from the CCHS 2012 Mental Health Cycle and the CCHS 2011-2012 annual cycle. Correlations of MHC-SF subscale scores with both positively and negatively associated concepts such as life satisfaction and psychological distress were conducted as tests of criterion-related validity.

**Results:** Consistent with the conceptual model of emotional, psychological and social well-being, a three-factor model of PMH was confirmed through CFA on two samples. Four correlated errors on the social well-being scale needed to be included in the model in order to attain adequate model fit (CFI 0.962; RMSEA 0.027; SRMR 0.029). Correlations between subscales and related concepts were significant and in the anticipated directions.

**Conclusions:** This study supports the factor structure of the MHC-SF as a three-factor model of PMH, once correlated errors of social well-being were included. However, we suggest caution when using the social well-being scale, which had poorer functioning than emotional and psychological well-being, as demonstrated by the correlated errors, higher levels of missing data, lower Cronbach's alpha, and weaker correlations with related concepts. Because of the importance of social well-being in a comprehensive measure of PMH, further work to measure this concept is warranted.

What are the implications of your research to inform future policy or practice initiatives? This study demonstrated that the MHC-SF can be used in the Canadian context to measure PMH. Further measurement development should focus on social well-being.

Service needs of families in Ontario with a youth with mental health and/or addictions issues - Kendyl Dobbin

Co-authors: Roula Markoulakis, Staci Weingust, Emily Levitt, Anthony Levitt

**Objectives:** To investigate the characteristics and service needs of families with a youth age 30 or under with mental health and/or addictions (MHA) issues across Ontario.

**Methods:** A cross-sectional survey was sent to Ontario adults ages 35-65 who identified caring for a youth age 30 or under. The survey was completed online via the SurveyMonkey® platform.

Results: There were a total of 840 respondents, of whom 259 identified caring for a youth with a MHA issue and completed the MHA and service use components of the survey. The youth issues most frequently reported by the 259 caregivers of youth with MHA concerns included academic difficulties (49%), frequent outbursts of anger/rage (41%), and difficulty sleeping (40%), with 75% reporting three or more concerns. The most frequently reported youth diagnoses were Depression (30%), ADHD (27%), and Generalized Anxiety (21%). The youth's motivation to participate in MHA care (54%), service costs (42%), and the availability of appropriate service options (38%) presented the most frequently reported barriers to accessing services. Families indicated numerous types of assistance that could be beneficial in finding appropriate MHA service, such as case management or primary healthcare providers, however, Navigation was seen as the most helpful (77%) and important (86%) assistance.

**Conclusions:** A large proportion of families in Ontario are in need of assistance accessing MHA services. Families across Ontario are experiencing complex needs and strains associated with youth MHA needs as well as numerous barriers to care.

What are the implications of your research to inform future policy or practice initiatives? Understanding the nature and extent of youth MHA issues, service needs, and family preferences across Ontario can inform the development of navigation services and other innovations that address families' needs and lend vital support for accessing services within the complex youth mental health and addictions care system.

# Development of a mental health module for the COMPASS system: Improving youth mental health trajectories – Karen Patte

**Co-authors:** Joanna Henderson, Guy Faulkner, Tara Elton-Marshall, Catherine Sabiston, Chad Bredin, Kate Battista, Robert Mann, John Cairney, Scott T. Leatherdale

**Background:** The COMPASS study is an ongoing cohort study that uses a hierarchical and longitudinal quasi-experimental design to evaluate how changes in school programs, policies, and built environment characteristics are related to changes in multiple health behaviours over time. COMPASS was not originally designed to address mental health, although it is now consistently listed by schools as a top prevention priority.

**Objectives:** To fill this research-to-practice gap, this project aimed to expand the functionality of COMPASS by developing the tools necessary to continually evaluate and improve school-based programs, policies, and resources for the advancement of student mental health. Building on the existing COMPASS infrastructure, a mental health module (MH-M) will include 3 components:

- 1. Student mental health questionnaire (MHq)
- 2. School-level mental health program and policy scan tool (MHpp)
- School-specific mental health knowledge exchange tool (MHkte)

**Methods:** Tool development and testing will involve: consultations with researchers, clinicians, and public health and school board representatives; pilot testing in 9 Ontario secondary schools; student and school administrator focus groups to ensure tool comprehension, appropriateness, and comprehensiveness; and automation and incorporation into the COMPASS system.

**Results:** The finalized MH-M will be presented, along with consultation, pilot testing, and focus groups outcomes. Discussion will include the lessons learned in developing short yet comprehensive tools to meet

varied research, public health, and school interests, while remaining practical for large school-based research projects.

**Conclusions:** Extending COMPASS to include mental health rapidly fills an existing practice gap in school-based prevention programming.

What are the implications of your research to inform future policy or practice initiatives? As COMPASS is now considered the international gold standard in school-based research, and most mental health programs remain untested, this tool will expectedly prove invaluable for the advancement of youth mental health, a key strategic priority of national and provincial stakeholders.

The associations between neighbourhood built characteristics and physical activity among adults: A systematic review of Canadian evidence – Brenlea Farkas

Co-authors: Daniel Wagner, Karen Tang, Gavin McCormack

**Background**: Many Canadian adults do not achieve the recommended levels of physical activity (PA) necessary to achieve optimal health. Furthermore, inactivity places a significant financial burden on the Canadian healthcare system, garnering significant policy attention. Evidence to date suggests that the built environment is an important correlate of PA. Reviews of evidence to date include mostly studies that have been undertaken in countries other than Canada.

**Objectives:** To undertake a systematic review of Canadian-based studies investigating the relations between the built environment and PA.

Methods: A search for primary peer-review quantitative studies among five scientific databases was undertaken (Medline, SPORTDiscus, CINAHL, Environment Complete, and TRID). Eligible studies included a Canadian sample, adults (≥18 years of age), an objective measure of the built environment, an objective or self-reported measure of PA, and estimated the association between the built environment and PA. Data from eligible studies were extracted and synthesized. Two reviewers participated at each stage of the review process.

**Results:** From 4120 articles retrieved, 50 articles were selected for data extraction. Of the included studies, the majority included data from Ontario (n=15) followed by Quebec (n=13), British Columbia (n=11), Alberta (n=9), and other (n=6). Publication dates ranged from 2002-2016. All studies included an objective measure of the built environment (i.e., geographical information systems, street audits). Most studies (n=42) included self-reported PA, while fewer (n=10) included an objective measure of PA (i.e., pedometers, accelerometers). Preliminary results suggest that overall levels of walkability is a consistently found correlate of PA.

**Conclusions:** The neighbourhood built environment is an important correlates of physical activity among Canadian adults.

What are the implications of your research to inform future policy or practice initiatives? New insight from this review into the associations between built characteristics and PA will inform local planning and policy decisions within Canada.

Bridging the social cohesion and network schools of social capital: Neighborhood social capital, network social capital and mental health – Valerie Haines

Co-authors: John Beggs, Jeanne Hurlbert

**Background:** Public health scholarship on social capital developed into two separate schools: a social cohesion school studying social capital inhering in places and a network school studying social capital inhering in personal networks. Researchers have begun to bridge these schools by theorizing or exploring empirically how neighborhood social capital, network social capital and health relate.

**Objectives:** This study's objective was to explore the value of a Portes-based conceptualization and measurement of network social capital in this bridging work by examining how neighborhood social capital (norms of reciprocity) and network social capital (closure, range, embedded support resources, and embedded instrumental resources) influence depressive symptoms.

**Methods:** We conducted a multilevel analysis of data from a 1995 telephone survey of 500 residents of 32 neighborhoods in a U.S. city. Stage one assessed whether neighborhood norms of reciprocity had a contextual effect on depressive symptoms. Stage two assessed whether network social capital had an independent effect on depressive symptoms. Stage three assessed whether forms of network social capital that had independent explanatory import mediated the association of neighborhood norms of reciprocity and depressive symptoms.

**Results:** Neighborhood norms of reciprocity had the expected negative contextual effect. Three forms of network social capital negatively affected depressive symptoms in a model including this form of neighborhood social capital. The effect of neighborhood norms of reciprocity became non-significant in this model. One embedded instrumental resource accounted for this mediating effect.

**Conclusions:** Our findings document the added theoretical and empirical value of a broader conceptualization and measurement of network social capital than is typical in public health.

What are the implications of your research to inform future policy or practice initiatives? Our findings carry implications for health-promotion interventions targeting neighborhoods and personal networks by highlighting the need to expand searches for mechanisms explaining why neighborhood social capital matters beyond neighborhood characteristics and processes and by corroborating calls for intervention strategies that target instrumental resources embedded in personal networks.

## **ORAL PRESENTATION 13 – PUBLIC HEALTH PROTECTION**

Wednesday 7 June 13:45-15:30 Room 302

The West African Ebola epidemic: Response of countries to the World Health Organization's international travel recommendations – Wendy Rhymer

**Co-author:** Rick Speare (posthumous)

**Objectives:** To determine congruence between the international travel recommendations of the West African Ebola Public Health Emergency of International Concern (PHEIC) and those publicly available in signatory State Parties of the International Health Regulations (IHR) (2005) to foreign travellers who had recently visited countries with widespread Ebola transmission.

**Methods:** Google search engine was used to find information detailing Ebola-related travel regulations for the 196 signatory State Parties to the World Health Organization (WHO) IHR (2005). Official government sites were identified first, then travel and news websites. When limited, conflicting or no information was found, an email inquiry was sent to the country's embassy. If no applicable information was gathered, or if conflicting reports weren't clarified, that search was halted.

**Results:** Data was available on 187/196 (95.4%) of the IHR (2005) State Parties and entry of foreigners, who departed from a country with widespread transmission of Ebola, was prohibited in 23.0% (43/187). Of those 144 countries that did not ban entry, exclusions or significant restrictions were applied by 15 (8.0%), including requirement for a medical certificate documenting freedom from Ebola (4.3%, 8/187), mandatory quarantine (3.2%, 6/187) or other restrictions (0.5%, 1/187).

**Conclusions:** There was varying agreement amongst countries in relation to the IHR (2005) international travel recommendations of the 2013-2016 Ebola outbreak. 31.0% (58/187) countries exceeded or disregarded these recommendations. More research is needed to clarify and minimize these deviations.

What are the implications of your research to inform future policy or practice initiatives? Health policies need to be scientific evidence based. When countries implement international travel regulations which are different

and more restrictive than those of the WHO, a justification of actions is required. This research shows that countries need to reflect on policy-making for public health emergencies, and the WHO should consider how to address future deviations.

Responding to Zika: a cross-jurisdiction scan of policies and provisions for public health surveillance of emerging infectious diseases in Canada – Shivoan Balakumar

Co-author: Margaret Haworth-Brockman

**Background:** Infectious disease surveillance in Canada is a shared responsibility between federal, provincial and territorial governments. Information moves formally and informally across jurisdictions and within jurisdiction-specific parameters of public health and privacy legislation. In the case of an emerging disease such as Zika, these systems are pushed and legislation is tested as national and international actors become increasingly interested in the collection, use and disclosure of personal health information.

Following the spread of Zika across the Americas, Canadian Chief Medical Officers of Health requested an environmental scan on jurisdiction-specific legislation, regulations and authorities for public health surveillance of Zika and emerging infectious diseases. This presentation will share key results and themes.

**Objectives:** To document alignment and variation in public health policies and authorities across jurisdictions, and to help inform decision-making for surveillance and privacy during international outbreaks and epidemics.

**Target Groups:** Senior public health officials and policy makers (e.g. Medical Officers of Health); epidemiology and surveillance units; policy analysts and researchers; public health students.

**Activities:** Information was collected iteratively and formatively with key expert contacts in every jurisdiction. Consultations were conducted in parallel with reviews of jurisdiction-specific legislation and policies. Verification was collaborative and iterative prior to publication and dissemination of the final product.

**Deliverables:** The results of the scan are held on a user-friendly online knowledge sharing platform. A short analysis of key concepts and learnings was created.

What are the implications of your policy or practice initiative to inform future research? When responding to emerging public health events, differing legislative frameworks can make collecting, coordinating and communicating information across jurisdictions challenging. The results from this scan are intended to facilitate cross-jurisdiction dialogue and coherence in public health policy and decision making. This scan may inform future research and inquiry into the dynamics and implications of public health and privacy legislation on government surveillance and response to emerging diseases and outbreaks.

From promise to practice: A case study of inter-sectoral latent tuberculosis infection care at a refugee health facility in Manitoba – Shivoan Balakumar

**Co-authors:** Dione Benjumea, Kimberley Hiebert, Jo-Anne Lutz, Alison Bertram-Farough, Pierre Plourde, Margaret Haworth-Brockman, Marissa Becker, Yoav Keynan

**Background:** In Winnipeg, non-complex Latent Tuberculosis Infection (LTBI) care is currently provided at select primary care sites through the Winnipeg Regional Health Authority Integrated Tuberculosis Services (WRHA ITBS). One of these sites, BridgeCare Clinic, delivers LTBI care to government-assisted refugees as part of regular care.

The experience of the WRHA ITBS staff, confirmed in a report by Manitoba Health, indicates that practitioners at LTBI primary care sites perform as well as Chest Medicine specialists at achieving good treatment outcomes (>75% completion rates). A case study on LTBI management at BridgeCare Clinic was conducted to share stories and promising practices.

**Objectives:** This presentation will share knowledge of promising practices for LTBI care in a primary care facility for refugees based on the decentralized inter-sectoral model for non-complex LTBI care in Winnipeg, Manitoba.

**Target Groups:** Program Managers of public health TB programs, as well as TB program nurses, primary care physicians and nurses, nurse practitioners and Medical Officers of Health.

**Activities:** In partnership with WRHA ITBS and BridgeCare Clinic staff, information was gathered through observation, consultations, and secondary data analysis. Processes, structures, and LTBI care pathways were mapped and analyzed in relation to current literature to identify barriers and facilitators for LTBI care. The case study includes lessons on the importance of patient-centered care, providing education and interpretation services for clients, the promise of nurse-delivered care, and screening based on Interferon Gamma Release Assay (IGRA).

**Deliverables:** Technical and plain language written products; as well as audiovisual knowledge translation products, to support TB program planners.

What are the implications of your policy or practice initiative to inform future research? Management of LTBI is a key strategy for eliminating TB, however acceptance and completion rates of LTBI treatment are usually low, and public health actors in Canada are searching for the best approaches for key populations. This case study will provide lessons learned that can be adapted in other large urban settings.

## A comparison of common cluster detection methods for infectious diseases - Liam W. Rémillard

Co-authors: Paul Belanger, William Pickett, Anna Majury, Kieran Moore

**Background:** John Snow may have been one of the first epidemiologists to use "dot mapping" when inferring the Broad Street pump to be the cause of the London cholera outbreak of 1854; however, long since gone is the practice of identifying disease clusters through one's own subjective visual interpretation. At present, there is a multitude of statistical methods for disease clustering within the field of spatial epidemiology. What is lacking in the literature is a rigorous assessment identifying when to leverage each method.

**Objectives:** The objective of the present study is compare and contrast the use of several common cluster detection methods when applied in parallel to a sample dataset.

**Methods:** The sample data used for this study includes Ontario STI cases of chlamydia diagnosed between 2005-2010. Cases were geocoded from identified case data, and age- and sex-standardized rates were calculated for each Ontario CSD and CT. Three cluster detection statistics were applied to the sample dataset annually from 2005-2010. The cluster detection methods explored in this study include one test of spatial autocorrelation (local indicators of spatial association (LISA)), and two scanning window tests (Kulldorff's circular spatial scan statistic, and Tango and Takahashi's flexible scan statistic).

**Results:** Both the circular and flexible scan statistics identified similar primary cluster locations; however, the flexible scan statistic provided a more precise representation of the shape of the clusters. The most likely cluster identified through both scanning window tests often correlated with one of the multiple cluster locations identified through LISA.

**Conclusions:** Scanning windows should be used when the objective of the research is to identify the location and magnitude of the single most likely cluster, whereas LISA should be leveraged when the objective is to identify all possible cluster locations.

What are the implications of your research to inform future policy or practice initiatives? This research identifies when to use which cluster detection method.

# A time-trend cluster analysis of sexually transmitted infections in Ontario – Liam W. Rémillard

Co-authors: Paul Belanger, William Pickett, Anna Majury, Kieran Moore

**Background:** As the incidence of sexually transmitted infections (STIs) in Ontario continues to increase beyond what may be expected from annual population growth, there is a need for epidemiologists to adapt current surveillance methods to better understand what is driving the incidence rates.

**Objectives:** The objective of the present study was to Identify if STIs exert spatio-temporal patterning, and if STIs are becoming increasingly structured over time.

**Methods:** Using the 2006 Census boundaries, a unique geography combining both census tracts (CT) and census subdivisions (CSD) was developed. Ontario STI cases of chlamydia, gonorrhea, and syphilis diagnosed between 2005-2010 were geocoded from identified case data, and age- and sex-standardized rates were calculated for each Ontario CSD and CT. To assess global autocorrelation trends, the Moran's I statistic was calculated for each STI annually. Local indicators of spatial autocorrelation (LISA) were also leveraged to identify localized clusters for each of the respective STIs. Lastly, Kulldorff's cylindrical scan statistic was applied to identify the most likely spatio-temporal cluster location for each STI.

**Results:** This research suggests that STIs are not spatially random with each exerting deferring degrees of spatial autocorrelation in Ontario. Although syphilis cases are becoming increasingly clustered between 2005-2010, both chlamydia and gonorrhea are becoming more diffuse. Results also identify the presence of regions with excess risk.

**Conclusions:** In contrast to chlamydia and gonorrhea, the increasingly clustered nature of syphilis may benefit from future geographically-targeted interventions.

What are the implications of your research to inform future policy or practice initiatives? Maintaining spatially invariant interventions may be the best approach for chlamydia and gonorrhea; however, syphilis interventions should be geographically-targeted.

From rhetoric to reality: Advancing human rights within Canada's response to the HIV epidemic - Rod Knight

Co-author: Jean Shoveller

**Background:** Violations of human rights have been shown to negatively affect health at the individual and population levels (with the corollary – advancing human rights contributes to improvements in health); however, many actors suggest the global "progress" in addressing human rights issues is insufficient. Much of the criticisms link with a purported disconnect between rhetoric and follow-through regarding human rights-based approaches to HIV/AIDs initiatives, as well as how these approaches tend not to result in achieving justice. Nevertheless, there are few empirical investigations in this area.

**Objectives:** The objective of this paper is to identify how issues pertaining to human rights are addressed (e.g., rhetorically; ideologically; discursively) within the National Composite Policy Index documents submitted to the United Nations by Canada from 2008-14.

**Methods:** Drawing on policy and content analysis techniques, we analysed governmental and civil society responses in Canada's UN reports in 2008, 2010, 2012 and 2014 to identify how human rights are considered, positioned and protected.

**Results:** Our findings identify how governmental stakeholders tend to advance a human rights discourse that ostensibly operates as 'universal' (e.g., through reference to the Canadian Charter of Human Rights and Freedom, Section 15). Conversely, civil society responses provide key counter claims indicating that specific populations are either: (i) not sufficiently represented by the 'universal' protections (e.g., sex workers; incarcerated populations; people living with HIV); or (ii) that there are a set of laws/policies that systematically burden specific populations in ways that violate their human rights (e.g., the criminalization of: sex work; HIV non-disclosure; effective harm-reduction interventions).

**Conclusions:** These findings identify some of the rhetorical strategies (e.g., political or ideological rationale; interpretations of evidence) used to address human rights issues pertaining to HIV/AIDS in Canada 2008-14.

What are the implications of your research to inform future policy or practice initiatives? These findings are of importance to informing how both governmental and civil society entities can more meaningfully engage with human rights-based approaches within responses to the HIV epidemic.

#### **ORAL PRESENTATION 14 – PUBLIC HEALTH PLANNING**

Wednesday 7 June 13:45-15:30 Room 303

**Developing a health impact assessment of Halifax's Centre Plan: An emerging role for public health –** Valerie Blair

Co-authors: Ali Shaver, Shelley Boutilier

**Background:** Municipal planning departments can contribute to population health through careful attention to housing construction, green spaces, transportation networks and land use for food related activities. In Halifax, the Centre Plan presents an opportunity to promote health and address health inequities through municipal planning policy. This window of opportunity has allowed Public Health to:

- Evaluate the potential health effects of Halifax's Centre Plan;
- Shape an evolving conversation about land use in Halifax and potential influence on the social determinants of health;
- Continue to build upon a relationship between Public Health and the Municipality.

### **Objectives:**

- To inform decision-makers about the Centre Plan's potential to create healthy communities and decrease health inequities.
- To review the Centre Plan and the possible health impacts related to mobility, food systems, sustainability and housing.
- To provide recommendations about how to increase the health-promoting potential of the new plan and mitigate any unanticipated negative health consequences.

Target Groups: Municipal planners and decision makers involved in the Centre Plan process.

**Activities:** The Health Impact Assessment will involve:

- Reviewing the Centre Plan, identifying polices related to health, assessing the potential impact and providing strategies to mitigate negative consequences or enhance positive impacts;
- Building public health capacity to complete a review of the Centre Plan polices in relation to health and health inequities; and
- Discovering processes to embed health in the Centre Plan policies based on literature review, quantitative assessment of impacts, and expert opinion.

Deliverables: A health impact assessment report on the Centre Plan policy framework

# What are the implications of your policy or practice initiative to inform future research?

- Stronger relationship between Public Health and the Halifax Municipality
- Approved policies that will positively contribute to health outcomes and reduce health inequities
- Establishment of an emerging role for Public Health in conducting health impact assessments
- Increased understanding of the influence of the Municipality in the areas of healthy communities

My Health My Community: Informing partnerships outside public health to guide healthy public policy and local-level planning – Maritia Gully

Co-authors: Salman Klar, Eleni Kefalas, Patricia Daly, Victoria Lee, Jat Sandhu

**Background:** The My Health My Community (MHMC) survey was developed to better understand how lifestyle, environment and neighbourhood characteristics affect community health and well-being at a local level. Online and through field outreach, over 33,000 responses were collected across Vancouver Coastal (VCH) and Fraser Health (FH) authorities during 2013/14.

**Objectives:** To incorporate MHMC data within a set of tools to engage municipal and community stakeholders and provide information at a granular level (e.g. neighbourhood) meaningful for community planning.

**Methods:** MHMC data were aggregated at the most granular level that was statistically feasible for presentation of a consistent set of indicators. Advisory groups of public health staff, leadership and municipal planners were consulted on developing common templates for dissemination.

**Results:** Municipal profiles (31 areas) and neighbourhood snapshots (100 areas) summarized data within domains of lifestyle behaviours, built environment, community resiliency, health status and primary care access. Results were benchmarked against health authority and regional district values. An online atlas provides an interactive view on 70 indicators (120 areas). Preliminary feedback suggests that these tools are facilitating collaborative partnerships between public health partners municipal and community stakeholders.

**Conclusions:** MHMC is enabling VCH and FH to better support their communities and local governments in prioritizing areas under their jurisdictions that will have the greatest potential benefit for reducing chronic disease and injury.

What are the implications of your research to inform future policy or practice initiatives? MHMC will continue to inform healthy public policy and planning across health regions and can be used as a model in other jurisdictions for engaging local governments.

Barriers and supports to physical activity in adults following residential relocation: A mixed methods study – Grazia Salvo

Co-authors: Bonnie M. Lashewicz, Patricia K. Doyle-Baker, Gavin McCormack

**Objectives:** This sequential mixed methods study addresses two specific research objectives:

- Estimate the associations between self-reported changes in walking and cycling for transportation and overall physical activity (PA) and changes in objectively-assessed neighbourhood walkability (Walk Score®), and;
- 2. Describe perceived individual, social and environmental barriers and supports to PA following neighbourhood relocation.

**Methods:** In 2014, a random sample of n=1023 Calgary adults completed an online survey capturing PA and sociodemographic characteristics. Participants also reported whether they had relocated neighbourhood in the past 12 months and whether their PA had changed since the relocation. N=63 reported relocating to a new neighbourhood. Fisher's exact test and ANOVA were used to estimate the associations between Walk Score® change and PA change. Of the n=63 participants, n=14 completed telephone-based semi-structured interviews. The interviews captured qualitative data regarding the barriers and supports to PA that participants experienced after relocating neighbourhood.

**Results:** Despite not reaching statistical significance (p<.05), self-reported reductions in transportation cycling and walking were associated with relocating to a neighbourhood that had a lower Walk Score®. Self-reported change in overall PA was not associated with neighbourhood relocation. Preliminary qualitative findings suggest that perceptions of aesthetics, functionality and safety of physical surroundings were important barriers and

facilitators of neighbourhood PA. Further, social relationships with individuals and pets and participant's attitude toward car use were also considered important in supporting PA.

**Conclusions:** Our preliminary qualitative findings help to explain why changes in transportation cycling and walking were observed following participants' relocation to less walkable neighbourhoods. Specifically, the interplay of family structure, pet ownership, attitudes towards car use, and the built environment before and after relocation appear to contribute to changes in PA.

**Implications:** Our study will inform urban and transportation policy for improving the supportiveness of neighbourhood built environment for PA.

# The Rapid Risk Factor Surveillance System (RRFSS) – 15 Years of "filling in the gaps" to inform local public health decision-making – Michael King

**Background:** Large national health surveys, such as the Canadian Community Health Survey (CCHS), paint an excellent picture of population health in Canada and in its provinces/territories. However, these surveys can leave gaps in the evidence at the local community level. There are geographic gaps, as samples are often unable to provide representative estimates at finer geographies. Gaps in content can arise when a unique issue of local public health importance is not covered by the survey. And timeliness gaps develop when an issue emerges faster than a large survey can respond to and provide data on it.

**Objectives:** The Rapid Risk Factor Surveillance System (RRFSS) aims to fill the geographic, content and timeliness gaps that national health surveys cannot address to better inform public health planning at the local level.

**Methods:** RRFSS is a collaboration between numerous health regions, currently all in Ontario, and the Institute for Social Research (ISR) at York University. It is a repeated cross-sectional telephone health survey using a dual-frame (i.e., landline and cellphone) random digit dialing (RDD) sample. Data are collected in 4-month cycles.

**Results:** RRFSS has been in continuous operation since 2001, making it the longest-running local public health survey in the world. It is tremendously flexible, providing each participating organization with options to select the sample size and design, survey specifications and questions that best meet both their information needs and their budget.

**Conclusions:** With the ability to focus on unique local public health issues, to profile rural areas or urban neighbourhoods, and to deliver data just 8 weeks after data collection, RRFSS is an effective way to fill in the gaps left by larger national health surveys.

What are the implications of your research to inform future policy or practice initiatives? Increased access to locally-relevant surveillance data can improve public health decision-making.

# So how's that plan going? A framework for measuring health and equity impacts of a municipal active transport plan – Josh Marko

**Co-authors:** Nazeem Muharjarine, Cora Janzen, Jasmine Hasselback, Daniel Fuller, Don Cook, Cory Neudorf, Michael Schwandt

**Background:** In June 2016, the City of Saskatoon approved an Active Transportation (AT) Plan. This is a comprehensive land use and infrastructure plan to develop a cycling and pedestrian network for all ages and abilities, which incorporates city planning, design, education and policy components. A framework for monitoring health effects of the plan's implementation, including differential impacts and effects on health equity, is sought by public health partners.

**Objectives:** In partnership with the City of Saskatoon and academic researchers, Saskatoon Health Region has developed a framework to monitor health behaviours and outcomes of the AT Plan's implementation.

**Target Groups:** The AT Plan envisions increased AT usage throughout the population of Saskatoon. The health monitoring framework will include analysis by neighbourhood socioeconomic areas, gender, age and other characteristics, allowing for the identification of potential inequities.

**Activities:** The framework will monitor (1) the built environment, (2) health behaviours and (3) health outcomes. (1) The City of Saskatoon will provide information on built environment interventions such as bicycle and pedestrian infrastructure. (2) Health-related behaviours such as physical activity and transportation mode will be assessed through the Canadian Community Health Survey and local Household Travel Surveys. (3) Health outcome data will be gathered on emergency department encounters and hospital admissions, as well as injury data from Saskatchewan Government Insurance.

**Deliverables:** This presentation will share process and outcome indicators, data sources selected, and baseline measures. We will discuss the developmental process of this framework, a unique opportunity for collaboration across sectors (health, planning, transportation, police, university).

What are the implications of your policy or practice initiative to inform future research? This framework will add a public health perspective to monitoring of the AT Plan, promoting a Health In All Policies approach and providing valuable public health data beneficial for program planning.

The process of developing an active transportation and health indicators report for Halifax – Alison Shaver

Co-author: Sara Kirk

**Background:** As the Transportation Association of Canada notes, most municipalities lack basic information on Active Transportation – leading to difficulty in justifying projects and measuring progress. The Public Health Agency of Canada's research found that *lack of evidence* was deemed by stakeholders to be a barrier to our effectiveness in advancing AT in our communities. The development of an AT Indicators report for the Halifax region will help inform decisions, measure progress and support key projects.

Objectives: Identify issues and trends to inform the development of evidence-based policies

- Establish a baseline and, when data are available, trends
- Identify gaps and/or areas with insufficient data

**Methods:** A working group, with representation from health, transportation, universities, advocacy groups, police, and recreation has collaborated to develop Halifax's first AT and Health Indicators Report. The work began with forming an understanding amongst all members of AT and related issues like health, sustainability and economic benefits. The creation of a logic model informed indicator selection. Using available data, an easy to read report will be developed (anticipated release is April 2017).

**Results:** Many sectors, orders of government, organizations working within and outside the region will benefit from the report. In addition, the working group has developed suite of tools and resources that can be used in other municipalities interested in developing their own indicators report.

**Conclusions:** Using collaborative partnerships and engaging knowledge products allows research to become fundamental in effectively shaping actions across governments and sectors.

## What are the implications of your research to inform future policy or practice initiatives?

- Increased awareness about AT and population health
- Tools and resources developed that can be applied to future data collection efforts within the region and across Nova Scotia
- New relationships built and existing ones deepened. Interest among partners about opportunities for future collaboration.

#### ORAL PRESENTATION 15 - PUBLIC HEALTH AND SUBSTANCE USE

Thursday 8 June 11:00-12:30 Room 304-306

Reducing the risk of overdose and intervening to save lives in Ottawa: Increased and coordinated access to take-home naloxone – Cynthia Horvath

Co-authors: Rebecca Potter, Jenna Bennett, Morgan Dalgleish, Jackie Kay-LePors, Kira Mandryk, Aideen Reynolds

**Background:** In 2016, Ontario's Ministry of Health and Long Term Care (MOHLTC) launched a program to expand availability of naloxone through Ontario pharmacies making naloxone available at no cost to clients. This expansion had implications for Ottawa Public Health (OPH) in terms of the need for consistent messaging for people accessing naloxone in Ottawa, where since 2012, OPH has provided take-home naloxone to 230 people who use injection drugs, and more than 90 overdoses have been reported back to OPH as reversed with naloxone.

**Objectives:** Conduct a survey to assess: local pharmacy awareness of the provincial naloxone program; pharmacists' confidence to provide overdose teaching to clients including overdose assessment and response, and naloxone administration; learning needs of pharmacy staff and interest in OPH capacity building in overdose prevention and naloxone.

Target Groups: All Ottawa-based pharmacies.

**Activities:** OPH partnered with the local Pharmacy Association to develop a needs assessment survey tool. Over a one-month period, OPH conducted the survey by phone with 200 pharmacies in the Ottawa area.

**Deliverables:** This initiative increased collaboration among local pharmacies and public health. Positive outcomes included: majority of the 200 pharmacies surveyed indicated that the phone call (survey) was helpful and contributed to pharmacists' knowledge of the provincial naloxone program; OPH provided tailored information to fill gaps identified through the survey; OPH is pursuing potential pharmacies interested in becoming needle exchange partners. Finally, results may be of interest to the MOHLTC to improve their provincial naloxone program.

What are the implications of your policy or practice initiative to inform future research? This initiative highlights the need for public health and pharmacy collaboration in order to maximize the reach with effective and consistent key messages around naloxone and overdose prevention. The design may be of interest to public health units looking to expand coordination with pharmacies.

Evaluation of the Take Home Naloxone pilot in BC Corrections; Recommendations for naloxone program improvement and implementation in Canadian prisons – Sonya Ishiguro

Co-authors: Lindsay Pearce, Diane Rothon, Lauren Mathany, Margot Kuo, Jane Buxton

**Background:** People who are incarcerated are at an increased risk of drug-related death in the first two weeks post-release due to loss of drug tolerance. Naloxone is a life-saving medication that reverses opioid overdose. In July 2015, the BC Take Home Naloxone (THN) program began training incarcerated individuals at-risk to administer naloxone and providing a THN kit to individuals upon release at two BC Corrections facilities. In 2016, the expansion of the BC THN program in Provincial and Federal correctional facilities was identified as a key recommendation to mitigate the number of overdose deaths among this vulnerable population.

**Objectives:** To share findings from the evaluation of the pilot THN corrections program to inform program improvement and guide implementation in Canadian prisons.

**Target Groups:** Public health professionals, policy makers, health care and corrections administrators, public health and prison nurses and educators.

**Activities:** A program logic model was developed. An evaluation was conducted using take home naloxone program ACCESS database and focus groups and interviews with health care staff at the two pilot correctional centres. The facilitators asked open-ended questions to stimulate discussion, which was recorded and transcribed. The data was organized into themes and coded based on the research questions. Divergent and convergent views and methodologies between the facilities were identified and explored.

**Deliverables:** Recommendations were developed including suggestions how to strengthen nurse training, enhance awareness of incarcerated individuals, and develop program specific training materials and to provide education to correctional officers. The report has been shared with key stakeholders and study participants to support the improvement and implementation of THN programs in British Columbia.

What are the implications of your policy or practice initiative to inform future research? Knowledge generated from this evaluation can be used by regions throughout Canada interested in improving and implementing THN programs in Provincial and Federal correctional facilities.

Beyond informed consent: Ethical dilemmas in a clinical trial testing the effectiveness of injectable opioid assisted treatment for long-term opioid dependence – Kirsten Marchand

Co-authors: Daniel Steel, Eugenia Oviedo-Joekes

**Background:** The issue of whether long-term opioid dependence undermines the capacity of individuals to voluntarily consent to clinical research delivering heroin assisted treatment has been extensively debated.

**Objectives:** This presentation discusses this dilemma in the context of a recent clinical trial testing the effectiveness of injectable hydromorphone and diacetylmorphine treatment for people with long-term opioid dependence.

**Methods:** SALOME (Study to Assess Longer-term Opioid Medication Effectiveness) was a double-blind, non-inferiority clinical trial comparing the effectiveness of injectable hydromorphone to diacetylmorphine for 202 chronic opioid dependent people not benefitting from conventional treatments. Conducted in Vancouver (Canada), SALOME represents an opportunity to reflect further on the dilemma faced by researchers wherein there was no guaranteed provision of these needed treatments post-trial.

**Results:** Researcher accountability was informed through a community consultation process, which led to the development of innovative strategies (e.g., informed consent quiz) that supported the ethics and informed consent process. Despite these efforts, the main ethical dilemma was beyond informed consent, and reflected a general problem that arises when badly needed medical therapies can only be accessed via participation in clinical research.

**Conclusions:** The central issue related to conducting clinical research with injectable diacetylmorphine or hydromorphone treatment for long-term opioid users is beyond whether they are able to provide voluntary informed consent. Rather, the dilemma is in finding ethical solutions that address the underlying problem of needed treatment that is only accessible through participation in research, while not prohibiting such research altogether.

What are the implications of your research to inform future policy or practice initiatives? This debate is not unique to addictions research and has implications for public health researchers relating to informed consent and also to finding ethical solutions that address the underlying problem of needed treatment.

Treatment effectiveness of hydromorphone and diacetylmorphine and its relationship with gender in the **SALOME clinical trial** – Heather Palis

**Co-authors:** Kirsten Marchand, Daphne Guh, Suzanne Brissette, Kurt Lock, Scott MacDonald, Scott Harrison, David Marsh, Martin Schechter, Eugenia Oviedo-Joekes

**Background:** Clinical trials of treatments for severe opioid use disorder consistently suggest that treatment outcomes rarely differ by gender. Nevertheless, it is important to consider how men and women perceive the treatment they receive as having an impact on their outcomes.

**Objectives**: The present study aims to explore perceptions of treatment effectiveness among men and women receiving supervised injectable opioid assisted treatment.

**Methods:** The Study to Assess Longer Term Opioid Medication Effectiveness (SALOME) was a phase III, double blind clinical trial based in Vancouver. SALOME tested the non-inferiority of injectable hydromorphone to injectable diacetylmorphine for the treatment of severe opioid use disorder. Baseline characteristics and sixmonth treatment outcomes were analysed by gender. Participant perceptions of treatment effectiveness were analyzed using an inductive approach.

**Results:** At baseline women had higher rates of HIV (22.6% vs. 11.4%), lifetime sex work (83.9 % vs. 22.1%), and significantly worse health compared to men. After six-months of treatment, the only outcome that differed by gender was physical health, men having a significantly lower symptom score (10.78 vs. 13.62, p<0.05). Themes surrounding perceptions of treatment effectiveness were similar for men and women, the most common of which were improved health and improved quality of life. Descriptions surrounding these themes however differed by gender.

**Conclusions:** While there were few differences in tested outcomes by gender, the open-ended comments revealed unique perceptions of treatment effectiveness. Combined with standardized measures, collecting participant perceptions of treatment effectiveness can provide insights to improve communication and decision-making between patients and providers and overall enhance patient satisfaction with treatment.

What are the implications of your research to inform future policy or practice initiatives? The systematic use of information collected from participants has strong clinical significance, and can work to ensure treatment services are designed to effectively meet the needs of individual patients.

Evaluation of Mainline Needle Exchange: Implications for Atlantic Canada's harm reduction landscape in the context of a changing and growing opioid epidemic – Caroline Ploem

Co-authors: Susan Kirkland, Diane Bailey, Katerina Dikaios

**Background:** In operation for 25 years, Mainline is one of two needle and syringe programs (NSPs) in mainland Nova Scotia. In contrast to larger centres, Atlantic Canada's harm reduction landscape is very conservative —e.g. limited access to NSPs, low threshold MMT, and naloxone; no supervised injection sites or community detox centres.

# **Objectives:**

- 1. Document program operations and impacts, as well as current and emerging challenges and needs;
- 2. Generate points for consideration/recommendations to increase positive impacts and outcomes;
- 3. Consider the findings within the Atlantic's broader harm reduction landscape and the changing/growing opioid epidemic.

**Methods:** Qualitative and quantitative data was collected from three main sources: (1) Key epidemiological, program and policy documentation; (2) Mainline's de-identified electronic record system; and (3) Key informant interviews with staff, clients and partners.

**Results:** Mainline's impact on the mental, emotional and physical health and wellness of a stigmatized and vulnerable population who use injection drugs is far-reaching and life-saving. Benefits to the broader community

are also evident. In addition to reducing the risk of exposure to HIV/HCV/other STBBIs, the results underscore increased levels of health and safety, as well as increased knowledge, advocacy and community mobilization. The most notable challenges were related to funding and systemic barriers. The findings yield a number of internal, external and systemic considerations for moving forward.

**Conclusions:** The demand and need for effective harm reduction services has increased markedly over the years, and continues to increase. A more comprehensive, evidence-based package of harm reduction initiatives is needed to promote the health, safety and well-being of people who use drugs in Atlantic Canada.

**Implications for policy/practice:** This research, along with data on the status of Atlantic Canada's harm reduction landscape, provides useful information for moving toward equitable access to health promotion and disease prevention, within an integrated population health/harm reduction approach.

Canada's pain epidemic: Musculoskeletal health as a public health priority – Wanda Lee MacPhee

Co-author: Michael Heitshu

**Objectives:** Musculoskeletal disorders, including low-back and neck pain, are both directly and indirectly, a significant public health concern:

- A significant contributor to inactivity
- Lower income Canadians face a higher prevalence, and a higher burden, including challenges in accessing care and securing or holding employment
- Back pain is key driver for opioid prescribing, with associated risks

The CCA is one of five health professions that are signatories of Canada's Joint Statement of Action to Address the Opioid Crisis.

This session will provide an introduction to the chiropractic profession, and explore musculoskeletal conditions from a public health perspective and the importance of the role of the public health community in building awareness of the importance of a better approach to pain management in Canada. Public health initiatives to promote access to evidence-based approaches to prevention and treatment are particularly important where socio-economic barriers exist.

**Target Groups:** Public health audience including administrators, policy makers, researchers, governments, students and healthcare professionals among others.

Activities: Panel supported by a PowerPoint presentation, followed by moderated discussion.

#### **Deliverables:**

- Greater awareness among attendees of the burden and implications of musculoskeletal disorders
- Discuss the role of intersectoral approaches to managing musculoskeletal disorders from a public health perspective
- Discuss the policy and program implications of the federal Joint Statement of Action to Address the Opioid Crisis

What are the implications of your policy or practice initiative to inform future research? This session will explore these issues from a public health perspective and the importance of the role of the public health community in responding. Understanding the true impact from a population health point of view could be meaningful in how we support the musculoskeletal health of Canadians could have important policy implications. Public health authorities can play an essential role in building awareness of the importance of a better approach to pain management in Canada. However, more research is needed to fully understand the full breadth of the crisis.

## **ORAL PRESENTATION 16 - PUBLIC HEALTH EQUITY**

Thursday 8 June 11:00-12:30 Room 101

Toward a health equity lens: from the theoretical to the practical – Marjorie MacDonald

Co-authors: Bernie Pauly, Wanda Martin, Kathleen Perkin, Susanna Caxaj, Simon Carroll, Phuc Dang

**Background:** In the Equity Lens in Public Health research project that explored integration of an equity lens in public health (PH) policy and practice, we conducted a narrative review of theoretical perspectives on development of health inequities or promotion of health equity. We are developing a theoretically-informed health equity lens to guide planning of equity interventions.

#### **Objectives:**

- Describe theoretical perspectives on producing and reducing health inequities;
- Critique these in terms of how they can inform health equity interventions; and
- Theorize a meta-theoretical perspective grounded in complexity theory that provides an integrating framework as the basis for a health equity lens.

**Methods:** We conducted a systematic literature search of seven data bases to identify theoretical perspectives on health equity, followed by hand searches in key journals. Each article was assessed for inclusion and a set of orienting questions was used to guide data extraction.

**Results:** We identified five theory clusters from different disciplinary traditions:

- 1. material/economic;
- 2. critical/feminist;
- 3. social epidemiology;
- 4. social organization/networks; and
- 5. Indigenous. The material/economic and social epidemiology theories are explicitly about causal pathways producing health inequities; the other three are about promoting health equity.

We are now developing a "health equity lens" which will be discussed in the presentation.

**Conclusions:** Complexity theory provides a useful and practical framework for integrating theoretical perspectives to guide the development of multi-level, multi-faceted interventions to promote health equity. Several challenges emerged in our critique including the observation that PH often intervenes in a technocratic way reinforcing power differences and exacerbating inequities.

What are the implications of your research to inform future policy or practice initiatives? PH professionals can draw on this work to help them understand the complex causal pathways that produce health inequities and develop theoretically sound interventions.

Saskatchewan Equity Study: Research evidence to inform program and policy change on the social determinants of health and in health system performance – Cordell Neudorf

#### **Objectives:**

- Examine trends over 35 years in selected social determinants of health: income, education, employment.
- Examine trends over 10 years in health inequities for 15 health outcomes in Saskatchewan.

**Methods:** Different statistical measures were used to provide comprehensive quantitative information on inequalities in 15 health conditions and 3 socio economic determinants of health, and whether or not they changed over time. These methods were disparity rate ratios (DRRs), disparity rate differences

(DRDs), and Area Level Concentration (ALC) curves and coefficients. A prioritization matrix and a review of effective interventions was used to determine areas of greatest concern to inform action. The methods are replicable and provide sufficient information to evaluate policies to reduce health inequalities.

**Results:** Increasing gaps in health were found in self-rated mental health, COPD, all-cause mortality, and remained constant through the time period under study for most other indicators. Income gaps showed some widening over time as well. Individual measures of socio economic status showed higher health inequalities than area based measures, especially in rural areas.

**Conclusions:** Most health conditions and determinants of health studied showed widening or stable inequities over time. Evidence informed policy options exist to narrow the gaps, and have significant public support. Small area- based analysis works well to estimate these inequities in the urban environment, but works less well in rural and remote areas.

What are the implications of your research to inform future policy or practice initiatives? Action to reduce health inequities using a proportionate universalism approach can be taken by the health system, and through intersectoral action using a health in all policies approach, guided by public health through a prioritization matrix.

Shoot first and ask questions later: Challenges in implementing health equity on the frontline – Bernie Pauly

**Co-authors:** Megan Deyman, Trudy Norman, Marjorie MacDonald, Sana Shahram, Lenora Marcellus, Susanna Caxaj, Meaghan Brown, Geoff Cross, Alex Kent, Diane Allan

**Background:** Health equity is a stated priority and goal for all five regional BC health authorities, whether mentioned explicitly in health authority documentation or not. However, there is no clear mandate, limited direction, and inadequate funding to implement such a goal. Further, there is no clear understanding or single definition of health equity in use in implementation efforts.

**Objectives:** Drawing on data from a province-wide inquiry into implementing an equity lens, we examine how a series of systemic challenges directly impact the ability of frontline program managers and staff to fulfill an equity requirement in their day-to-day work.

**Methods:** Focus group and individual qualitative interviews with executives, program managers and staff, along with archival documents, were analyzed using situational analysis methods to explore implementation of a health equity lens in the BC health care system.

**Results:** Results from this study describe the 'trickle-down effect' of health equity implementation challenges that lead frontline managers and staffs to 'shoot first and ask questions later' that is, to do what is necessary to serve members of marginalized or underserved groups seeking health services.

**Conclusions:** Findings highlight the need to identify a clear pathway to support program managers and staff in implementing an equity lens for service provision.

What are the implications of your research to inform future policy or practice initiatives? An explication of the systemic challenges and responses by those on the frontlines can contribute to a greater understanding of both constraints and facilitators in the implementation of a population health directive. These findings will better support program level staff in implementing such a directive, and through the successful application of a health equity lens, strengthen efforts to reduce health inequities.

#### Moving health equity forward: From talk to action – Bernie Pauly

**Co-authors:** Marjorie MacDonald, Sana Shahram, Trudy Norman, Susanna Caxaj, Lenora Marcellus, Megan Desman, Meaghan Brown, Phuc Ti, Geoff Cross, Tina Revai, Alex Kent

**Background:** The province of British Columbia (BC) has been undergoing a process of public health renewal with a focus on the application of a health equity lens in the implementation of public health programs. The goal of the Equity Lens in Public Health (ELPH) research program is to learn about the application of health equity in public health systems and services during a time of complex system change.

**Objectives:** The objectives of this study were to identify contextual factors that facilitate and/or act as barriers to the uptake of health equity within health systems.

**Methods:** Interviews and focus groups with senior health authority and public health leaders in six BC health authorities and the Ministry of Health were conducted at two points in time with 56 participants in Phase I (2013) and 55 participants in Phase II (2015). Situational analysis was used to analyze the broader context in which health system leaders are implementing a health equity lens.

**Results:** In Phase I, participants reported that the application of a health equity lens was a challenge as health equity was often not a priority and was understood in various ways, with little practical guidance about how such a lens could be applied. In Phase II, public health leaders reported moving from health equity talk to action through a series of workarounds in the absence of provincial and regional directives.

**Conclusions:** The lack of provincial directives and population health data acted as barriers to prioritization of health equity. The creation of the First Nations Health Authority and presence of senior public health leaders on executive teams were key facilitators.

What are the implications of your research to inform future policy or practice initiatives? The results of this study provide information on key organizational approaches for prioritizing and taking action on health equity.

# Starting a discussion on the social determinants of health: experience of BC First Nations – Grand Chief Doug Kelly

**Objectives:** Describe the *Memorandum of Understanding: A Regional Engagement Process and Partnership to Develop a Shared Ten-Year Social Determinants Strategy for First Nations Peoples in BC (2016)* signed by the Province of BC and First Nations Health Council as a prospective pathway for addressing the social determinants of health in BC.

Discuss work underway in BC to develop a long-term plan to improve outcomes in health, child and family wellbeing, and justice.

**Target Groups:** The MOU aims to improve health and wellness of First Nations in BC by supporting First Nations to be more fully involved in the planning, design and delivery of necessary social services.

**Activities:** The MOU is an agreement outlining the health partnership between the Province of BC and BC First Nations to make progress on social determinants of health, and will minimally remain in place through the end of 2019/20. The BC First Nations health governance approach and its 'engagement and approvals pathway' will be used to create five regional multi-year social determinant strategies that reflect regional priorities and holistic models of health and wellness, as the basis for an ongoing ten-year social determinants strategy.

**Deliverables:** The MOU affirms the Parties commitment to: define the initial engagement framework to determine mutual priorities and interests related to the social determinants of health; establish provincial and regional bilateral structures to support engagement; develop a tripartite ten-year social determinants strategy; and set out expectations for engagement of the Provincial Government and BC First Nations with the Government of Canada in developing the tripartite ten-year social determinants strategy.

What are the implications of your policy or practice initiative to inform future research? This MOU provides a unique case study and approach of addressing social determinants of health for First Nations through health governance agreements, structures and community engagement processes that increase First Nations decision-making.

#### ORAL PRESENTATION 17 - SEXUAL HEALTH RESEARCH, POLICY AND PRACTICE

Thursday 8 June 11:00-12:30 Room 202 & 203

Leave no-one behind: Ending HIV/AIDS demands the inclusion of people of all ages and genders – Peggy Edwards

**Background:** The laudable goal of "ending HIV/AIDS for good" will never be achieved without a deliberate effort to include people of all ages and genders—including older women. Grandmothers in sub-Saharan Africa are at the centre of the pandemic—both in terms of their own vulnerability to the disease and in their roles as caregivers to millions of young people orphaned by AIDS. Yet they are rarely counted, recognized or included in efforts addressing HIV/AIDS.

# **Objectives:** To explore how:

- Invisibility and misconceptions about HIV/AIDS, gender and age affect older women/grandmothers in Africa and the orphaned children in their care.
- older women/the Grandmothers movement in Canada and Africa are advocating for their rights to health and full inclusion in policies and practices to address the pandemic.

#### **Target Groups:**

- Organizations and individuals working in HIV/AIDS, aging (older people), women's rights and global/international development
- Government Canada: elected officials and selected department leaders
- International institutions (e.g. United Nations)
- Interested Canadian public.

**Activities:** Grandmothers in Canada and in sub-Saharan Africa work in solidarity to lead the fight to end HIV/AIDS. This session will include a description of some key activities of the Canadian Grandmothers Advocacy Network and the grandmothers in sub-Sharan Africa.

**Deliverables:** A strategy to include older women/grandmothers as a key population in national, international and global plans to fight and end HIV/AIDS.

What are the implications of your policy or practice initiative to inform future research? There is an urgent need to collect and analyze data and information on the experience of HIV/AIDS after the age of 49 in Africa and other developing areas. Without this, older persons are left out of policies and practices to prevent and treat HIV/AIDS.

National practice guidelines in peer health navigation for people living with HIV - Laurie Edmiston

**Co-authors:** Logan Broeckaert, Laurel Challacombe, Christine Johnston, Erica Lee, Jason Altenberg, Glen Bradford, Vijaya Chikermane, Miranda Compton, Clarence Frenchman, Holly Gauvin, Kira Haug, Scott Harrison, Shazia Islam, Murray Jose-Boerbridge, Marvelous Muchenje, Susanne Nasewich, Mary Petty, Sudin Sherchan, Carol Strike

**Background:** For a person living with HIV to achieve optimal health outcomes, they need access to a continuum of services: HIV testing and diagnosis, linkage to appropriate medical care and other health services, support while in care, access to ART if and when they are ready, and support while on treatment. Estimates from around the world and several Canadian provinces demonstrate that people living with HIV are not optimally engaged across the HIV continuum of care.

#### **Objectives:**

- Improve the quality and consistency of peer health navigation programs
- Improve the effectiveness of peer health navigation programs to positively impact the health and well-being of people living with HIV
- Build on existing local/regional models and materials, many of which were developed and informed by people living with HIV

#### **Target Groups:**

- Program planners and service providers in community-health and community-based organizations
- public health program planners and service providers
- HIV clinical care providers and administrators
- Researchers interested in health navigation
- Program funders

**Activities:** CATIE conducted an extensive peer-reviewed and grey literature review. We also convened a 15-member national expert working group of researchers, clinicians, public health practitioners, program planners, frontline service providers, and people living with HIV. The working group informed and developed research-based and practice-based guidelines on peer health navigation for people living with HIV.

The working group has developed guidance for new and existing peer health navigation programs in HIV. Evidence-based and practice-based recommendations are available on assessing peer and agency readiness; integrating navigators into the host agency, and with community and healthcare partners; recruiting, selecting, training, and supervising navigators; navigator roles and responsibilities; and related ethical and policy considerations.

**Deliverables:** Practice Guidelines in Peer Health Navigation for People Living with HIV

What are the implications of your policy or practice initiative to inform future research? The guidelines are intended to provide direction to agencies considering the development, implementation or strengthening of peer health navigation programs. Future research may build on our work to determine the best way to support people living with HIV.

Strengthening the Canadian public health response to syphilis – Creating an opportunity to discuss successes and failures in programs from coast to coast – Geneviève Boily-Larouche

**Background:** The re-emergence of syphilis with epidemics rooted in both urban and rural settings in Canada emphasizes the need for new approaches to share knowledge rapidly. This presentation will describe the consultative and iterative development of knowledge translation (KT) for immediate users.

**Objectives:** To help circulate timely information between public health specialists and span research-practice gaps in syphilis responses, the National Collaborating Centre for Infectious Diseases (NCCID) and its partners coordinated a 1 ½ day knowledge exchange event. NCCID led a participatory process that helped identify KT gaps among urban and rural public health specialists and helped shape a national discussion about shared goals and opportunities for research, practice, and policy on syphilis.

**Target Groups:** In preparation for this forum, rural and urban public health specialists and representatives from community based organizations and federal agencies from across Canada were consulted to discuss local challenges and the types of knowledge needed to improve syphilis responses in their jurisdictions.

**Activities:** Five major KT needs were identified during the consultation and were used to set the agenda. Presentations and processes were developed collaboratively, giving participants scope to present and discuss examples of innovative, integrative, and community informed practices within each pillar. Time and space were created for context-specific discussions.

**Deliverables:** Participants were highly satisfied with the resulting event. They appreciated the timeliness and learning about the different contexts of the syphilis epidemics, given that surveillance and research data are scarce. Many found the event useful to create new partnerships and improve the standard of excellence of care in their locale.

What are the implications to inform future research? The KT processes used fostered a successful platform for exchange tailored to the participants needs and highlighting where research and surveillance are most needed. The results will also inform new research on effective knowledge brokering.

Sex and gender in public health research, policy and practice: Mobilizing and transforming for system-level change – Jacqueline Gahagan

Co-authors: Cara Tannenbaum

**Background:** Although sex and gender remain key factors in the public health discourse in Canada, conceptual clarity is critical in understanding the impact of both sex and gender implications in informing evidence-based public health interventions, policies and programs. The rationale for this session is therefore to examine the international movement to incorporate sex and gender in both health research funding and health research reporting in the health literature from a variety of perspectives, including from public health journal editors, public and population health researchers, health research funding bodies, and public health decision-makers.

An overview of the recently released Sex and Gender Equity in Research (SAGER) guidelines will be provided as a case study example emerging from the European Association of Science Editors (EASE) aimed at engaging delegates in discussion and debate about the implications sex and gender reporting have on public health decision-making in Canada. Additional gender transformative resources and case study examples will be shared with delegates to help mobilize for system-level change in public health, particularly in relation to sex and gender in health care decision-making and health policy development.

**Learning Objectives:** Our key learning objectives for our sex and gender in public health symposium include the following:

- 1. Analyze the principles of sex and gender as a health equity issue;
- 2. Apply sex and gender concepts to public health research, policy and practice scenarios;
- 3. Understand how to incorporate SAGER guidelines into public health evidence-based decision-making.

**Target Groups:** Public health policy decision makers, public health researchers, public health practitioners, public health trainees

Activities: Our sex and gender in public health research, policy and practice session will include a variety of short presentations from experts from the fields of public health, including health research, public health journals, and health research funding. Each presenter will highlight at least one key element of our symposium learning objectives (see below) in relation to the implications of sex and gender in transforming public health decision-making at the systems-level. The remaining time will be used for an interactive brainstorming session on other mechanisms to further clarify and advance sex and gender in public health, and to discuss possible ways to mobilize sex and gender in evidence-based, transformative decision-making in public health in Canada.

What are the implications of your policy or practice initiative to inform future research? Sex and gender-based analyses (GBA) in health research are vital to improving the evidence base from which public health decision-makers determine evidence-based approaches to tackling key public health issues. This session will help equip participants with GBA skills to bring to public health research, public health policy-making, and related sectors.

International students at Dalhousie University: Their perceptions and experiences in accessing sexual health services in Halifax, NS – Stefanie Machado

**Background:** Access to sexual health services is important for sexual health, but relatively little is known about potential barriers and facilitators that international university students in Canada face in accessing and using such services. Given that international students at Dalhousie University (Halifax, NS) are new to Canada, it is important to understand potential barriers they might experience. Potential facilitators in using such services is also limited, and research is needed in this area to understand what helps with access.

**Objectives:** The key purpose was to explore perceptions and experiences of barriers and facilitators to sexual health services among Dalhousie University international students. The research was also aimed at gaining potential suggestions from participants for improving access to sexual health services.

**Methods:** Primary data were collected using qualitative methods. One-on-one, face-to-face interviews with four participants were audio-recorded and transcribed verbatim. Data were analyzed using thematic coding procedures, and themes were compared and contrasted through the constant comparative method.

**Results:** Key barriers and facilitators were found at the interpersonal (e.g. client-provider communication), community (e.g. information provided by services at Dalhousie), and societal/cultural (e.g. different language and beliefs) levels that international students perceive and experience. Some barriers were similar to those identified in previous studies.

**Conclusions:** Identifying barriers and facilitators that Dalhousie international students perceive and experience is important to determine access to sexual health services in Halifax, NS. Addressing barriers and strengthening facilitators may help inform and improve access to sexual health services in North America.

What are the implications of your research to inform future policy or practice initiatives? The barriers and facilitators that Dalhousie international students perceive and experience in accessing sexual health services is a call for improving access and informing such services in Canada. This study is a beginning, and future research is needed with more international students across North America to gain more indepth knowledge about what prevents and facilitates access to sexual health services.

## ORAL PRESENTATION 18 – FAMILY HEALTH AND WELLNESS

Thursday 8 June 11:00-12:30 Room 204 & 205

Perinatal and postpartum health outcomes and care experiences of marginalized women in Canada: A mixed methods literature review – Anna Dion

Co-authors: Amy Nakajima, Neil Andersson

**Objectives:** To review quantitative and qualitative literature on the experiences and health outcomes among marginalized women in Canada.

**Methods:** A literature search on perinatal outcomes and experiences of marginalized groups (primarily women living in chronic poverty and social isolation, including immigrant and refugee, indigenous women, LGBTQ2S, at-risk adolescents, women who use substances, among others) in Canada was carried out in Medline. Articles were limited to primary research, during pregnancy to 12 months postpartum, in French or English and in Canada after 1980.

This review followed a parallel-results convergent synthesis design, using thematic synthesis to summarize qualitative results and descriptive statistics to summarize quantitative results. Findings were integrated by population group, and then compared across population groups.

**Results:** Our search identified 2036 publications, of which 380 were relevant. We identified several areas of concern around perinatal care and poorer maternal and infant health outcomes among marginalized groups. Findings include that several groups of marginalized women either have their concerns unaddressed by the health system or experience negative outcomes due to excessive, inadequate or inappropriate care practices. Factors contributing to these experiences include but go beyond patient-provider communication, health system organizational factors and social determinants of health.

**Conclusions:** These results suggest that there is a disconnect between the perinatal and postpartum needs of marginalized women in Canada and the health and social services available to them.

What are the implications of your research to inform future policy or practice initiatives? This review reveals patterns across the perinatal experience of several marginalized groups in Canada. Better understanding of these patterns is needed in order to effectively support diverse care needs within health systems and point to specific recommendations to improve perinatal and postpartum care for marginalized groups in Canada.

Health equity in pregnant and parenting women's public health services – Sana Shahram

Co-authors: Lenora Marcellus, Bernadette Pauly

**Background:** A large portion of public health services in BC focus on supporting pregnant and parenting women and their families, yet little is known about how to support or promote health equity in these services.

**Objectives:** A secondary data analysis was conducted with a sub-sample of data collected as part of a larger research project (Equity Lens in Public Health, ELPH) to understand how public health service providers, directors and managers construct the role of pregnancy and parenting services in supporting health equity.

**Methods:** A situational analysis was conducted on data from in-depth interviews & focus groups conducted with 82 participants from six health authorities and the Ministry of Health (senior execs,

directors, regional leads, MHO's, managers and front line staff) who had any role related to supporting pregnant and parenting women. Critical discourse analysis of data illuminated dominant values, discourses, and discursive dynamics influencing role constructions.

**Results:** Participants constructed their roles differently based on their understandings of health equity, their opinions on women's autonomy and rights during pregnancy and the role of public health in women's lives. Bureaucratic processes and arbitrary definitions of vulnerability were identified as challenges for supporting health equity with this population. Health equity is a central tenet of public health services to support pregnant and parenting women.

Conclusions: Applying health equity in these services are challenging within defined parameters.

What are the implications of your research to inform future policy or practice initiatives? Understanding the issues and opportunities in delivering services to support health equity for pregnant and parenting women can support a more equitable public health system in general.

Indigenous parenting resources – An adaptation project to create culturally localized and respectful public health tools for Indigenous parents in Manitoba – Margo Greenwood

**Background:** A current Canadian public health challenge involves seeking ways to counter the dismal health disparities experienced by Indigenous children. This presentation highlights the evolution of collaborative partnerships that have led to the development of health promotion resources and information for Indigenous parents and their families that are culturally relevant and respectful of the diversity of Indigenous cultures.

#### **Objectives:**

- Locating collaborative strengths-based, community-driven programs, policies and strategies which
  provide an alternative to pan-Indigenous public health information and materials
- Re-envisage how cultural and generational continuity, identity and pride are reinforced through Indigenous narratives and worldviews and have the potential to improve health outcomes of Indigenous children, families, communities and nations.

**Target Groups:** Indigenous and non-Indigenous public health professionals, policy makers, health promotion and front-line workers servicing predominantly Indigenous peoples in urban, rural, remote and small communities.

**Activities:** In 2013 the First Nations Health Authority and the National Collaborating Centre for Aboriginal Health (NCCAH) created a series of four BC-Specific Indigenous parenting resources, 1) Growing Up Healthy, 2) Family Connections, 3) Parents as First Teachers, and 4) Fatherhood is Forever, which were widely disseminated across BC and Canada. The Healthy Child Manitoba Office (HCMO), located in Winnipeg, distributed electronic copies of the booklets province-wide through their 26 Parent Child Coalitions and other HCMO-funded agencies and partner departments.

The response to the booklets was immediate and very positive, with an overwhelming number of requests from both Indigenous and non-Indigenous communities for hard copies of the booklets across Manitoba. As a result the HCMO approached the NCCAH to partner to adapt these resources to the Manitoba context. Over the course of a year the project to adapt content brought to light lessons learned on collaboration, primarily how government collaboration and community-input of Indigenous specific voices, teachings and images can lead to improved health and well-being of Indigenous children and families. Of significance, like the BC parenting booklets, the focus of the adaptation project has been to highlight the cultural and linguistic diversity and strengths of Indigenous families in Manitoba as parents and caregivers of infants and children 0-6 years.

**Deliverables:** Distribution of four parenting booklets produced by the NCCAH (2013) and HCMO/NCCAH (2017)

What are the implications of your policy or practice initiative to inform future research? Lessons learned through this project is that by privileging Indigenous community voices and their public health needs along with cross sectoral partnership and collaboration, ensures the successful production of strengths-based, comprehensive and culturally relevant health promotion resources.

Cowichan Tribes - Assessing Indigenous youth wellness - The'ye'lh Smun'eem team

Co-authors: Nancy Laliberte, Savannah Harris, Emannual Horne, Dallas Paige, Keshawna Thomas

**Background:** Cowichan Tribes and PHSA Indigenous Health have worked together since 2013 to develop on-line wellness quests for youth. We are now working toward using Indigenous specific indicators and evaluation methods to determine the impact of the quest for 13 to 15 year olds. We are a team of Cowichan youth, youth workers, suicide prevention workers and researchers.

# **Objectives:**

- 1. Determine Cowichan specific relevant health indicators for youth wellness.
- 2. Determine Cowichan specific evaluation methods for the Indigenous Youth Wellness quest.

**Methods:** Elders, community members and youth participated in video and audio taped interviews that were conducted to determine the indicators of youth wellness and evaluation methods in their community. Interviews were then analyzed by the Cowichan youth wellness team to determine indicators and evaluation methods.

**Results:** Cowichan specific indicators of youth wellness included understanding Cowichan teachings and living by their values, knowing the history of their families, language, ceremony, connection to community through participation in events, and serving the community. Evaluation methods were considered to be observation by family and community of the youth, community dialogue and an assessment of balance in the youth's life. In the next phase of the project Cowichan specific activities will be added to accompany the quest material and we will use the indicators developed by the community to measure the success of the quest.

**Conclusions:** Indigenous youth wellness is measured most accurately in the context of Indigenous peoples' own community utilizing indicators and methods that are culturally relevant and appropriate to their community.

What are the implications of your research to inform future policy or practice initiatives? Indigenous communities are well informed to determine the relevance of community programming for their own youth using their own indicators and methods of evaluation.

### Sharing the ACHWM with Indigenous communities – Nancy Young

Co-authors: Trisha Trudeau, Marnie Anderson, Mary Jo Wabano

**Background:** The Aboriginal Children's Health and Well-being Measure (ACHWM) is a comprehensive health assessment that enables Indigenous communities to understand health from the perspectives of their children. The ACHWM was developed through a rigorous research program that established its measurement properties. We are now sharing the ACHWM with other Indigenous communities.

**Objectives:** Our main objective is to describe the ACHWM outreach process and share the lessons learned through experience.

**Target Groups:** Indigenous communities and agencies, whose intent is to promote better health and wellbeing outcomes for children and youth in their communities

**Activities:** The outreach process began by making connections with Indigenous communities and agencies. An initial visit was made to each community to share information regarding the ACHWM process and discuss the community's purpose in applying the measure. A tailored process was then developed for each community. A second visit was important to build local capacity to use the ACHWM.

**Deliverables:** We offered two outreach models: *Collaborative Research* and *Independent Use*. The *Collaborative Research* model supports communities wishing to engage in research in partnership with Wiikwemkoong and Laurentian University. The *Independent Use* model enables communities to use the ACHWM without external partner involvement. Through collaboration we identified the need for a third option that combines the strengths of both models: the *Collaborative Practice* model.

What are the implications of your policy or practice initiative to inform future research? The ACHWM is available to support: population health assessment, program evaluation, or other community goals. There is no licence fee for the ACHWM. The processes are well developed including automated referral forms, reporting templates and a balance application to support discussions of holistic well-being (celebrating strengths). The resulting data can be used to advocate for children's health services, to meet needs identified through the ACHWM.

# **ORAL PRESENTATION 19 – PUBLIC HEALTH AND COMMUNITIES**

Thursday 8 June 11:00-12:30 Room 200 C1

Public policy advocacy to eradicate child poverty: A primary preventive strategy – Sid Frankel

Co-author: Anita Khanna

**Background:** The prevention of disease and health promotion are increasingly cited as part of the logic for renewed government interest in eradicating poverty and reforming income security programs in Canada. Poverty has been clearly identified in the social determinants of health literature as a central factor in creating inequalities in health status. Therefore, healthy public policy should include effective poverty eradication policy.

# **Objectives:**

- 1. Participants will be able to describe definitions of poverty and the rate, depth and geographic and demographic distribution of child poverty.
- 2. Participants will be able to describe a comprehensive package of child poverty eradication policy recommendations at the federal and provincial levels.

#### **Target Groups:**

- Health care practitioners
- Public health staff
- Academics and researchers
- Civil servants with responsibility to formulate or evaluate public policy

### **Activities:**

- Oral presentation supported by graphic display on the definitions of poverty
- Oral presentation supported by graphic display of the rate, depth and distribution of child poverty
- Oral presentation of a comprehensive child poverty eradication strategy and the rationale of each element supported by graphic display.

**Deliverables:** Participants will receive an accessible description of the child poverty problem in Canada and a comprehensive analysis of a key element of healthy public policy – child poverty eradication policy.

What are the implications of your policy or practice initiative to inform future research? Future research could focus on the knowledge, attitudes and actions of public health workers in advocating for effective child poverty eradication policy as a primary preventive strategy.

Gender, socioeconomic status and early child development: Are boys from low-SES neighbourhoods getting left behind? – Simon Webb

**Co-authors:** Eric Duku, Magdalena Janus, Martin Guhn, Marni Brownell, Nazeem Muhajarine, Barry Forer, Rob Raos

**Background:** Poor socioeconomic circumstances and gender disproportionally affect educational and behavioral trajectories such as high school drop-out and crime rates in males over females. There is currently a lack of information/research about how early in the life course these gaps develop.

**Objectives:** We investigate whether males are disproportionally affected by gradients in socioeconomic status (SES) in early childhood across all Canadian provinces and territories.

**Methods:** The study combines the Early Development Instrument (EDI), a measure of early child development, with data from the Canadian Census at the neighbourhood level. The EDI data used are from one time point in all Canadian provinces and territories (N=759,610). Regressions are used to determine the effects of gender and SES on the level of 'vulnerability' (representing whether a child falls below a national threshold) on the EDI, with children's English/French as a Second Language (EFSL) status and age at kindergarten as control variables.

**Results:** At the national level, vulnerability rates are higher for children who grow up in low SES neighbourhoods compared to those who do not, and this gap is larger for males than for females. These findings are similar across all of the provinces and territories, but show some variation in relation to EFSL and age.

**Conclusions:** A socioeconomic gradient is present in Canadian children's kindergarten-age development, and it is steeper for males than for females. Over the life course these gaps in development are amplified and put a strain on the healthcare, economic and judicial systems.

What are the implications of your research to inform future policy or practice initiatives? Since early childhood is a crucial stage for the development of key mechanisms, focusing policy on the known weaknesses in children from low SES neighbourhoods, and particularly males, could have immense benefits for the country as a whole.

The life satisfaction of children from various ethno-cultural backgrounds living in British Columbia – Scott Emerson

Co-authors: Louise Mâsse, Martin Guhn

**Background:** Children's life satisfaction (LS) is a key indicator of healthy child development. Research supports valid inferences of scores from the Satisfaction with Life Scale adapted for Children (SWLS-C) for children and measurement equivalence (ME) of the SWLS-C for boys and girls; ME enables meaningful cross-group comparison of scores, which is important in research and practice. In light of Canada's ethnic diversity, it is important to examine the equivalence of the SWLS-C for ethno-cultural groups of children.

**Objectives:** Assess the extent to which the Satisfaction with Life Scale adapted for Children is an equivalent measure of life satisfaction across children from various ethno-cultural backgrounds living in British Columbia.

**Methods:** Participants were 22,931 grade 4 British Columbian public school children. Home language background was employed as a proxy for ethno-cultural background. We assessed ME across 28 ethno-cultural groups (based on home language background), using multi-group confirmatory factor analysis with a means and variance adjusted weighted-least squares estimation method.

**Results:** Findings indicated the factor structure, factor loadings, item thresholds, and residual variances of the SWLS-C model were equivalent across all 28 ethno-cultural groups examined; results thus supported the highest form of cross-group measurement equivalence of the SWLS-C.

**Conclusions:** The SWLS-C measured life satisfaction equivalently for over two dozen ethno-cultural groups of children. Results suggested that children of many different ethnic backgrounds generally interpreted and ascribed meanings to SWLS-C items in similar way.

What are the implications of your research to inform future policy or practice initiatives? Results enable valid inferences of SWLS-C scores for many ethnic groups of children in British Columbia. Moreover, study findings set the stage for endeavours to understand cultural-specific determinants of children's life satisfaction exist, and hence better tailor community programs to promote children's healthy development.

Hubs, tools & community: How to increase community capacity to support youth mental health – Lisa Lachance

**Background:** The Children and Youth in Challenging Contexts (CYCC) Network supports the mental health and well-being of vulnerable young people through collaborating across the youth serving sector – including researchers, educators, governments officials, community service providers, health care providers and young people themselves – to identify, capture and share what works for supporting children and youth across Canada and around the world. In 2016, the CYCC Network – with three regional Hubs in Montreal, Ottawa and Iqaluit -launched a free online toolkit designed to support organizations increase the effectiveness of their work through evaluation and evidence.

We also launched a mentoring program providing up to 100 hours of KMb support to organizations. This workshop will introduce participants to the CYCC Network model of hubs and tools and lessons learned from working with community based organizations, and will provide participants with the opportunity to consider their own projects and work with community based service providers.

Across public health issues, there is a need to engage community partners in order to achieve desired health outcomes. The CYCC Network's experience and approach will be provided an example of community based knowledge mobilization (KMb) and will be the starting point for collective reflection and problem solving on other KMb initiatives being led by workshop participants.

### **Objectives:**

- Increased awareness of knowledge mobilization tools available to increase the use of evidence and evaluation in mental health and other programming
- Improved understanding of the challenges of increasing evaluation and evidence use in community based organizations
- Increased experience with participatory facilitation techniques that can be applied in diverse settings, including with community partners.

#### **Target Groups:**

- Researchers
- Service providers
- Knowledge mobilizers
- Mental Health advocates
- Youth engagement advocates

Activities: Development and implementation of an organizational mentoring program.

**Deliverables:** Ongoing mentoring program and mentoring evaluation.

What are the implications of your policy or practice initiative to inform future research? Improved outcomes for youth who need to access community based services.

Neighbourhoods and obesity: A longitudinal study of characteristics of the built environment and their association with adiposity outcomes in children in Montreal, Canada – Adrian Ghenadenik

Co-authors: Mélanie Henderson, Tracie Barnett

**Background:** Childhood obesity is a major public health concern in Canada. Along with many other factors, the built environment may influence risk of obesity. However, the mechanisms involved remain poorly understood. Because the evidence is overwhelmingly based on cross-sectional designs, our ability to examine potential causal effects and mechanisms linking built environments and childhood weight-related outcomes is precluded. Evidence from longitudinal designs is essential.

**Objectives:** To examine associations between selected built environment features assessed at baseline and adiposity outcomes in children in Montreal, Canada.

**Methods:** A sample of 630 children aged 8-10 years with a parental history of obesity was recruited for a baseline visit in 2005-2008, where measurements were taken (the QUALITY study). Follow-up took place two years later. Built environment features were observed in up to 10 street segments around each participant's residential address using a validated assessment tool. Linear random intercept mixed-effects models adjusted for potential confounders were used to examine associations between baseline presence of four environmental exposures (traffic calming features, pedestrian aids, disorder and physical activity facilities), and adiposity outcomes (CDC age-and-sex-adjusted BMI percentile, waist circumference, waist-hip ratio, and truncal fat).

**Results:** In fully-adjusted models, presence of pedestrian aids was significantly associated with all outcomes (BMI percentile  $\beta$ =-11.0, SD=4.94, p=0.026; waist circumference  $\beta$ =-8.02, SD=2.04, p=<0.001; waist-hip ratio  $\beta$ =-0.05, SD=0.01, p=<0.001; truncal fat  $\beta$ =-2.31, SD=0.88, p=0.009). No significant associations between the other three exposures and adiposity outcomes were observed.

**Conclusions:** Findings provide longitudinal evidence of the potential role of built environments in shaping childhood adiposity outcomes. Future research examining how these environments may influence weight-related behaviours in children is warranted.

What are the implications of your research to inform future policy or practice initiatives? This research suggests that targeting specific components of pedestrian aids at the neighbourhood level may help promote healthy weight-related behaviors among children.

## ORAL PRESENTATION 20 - SUBSTANCE USE RESEARCH, POLICY AND PRACTICE

Thursday 8 June 11:00-12:30 Room 200 C2

Cannabis law reform: Decriminalization is still important – Mike DeVillaer

**Background:** The Canadian government has indicated an intention to introduce legislation for the legalization of cannabis in the spring of 2017. However, early indications are that this target is unlikely to be achieved. Whenever achieved, it would be only for first reading with a potentially long legislative process to follow. Thus pending legislation will have additional time to evolve with input based upon public health best advice.

# **Objectives:** Increase awareness of:

- 1) The frequent misrepresentation of the contraband cannabis trade and the implications for reform
- 2) Research findings on the viability of decriminalization.
- 3) The public health impact of criminal records on the health of Canadians, in particular with regards to the social determinants of health (SDOH).
- 4) A stepped hybrid model that incorporates the strengths of decriminalization and legalization to maximize health and social justice impacts

Target Groups: Public health and legal policy makers, researchers, educators, advocates, and students

#### **Activities:**

- 1) Review peer-reviewed research on the:
  - a) contraband cannabis trade
  - b) viability of decriminalization
- 2) Present:
  - a) Realistic time frame for establishment of legal retail
  - b) Impact of continued criminalization of cannabis use particularly upon sdoh
  - c) Legal approaches to promptly establish decriminalization as a first step towards legalization

# **Deliverables:** Content to:

- 1. Guide development of cannabis policy
- 2. Stimulate evaluation protocols and research questions for cannabis law reform
- 3. Increase the capacity of educators and students to engage in advocacy based upon health and justice priorities

What are the implications of your policy or practice initiative to inform future research? The presentation will stimulate research questions on the relationship between policy models and the public's health (ie sdoh) for both cannabis law reform and other public health issues.

The constitutionality of advertising restrictions on marijuana: Balancing commercial free speech and public health protection – Melanie McPhail

Co-author: Jacob Shelley

**Background:** The Liberal government has committed to legalizing recreational marijuana. On November 30<sup>th</sup>, 2016, the Federal Task Force on Marijuana Legalization and Regulation will release a report advising on various aspects of marijuana regulation, including labelling and product warnings. Advertising is protected under section 2(b) of the *Charter of Rights and Freedoms*, so any infringement of this right must be shown to be justifiable in a free and democratic society.

**Objectives:** To undertake a legal analysis of the Task Force's report as it relates to the constitutional protection of commercial speech enshrined in section 2(b) of the *Charter of Rights and Freedoms*.

**Target Groups:** Health and legal policy-makers

**Activities:** I will conduct a comparative constitutional legal analysis of the proposed advertising restrictions. The comparator will be tobacco advertising restrictions and related litigation, particularly the Supreme Court of Canada decisions *RJR-MacDonald v Canada* and *Canada v JTI-MacDonald*.

**Deliverables:** The Supreme Court of Canada has twice assessed restrictions on tobacco advertising. These decisions provide a framework for assessing whether advertising restrictions satisfy the legal threshold to justify an infringement of section 2(b). This presentation will assess whether the Task Force's recommendations can satisfy this threshold while sufficiently protecting public health interests.

What are the implications of your policy or practice initiative to inform future research? The extent to which cannabis producers and/or retails can advertise their products will have a great impact on the Canadian population. It will determine the audience of advertisements, and what information can be included in the advertisements. It is important for any restrictions to strike a balance between ensuring that consumers have access to accurate information about the products so that they can make informed decisions, while considering the potential impact that advertising marijuana products will have on vulnerable populations, including children.

Adolescence and young adult correlates of marijuana use trajectories among Canadian youth: Implications for prevention – Kara Thompson

Co-authors: Gabriel J. Merrin, Bonnie Leadbeater

**Background:** Movement towards the legalization of recreational marijuana use in Canada raises questions about the need for regulation of marijuana use for youth. Accurate information about harms relating to differing patterns of marijuana use in Canadian youth is lacking.

**Objectives:** We estimated variability in marijuana use trajectories using latent class growth curve analyses and asked: Is there a safer age for onset of use? How do the trajectories of use vary across the transition to young adulthood? How do these trajectories relate to the use of other substances and mental health problems?

**Methods:** The Victoria Healthy Youth Survey is a 10-year prospective study of a random community sample of 662 (48% male;  $M_{\rm age}$  = 15.5) youth followed biennially for six assessments from 2003 to 2013.

**Results:** Five marijuana use groups were identified: Abstainers (29%), Occasional Users (27%), Decreasers (14%), Increasers (20%) and Chronic Users (11%). Lower use groups had later onset of use. Chronic Users had high co-occurrence of poly-substance use and externalizing problems. Increasers were similar to Chronic users, yet resolved their mental health problems by adulthood. Decreasers resolved their substance use and mental health problems. However, occasional users had high levels of mental health concerns in adulthood.

**Conclusions:** Youth with a later onset of use (>16) and who had few co-occurring externalizing problems and little simultaneous use of substances other than alcohol during adolescence also go on to use marijuana infrequently. Yet, the majority of youth initiated prior to the age of majority, indicating easy access to marijuana.

What are the implications of your research to inform future policy or practice initiatives? This information is imperative for the development of, as well as the timing and targeting of, prevention and

intervention initiatives needed to mitigate the potential harm from marijuana use and its pending legalization.

Caution in the wind: Researching and translating evidence on cannabis for parents - Natalie Hemsing

Co-authors: Nancy Poole, Lorraine Greaves, Rose Schmidt

**Background:** With expanding medical and recreational cannabis use in North America, there is increased research and attention on the health impacts of cannabis use, including during pregnancy and parenting.

**Objectives:** To examine the academic evidence regarding the effects of cannabis use on male and female fertility, pregnancy and parenting, and translate into guidance for women and their partners.

**Methods:** Searches were conducted to identify academic literature published in the past ten years on cannabis use and fertility, pregnancy, breastfeeding, birth, child development and parenting outcomes. Sixty articles were identified and synthesized. The findings were then translated into a plain language resource for women and their partners.

**Results:** The available evidence is limited by the: presence of confounding factors including co-occurring tobacco or alcohol use and low socioeconomic status; the complex chemistry of cannabis; lack of research on medicinal use and forms of ingestion other than smoking; and lack of detail on amount and frequency of cannabis used. Knowledge translation in the context of these limitations is a significant challenge. An example of a KT product for aspiring, expectant parents will be introduced and its development described.

**Conclusions:** The contradictory nature of the evidence hinders the development of clear messaging on the effects of cannabis use. However, given the potential for harm, women and their partners are discouraged from using cannabis when trying to conceive, during pregnancy and breastfeeding, and to take precautions regarding use while parenting.

What are the implications of your research to inform future policy or practice initiatives? Evidence on the effects of cannabis use on fertility, pregnancy and parenting is still emerging and there is a need for more robust, nuanced research to address existing data quality issues. Until this research is available, the ability to translate evidence into clear guidance will be limited.

Canadian Student Tobacco Alcohol and Drugs Survey (CSTADS): Significant change in pattern of substance use between PEI and Canadian students (2008/2009 to 2014/2015) – Melissa Munro-Bernard

Co-authors: Donna Murnaghan, Jo-Ann MacDonald, Tammy Cumming, Vicki Rynard

**Objectives:** To explore the divergent pattern of tobacco, alcohol and cannabis use between Prince Edward Island (PEI) and Canadian students and describe the importance of longitudinal surveillance of fast-changing youth health risk behaviours.

**Methods:** From 2008/2009 to 2014/2015, the Canadian Student Tobacco Alcohol and Drugs Survey (CSTADS; formerly the Youth Smoking Survey) was used to collect biennial tobacco, alcohol, and drug use data from Prince Edward Island students in grades 6-12, as part of the *School Health Action*, *Planning, and Evaluation System – Prince Edward Island* (SHAPES-PEI). In 2014-15, there were n=2 256 students from 53 PEI schools surveyed (n=42 094 from 336 schools across Canada).

**Results:** In 2014/2015, tobacco use rates among PEI students (i.e., current smoking; ever tried; past 30 day use of cigarettes, e-cigarettes, menthol cigarettes, little cigars or cigarillos, and any tobacco product)

were <u>all</u> significantly higher than comparable national rates. In addition, use in PEI rose significantly from 2012/2013 for three indicators (past 30 day use of menthol cigarettes [3.0 to 4.3%], little cigars or cigarillos [4.3 to 5.4%], and any tobacco product [13.8 to 16.1%]). Alcohol use (42.8%), binge drinking (32.2%) and cannabis use (24.8%) rates among PEI students in 2014/2015 were also all statistically significantly higher than national rates (39.5%, 23.7%, and 16.5%, respectively).

**Conclusions:** Substance use among PEI students mirrored Canadian trends until 2012/2013. Alarmingly, between 2012/2013 and 2014/2015 there was a significant increase in risk behaviours of tobacco, alcohol, and cannabis use among PEI students that did not align with youth risk behaviour patterns in other provinces. Timely monitoring via trend data is essential to provide data analytics that are critical to informing policy and action.

What are the implications of your research to inform future policy or practice initiatives? Data from PEI supports a call to action for the creation of a renewed federal tobacco strategy that sets clear targets for reducing substance use among the youth population.

# ORAL PRESENTATION 21 – PUBLIC HEALTH COMMUNITY PLANNING

Thursday 8 June 11:00-12:30 Room 200 D

"It is Not the Diet; it is the Mental Part We Need Help with." A Multilevel Study on Obesity and Psychological, Emotional, and Social Well-being – Kathryn Rand

Co-authors: Michael Vallis, Megan Aston, Sheri Price, Laurene Rehman, Helena Piccinini-Vallis, Sara Kirk

**Objective:** To explore the psychological, emotional, and social experiences of individuals living with obesity, and perceptions of health care providers.

**Methods:** Using data from a study on obesity management, we conducted a thematic analysis using a mental well-being framework derived from the World Health Organization, along with the Social-Ecological Model (SEM), to identify mental well-being themes across five environmental levels: individual, interpersonal, organizational, community, and policy.

**Results:** We identified mental well-being themes across all levels of the SEM except for the policy level. In the individual environment, food was used as a coping mechanism and was a source of emotional distress. In the interpersonal environment, themes were (a) blame and shame in relationships because of their weight and (b) condemnation and lack of support from health professionals. In the organizational environment, inadequate mental well-being support in obesity management programs, and in the community environment, the negative mental well-being impact of the social stigma of obesity, were identified.

**Conclusions:** Individuals living with obesity face negative mental well-being impacts that include the use of food as a coping mechanism and source of mental distress, blame and shame in relationships, lack of mental support within the healthcare system, and the social stigma of obesity. Weight bias was the main source of negative interactions, leading to deterioration in mental well-being. Although clinicians acknowledged mental well-being as a key component to obesity management, they lacked awareness of the social determinants of health and looking outside individualistic healthcare to support their clients.

What are the implications of your research to inform future policy or practice initiatives? These data should inspire health professionals to re-evaluate obesity management strategies to focus on reducing weight bias. Policy-makers can use the insight provided in this study to develop obesity management policies concentrated on environmental changes to promote positive mental well-being.

#### Creating an urban agriculture action plan – Wanda Martin

Co-author: Lindsey Wagner

**Background:** The rising rate of chronic disease and mental illness requires public health interventions that differ from traditional approaches of direct delivery of programs and services. Reconnecting people with food production provides a means to increase vegetable intake, promote physical activity, and improve social relationships. Saskatchewan, a major producer of the global grain supply, produces just 7% of the local demand for vegetables and fruits, and the industrial food system fails to provide many Saskatchewan residents with access to healthy food.

**Objectives:** The purpose of this study was to improve health and self-reliance by reconnecting people with their food system through discussions on developing an urban agriculture action plan.

**Methods:** We used Concept Mapping and neighbourhood focus groups to develop a strategy for supporting urban agriculture within the province's largest city. We also conducted individual interviews to examine the costs of home and community gardening to discern if urban agriculture is economically achievable for those of limited means.

**Results:** We found urban agriculture to be an economically feasible approach to health promotion. Key actions include building community relationships and transforming public spaces, which can foster community resilience. Many people need assistance to gain knowledge necessary to grow, cook, and preserve their own produce.

**Conclusions:** Building relationships facilitates knowledge sharing. City planners can aid this by including resources for gardens in community plans, such as in new neighbourhoods. Gardens can be simple and inexpensive, yet offer much toward healthy living. Urban farming is a challenging business, but gardening can provide a good return on investment.

What are the implications of your research to inform future policy or practice initiatives? This action plan is for the Saskatoon Food Council to promote urban vegetable production and to inform changes to Saskatoon's built environment through working with city planners to revise necessary city bylaws.

### Collaboration a key to building capacity in a rural ferry dependent community – Brenda Fowler

**Objectives:** To provide local access to a comprehensive set of health services inclusive of health promotion, prevention, primary and emergency care for a rural BC ferry dependent community of 4200.

#### **Target groups:**

- Entire Island population for primary and emergency care. The community was unable to recruit and retain doctors. Many vulnerable within the community could not or would not travel to the city to seek services.
- Target groups for health promotion and prevention are the mentally ill, drug and alcohol dependent, vulnerable seniors (especially those living alone) and vulnerable youth.

#### **Activities:**

- Construction of a community owned and operated medical clinic and urgent treatment facility.
- Physician recruitment
- Creation of community awareness and knowledge of the social determinants of health.
- Collaboration of local doctors with not for profits and interested citizens
- Establishment of a Community Health and Wellness Collaborative

#### **Deliverables:**

- Clinic and urgent treatment facility opened in 2012 resulting in fewer hospital admissions most primary and urgent care managed locally.
- Successful recruited and retained 3 physicians
- Partnerships with the health authority resulting in more services delivered locally e.g., mental health and home care nursing and social worker services.
- Community groups, physicians and organizations collaboration has successfully resulted in grants for seniors day care, peer led exercise programs, child and youth programs and community education.

#### **Evolving Challenges:**

- Meeting rural health needs within a system which is specialized and urban centric
- Enabling rural communities to find innovative approaches to building community capacity
- Increasing individual capacity to manage one's own care
- Redefying relationships with the health system

#### Relevance:

• Actions taken on Gabriola Island have resulted in reoriented health services, created a supportive environments, strengthened community action and personal skill development.

# **Implications for Research:**

- Creating sustainable health care in rural communities contributing to new models of care.
- Capacity building within a healthy community framework

# Exploring the association between rail transit investments and utilitarian walking in urban-dwelling Canadians – Sidonie Pénicaud

Co-authors: Rania Wasfi, Nancy Ross

**Background:** Public transit, especially rail transit, shows promise as an intervention to increase utilitarian walking at the population level.

**Objectives:** A retrospective cohort study was carried out to investigate how investments in public rail transit in urban Canada influenced utilitarian walking (i.e. walking to work, school or to run errands) in adults.

**Methods:** A geographic information system was used to identify participants from the National Population Health Survey (NPHS) living in a Census Metropolitan Area (CMA) where a new rail station (light rail, subway or commuter rail) was built between 1994 and 2010. Using a mixed-effect logistic regression, levels of utilitarian walking in individuals living less than 2000 meters from a new station were compared to those living more than 2000 meters.

**Results:** 5,428 NPHS participants lived in a CMA with a new station: 414 lived within 2,000 meters while 5,014 lived at more than 2,000 meters. Individuals living within 2,000 meters from a new station had 20% higher odds of engaging in one or more hours of utilitarian walking per week than individuals living at more than 2,000 meters (OR 1.19, 95% CI (1.00, 1.41)). The relationship between utilitarian walking and exposure to new stations was attenuated when adjusted for neighborhood walkability and other confounders (OR 1.18, 95% CI 0.99, 1.40). Additionally, utilitarian walking increased by 20% during the timespan of the survey independent of exposure to new transit.

**Conclusions:** There was a modest detectable increase in utilitarian walking in individuals exposed to new rail transit investment in Canada between 1994 and 2010.

What are the implications of your research to inform future policy or practice initiatives? Concurrent environmental and behavior interventions should be considered in order to maximize the impact of new public transit investments on physical activity.

Coming together: Evaluating inclusion and impact in Hamilton's Neighbourhood Action Strategy – Nishan Zewge-Abubaker

Co-authors: Shruti Ramesh, Melanie Pothier, Sarah Wakefield, Robyn Ocean, Carla Borstad Klassen

**Background:** The Neighbourhood Action Strategy (NAS) is an intervention addressing health inequity tied to concentrated poverty in 11 neighbourhoods in Hamilton, Ontario, contributing to emerging responses to inequity present in cities across North America. Through the NAS, residents, supported by community developers and municipal staff, develop and work towards achieving goals through Neighbourhood Action Plans. This multi-stakeholder population-health intervention focuses on resident leadership, with actors within the strategy paying explicit attention to issues of inclusion. Though increasingly prevalent, neighbourhood-level population-based interventions have rarely been subject to rigorous evaluation.

# **Objectives:**

- 1. Is participation in the NAS inclusive in terms of diversity of those involved, and how does this shape implementation?
- 2. Does the Strategy's community development work impact the NAS's capacity to create positive change, and how?

**Methods:** A qualitative developmental process evaluation was employed. Data collected includes participant observation at monthly neighbourhood planning team meetings, over 150 interviews, and focus groups from the 11 NAS neighbourhoods. Selecting participants was contingent on their involvement in the NAS, as a resident, service provider, or City staff. Observation notes and interview transcripts were coded through Nvivo 11 qualitative analysis software, and analyzed thematically.

**Results:** Initial themes of improved perceptions of neighbourhood cohesion and collaboration have been tied to the community development work of the NAS. However, many stakeholders have experienced challenges with increasing outreach to achieve representative and inclusive participation, particularly from low-income and new immigrant residents. This has influenced the articulated priorities of the neighbourhood planning teams.

**Conclusions and Implications:** Our initial findings suggest the NAS has the capacity to positively influence neighbourhood cohesion and resident capacity. More inclusion of a diverse range of residents must occur to continue creating this change. Given the paucity of evidence in this area, analyzing such barriers and enablers to the Strategy's success has provided significant insight in guiding future approaches.

#### ORAL PRESENTATION 22 – PUBLIC HEALTH PREVENTION PROGRAMS

Thursday 8 June 11:00-12:30 Room 200 E

Gaining public support for chronic disease and cancer prevention: Evidence for segmented approaches across Canadian subpopulations – Candace Nykiforuk

Co-authors: Jennifer Ann McGetrick, Kim Raine

**Background:** Increasing prevalence of obesity is linked to escalating burdens of chronic disease and cancer in Canada. Public support for prevention is needed to enact healthy public policies, which establish public and private sector mandates to support population-level health promotion. Research suggests segmented approaches are needed to shift knowledge, attitudes, and beliefs and gain public support across socio-demographic and ideological subpopulations.

**Objectives:** Using data collected in a randomized pan-Canadian survey, we examined knowledge, attitudes and beliefs across socio-demographic and ideological subpopulations in Alberta, Québec, and the Northwest Territories to evaluate whether variation warrants segmented strategies to gain public support for prevention.

**Methods:** Analyzing responses from 3200 survey participants in 2014, we conducted hierarchical binary logistic regression to model subpopulations' framing of obesity and support for healthy eating and physical activity promotion according to socio-demographic covariates (age, gender, self-identified minority status, education, income, employment, and self-reported health status) and independent ideological variables (prevention, behavioural, environmental, individual, and societal orientations to chronic disease and cancer).

**Results:** Socio-demographically, highlights of the analysis indicate understanding risk related to (i) diet, (ii) exercise, and (iii) body weight was likelier for more educated ( $OR_i=1.61$ ,  $OR_{ii}=1.56$ ,  $OR_{iii}=1.46$ ; p<=0.05) and non-minority ( $OR_i=1.40$ ,  $OR_{ii}=1.45$ ,  $OR_{iii}=1.27$ ; p<=0.05) participants, and less likely for older ( $OR_i=0.71$ ,  $OR_{ii}=0.74$ ,  $OR_{iii}=0.81$ ; p<=0.05) participants. Ideologically, participants were likelier to support healthy eating and physical activity promotion policies if they endorsed prevention ( $OR_{range}=1.27-2.17$ ; p<=0.05) or societal ( $OR_{range}=1.59-4.69$ ; p<=0.05) orientations.

**Conclusions:** Empirically demonstrated variation in knowledge, attitudes, and beliefs across sociodemographic and ideological subpopulations in Alberta, Québec, and the Northwest Territories potentially warrants segmented approaches to strategically increase public support.

What are the implications of your research to inform future policy or practice initiatives? Key strategies for increasing public support may include communicating opportunities for chronic disease and cancer prevention and promoting a societal mandate to address obesity, with attention to messaging for less-educated, minority, and older subpopulations.

Cancer Care Ontario's 2016 Prevention System Quality Index: Monitoring Ontario's efforts in cancer prevention – Maria Chu

Co-authors: Caroline Silverman, Alison Rothwell

**Background:** Cancer is the leading cause of death in Ontario and the number of new cases continues to rise. As many as half of all cancers could be prevented by eliminating known modifiable risk factors and exposures, making cancer prevention a key public health issue. With the exception of smoking, which has been a major focus of Ontario government strategy and legislation, the proportion of the population

with cancer risk factors has not changed substantially over the past decade, highlighting the need for stronger prevention policies and programs.

**Objectives:** Cancer Care Ontario's 2016 Prevention System Quality Index reports on indicators of effective system-level policies and programs that can reduce the prevalence of cancer risk factors and exposures in the Ontario population.

**Methods:** Methods used to identify the cancer risk factors and exposures, system-level policies and programs and indicators included: reviews of evidence from the international cancer organizations; reviews of the most recently published and widely cited systematic reviews, meta-analyses, and grey literature with recommendations from leading organizations; indicator criteria; and advice from subject matter experts.

**Results:** The findings of 21 policy and program indicators are described for the following cancer risk factor and exposure topics: tobacco, alcohol, healthy eating, physical activity, ultraviolet radiation, environmental carcinogens, occupational carcinogens and infectious agents.

**Conclusions:** Key cancer prevention policies and programs are in place in Ontario, but there are many opportunities to strengthen existing policies and programs to ensure that they are comprehensive, sustained and coordinated across a variety of sectors, including health, education, labour, municipal affairs, transportation, environment and finance.

What are the implications of your research to inform future policy or practice initiatives? The report provides evidence and data that can help policy-makers, policy-influencers and program planners in governments, non-governmental organizations and public health units implement effective system-level policies and programs in Ontario to reduce cancer risk factors and exposures.

SOS: Summer of Smoke. A mixed-methods, community-based study investigating the health effects of a prolonged, severe wildfire season on a subarctic population — Courtney Howard

**Background:** Between June 15 and Aug 31st 2014, Canada's Northwest Territories (pop 44,000: Stats Can), a subarctic region, experienced an unprecedented number of forest fires, with 385 fires and approximately 3.4 million hectares of forest affected, yielding one of Canada's most severe and prolonged urban smoke exposures for Yellowknife, the subarctic capital, and surrounding Aboriginal communities.

**Objectives:** To obtain a big-picture sense of the health impact of the Summer of Smoke on Yellowknife and surrounding Aboriginal communities through a mixture of quantitative and qualitative analysis.

**Methods:** We analyzed PM2.5 levels, salbutamol dispensations, clinic and hospital cardiorespiratory variables, and in-depth video interviews with community members from Yellowknife, N'Dilo, Dettah and Kakisa.

Results: 49% of days June15-Aug31 in 2014 had a PM2.5 over 30 mcg/m3, as compared to 3% in 2012 and 9% in 2013 and 2015. Max daily PM 2.5 in 2014 was 320.4 mcg/m3. There was a 22% increase in outpatient salbutamol dispensations in 2014 compared to the average of 2012, 2013 and 2015. More cough, pneumonia and asthma were seen in clinics compared to 2012-2015 (P<0.001). There was a 42% increase in respiratory ER visits in 2014 compared to 2012-13, but no change in cardiac variables. The respiratory effect was most pronounced in children 0-4 (114% increase in ER visits). Qualitative analysis demonstrates themes of fear, isolation, lack of physical activity, alteration of traditional summertime activities for both aboriginal and non-aboriginal subjects, elements of resilience and expectation for future smoky summers.

Conclusions: Prolonged smoke exposures have a profound impact on overall wellbeing.

What are the implications of your research to inform future policy or practice initiatives? Prolonged smoke exposures necessitate increased clean-air community shelters, recreation programming, initiatives to support community cohesion, and "go outside when it is not smoky" messaging to minimize impacts on mental and physical health.

# Conceptualizing public health emergency preparedness: A Canadian framework – Yasmin Khan

**Co-authors:** Tracey O'Sullivan, Jennifer Gibson, Adalsteinn Brown, Bonnie Henry, Melissa Genereux, Sarah Nayani, Shannon Tracey, Brian Schwartz

**Background:** The public health system is the lead in responding to outbreaks and in minimizing the impact of diverse emergencies on Canadians' health. Various all-hazards events have affected Canadians' health in recent years and yet, a persistent challenge for public health practitioners is defining what it means to be prepared. Existing frameworks are largely based on the US setting, and their relevance to Canada is unclear.

**Objective:** To develop a conceptual framework for public health emergency preparedness (PHEP) in Canada that identifies the essential elements of a resilient public health system and how the elements interact as a complex adaptive system.

**Methods:** This CIHR-funded research used a qualitative study design employing the Structured Interview Matrix (SIM) technique for focus groups. Six focus groups were conducted across four provinces in Canada. Rich qualitative data was analyzed using content analysis. Emergent themes were identified by incorporating empirical data from each phase of the SIM. The theoretical lens of complexity was used in analysis and development of the framework. Integrated knowledge translation was incorporated throughout the study design and involved knowledge users in study design and analysis.

**Results:** The resulting framework for PHEP in Canada will be presented. Essential elements of PHEP including the structures, processes and resources for preparedness in the Canadian context will be discussed. Elements of communication, collaboration and experience will be presented, as will crosscutting themes such as ethics.

**Conclusions:** This study presents a framework of the essential elements of public health emergency preparedness in Canada, which takes into account the complexity of the system.

**Implications:** This framework, derived from rigorous empiric research, conceptualizes PHEP for the Canadian context, which can guide practice and contribute to enhancing resilience within our public health system. In future, our team will use this framework to inform the development of PHEP performance indicators.

### An Indigenous model of emergency and disaster planning – Stephanie Montesanti

**Background:** In June 2013, a severe flooding of the Bow and Elbow Rivers affected southern Alberta. Among the hardest hit communities was the Siksika First Nation, about 100 kilometers east of Calgary. Funding from Alberta Health supported development of a community wellness plan for Siksika First Nation— a Nation-led initiative to promote health and wellness and strengthen resilience of the Nation.

#### **Objectives:**

- 1) Document Siksika Nation's community wellness plan;
- 2) Identify best practices in disaster recovery and mitigation in First Nation communities; and

3) Develop a culturally appropriate framework for disaster recovery and mitigation in First Nation communities

**Methods:** The university researchers developed a partnership agreement with the Siksika Nation to document their nation-led community wellness response. Data collection included key informant interviews, attendance at meetings where we took notes, site visits to the Siksika Health Centre, the schools, temporary housing units and the evacuation centre; as well as a review of publicly available and internal documents relating to emergency management on Siksika Nation.

**Results:** The flood exacerbated existing health and social inequities in Siksika First Nation. Siksika Nation's work to mitigate the impact of the flood followed a holistic or socio-ecological model that took the determinants of population health into consideration. The plan focused on the mental health of flood evacuees, the needs of children and youth and family, interdepartmental collaboration among service departments in the Nation.

**Conclusions:** A number of aspects of an Indigenous framework for disaster and emergency planning arose from this study. Recognition of traditional ways of life and cultural protocols were considered important in recovery and mitigation strategies.

What are the implications of your research to inform future policy or practice initiatives? Insights from the disaster response in Siksika Nation provided valuable lessons to inform and improve future disaster response planning by the federal and provincial governments as well as the Nations. The forest fire in Fort McMurray in Alberta in 2016 has further reinforced the urgent need for a framework.

# ORAL PRESENTATION 23 – PUBLIC HEALTH CHILD AND SCHOOL PROGRAMS

Thursday 8 June 11:00-12:30 Room 301

Assessing the effectiveness of Healthy Start-Départ Santé, a population health intervention to enhance healthy behaviours in children attending licensed childcare centres in Saskatchewan and New-Brunswick – Anne Leis

**Co-authors:** Mathieu Belanger, Nazeem Muhajarine, Louise Humbert, Hassan Vantaparast, Stephanie Ward, Amanda Froehlich Chow, Rachel Engler-Stringer, Gabrielle Lepage-Lavoie

**Background**: Healthy Start-Départ Santé (HSDS) is a multilevel, intersectoral population health intervention designed to enable educators to integrate physical activity and healthy eating in the daily routine of 3-5 years old children in Anglophone and Francophone licensed childcare centres in Saskatchewan and New-Brunswick. This study assesses the effectiveness of the HSDS intervention in improving physical activity levels, fundamental movement skills, and healthy eating among preschoolers attending early childcare centers.

**Methods:** Using a cluster randomized controlled trial design, eligible centres were stratified by province (SK, NB), location and language, recruited and randomized using a one-to-one protocol for each stratum. Sixty-one childcare centers were randomly assigned to the HSDS intervention or to usual practice. The 8 months long HSDS intervention is comprised of interlinked components which influence factors in the centres' environment and enable staff to integrate physical activity and healthy eating in the daily lives of young children. Pre and post data collection included the use of accelerometers (physical activity levels), the Test of Gross Motor Development-II (fundamental movements), digital photography-assisted weighted plate waste (food served and consumed) and nutritional risk assessment.

**Results:** Centres include 464 children in the intervention arm and 433 in the usual practice one. Preliminary results show significant positive changes in favour of the intervention centres compared to

usual practice centres. Analysis is on-going and the results of inferential analyses for our main outcomes will be available in the spring 2017. Qualitative comments attest educators feel energized, empowered by HSDS and incorporate the approach in their practice. For some, it has brought changes in their own lives.

**Discussion:** The multifaceted approach of HSDS positions it well to improve both dietary and physical activity behaviours of children attending childcare centres. The results of this study are relevant given the overwhelming prevalence of overweight and obesity in children worldwide.

Factors influencing implementation of school food and nutrition policies: A scoping review – Jessie-Lee McIsaac

Co-authors: Rebecca Spencer, Kaleigh Meisner, Julia Kontak, Sara Kirk

**Background:** Although school nutrition policies have been highlighted as an important intervention to support childhood nutrition, their implementation and maintenance into real-word settings is complex. There is a need to understand the factors that influence implementation by consolidating existing research knowledge to identify commonalities and differences.

**Objectives:** The purpose of this review is to determine what is known internationally about school and system-levels factors influencing the implementation of food and nutrition policies in elementary and secondary schools.

**Methods:** Following the scoping review framework outlined by Arksey and O'Malley, this review involved identifying and selecting relevant peer reviewed and grey literature studies, charting their details, interpreting, summarizing, and reporting the results. Following the search process, 1636 articles were screened and 38 articles were reviewed, from which common factors influencing food and nutrition policies were identified.

**Results:** Across the studies, five main themes emerged including: 1) Organizational Support for Policy Implementation; 2) Alignment between Nutrition and Core School Activities; 3) Healthy Food Access and Financial Implications; 4) Developing Common Purpose and Responsibility among Stakeholders; and 5) School and community characteristics.

**Conclusions:** While school food and nutrition policies offer potential as a contribution to environments that support the health of children and youth, factors influencing their implementing need to be mediated to help schools overcome the existing challenges.

What are the implications of your research to inform future policy or practice initiatives? School nutrition policies are common strategies used to improve childhood nutrition across Canadian school jurisdictions. The findings from our review provide tangible information for practitioners and policy makers working with schools of how they can help schools to overcome barriers to implementation.

**Examining 'Integrated Knowledge Translation' in a school-based population health intervention research project –** Jessie-Lee McIsaac

Co-authors: Tarra L Penney, Kate Storey, Lori Sigfridson, Jane Cunningham, Stefan Kuhle, Sara Kirk

**Background:** Integrated Knowledge Translation (IKT) is important in population health intervention research (PHIR) to ensure that stakeholders are co-producing relevant research that will support policy and practice. However, although IKT is often encouraged, there is little published research that describes its implementation and outcomes.

**Objectives:** The purpose of this study is to examine how IKT facilitated partnership development, knowledge creation and application to inform policy and practice.

**Methods:** We used a case study approach to describe and assess partnership development and knowledge use in in a school-based PHIR project in Nova Scotia. We invited all participating schools (n=18) to complete a short online survey about the use and usefulness of their individualized research reports to examine knowledge use. To assess partnership development, key knowledge users (n=5) were invited to participate in an interview, and a focus group was conducted with the lead local researchers (n=3).

**Results:** Feedback from schools that read their report (52%) was positive. Many of these schools felt that the report offered a new idea or way of knowing (conceptual knowledge use, 67%). Almost all of these schools attributed the partial or full adoption, or implementation, of a new practice as a result of using the information within their report (instrumental knowledge use, 89%). Key themes related to partnership development will be further elucidated through qualitative analysis of the interviews and focus group.

**Conclusions:** Ongoing exchange between researchers and knowledge users ensured integration of relevant results to inform practice changes in schools, policy development for the school board and transferable knowledge for other jurisdictions.

What are the implications of your research to inform future policy or practice initiatives? The results from this research help to clarify the implementation and outcomes of IKT for policy makers and practitioners that may be engaged in PHIR.

Provincial youth health trend data: Evidence informed action to build healthy school communities – Jo-Ann MacDonald

Co-authors: Donna Murnaghan, Melissa Munro-Bernard

**Objectives:** To understand and discuss the value of local student multi-year data and knowledge exchange systems to inform policy and practice at multiple levels.

**Methods:** From 2008 to 2014, four biennial cycles of the School Health Action Planning and Evaluation System (SHAPES) survey was used to collect data on the physical activity, healthy eating, and mental fitness behaviours of grades 5-12 students in 53-58 schools across Prince Edward Island. Knowledge translation mechanisms were used to increase dissemination of individual school, board and provincial profiles, providing local feedback to inform policies and programs with the goal of supporting and promoting improved youth health outcomes. Each data collection year was followed by a knowledge exchange year where researchers, schools, community and government partners worked collaboratively to further understand and act on the evidence produced.

**Results:** Since 2008, our data has shown statistically significant changes over time for PEI students: increased high levels of mental fitness (66%-71%); decreased consumption of fruits and vegetables 6+ times the day before the survey (42%-38%); and decreased consumption of high fat, salty, sugary snacks and drinks 7+ times the day before the survey (30%-15%). Since 2010, there has been no significant change in the rate of PEI students meeting the Canadian PA guidelines (45%).

**Conclusions:** The statistically significant changes over four data collection cycles in PEI speaks to the importance of monitoring youth health behaviours at the local level so that changes in trend data can be addressed in a sensitive and timely manner, linking policy and programming within schools and communities.

What are the implications of your research to inform future policy or practice initiatives? Access to trend data provides an excellent resource for population health assessment, research training, community engagement and measurement of new policies and programs that inform population health.

Innovative Northern programming: Public health unit and school board partnerships – Samantha Jibb

Co-author: Shannon Robinson

**Background:** Aligning with Ontario's Well-Being Strategy for Education – that children become healthy, active and engaged citizens – the Northwestern Health Unit (NWHU) has signed a formal Memorandum of Understanding (MOU) with each of 4 school boards in the region. The MOU outlines the expectations, roles and responsibilities of both agencies and is a step towards enhanced partnership. This presentation will cover both the public health unit and the school board perspectives on factors leading to a successful partnership and the importance of further collaboration – especially for northern communities with limited access to services and resources.

**Objectives:** The objective of the School Board-Public Health Unit MOU is to strengthen partnerships with school boards to enhance school health and the health of students and staff.

Target Groups: School Communities; Public Health Units

**Activities:** To develop the MOUs the management and administration of each agency met on multiple occasions to discuss programs and services, priorities, mutual objectives and expectations. A draft MOU was developed and reviewed by each team before finalizing and signing.

**Deliverables:** As a result of the agreements, both the Health Unit and the School Boards received earned media coverage recognizing the partnership. Deliverables include: A minimum of two presentations to Principals each year, Health Unit representation on Parent Involvement Committees, a joint communication plan, and additional partnership programming supporting staff and student wellness.

What are the implications of your policy or practice initiative to inform future research? Public organizations are facing fiscal restraint and are looking to do more with less. To successfully meet outcomes it is critical that organizations with mutual objectives work together to efficiently and effectively leverage resources. The School Board – Public Health Unit MOUs are an example of such partnership. Sharing lessons learned in the process of development can assist other organizations developing similar agreements.

# **ORAL PRESENTATION 24 – IMPACT OF PUBLIC HEALTH**

Thursday 8 June 11:00-12:30 Room 302

Public Health Strategy Design: Principles, Evidence & Practice – Robert Schwartz

Co-authors: Emily Taylor

**Background:** Strategies have been designed for nearly every imaginable public health issue (e.g. obesity, tobacco, sexual violence, poverty, alcohol) and the need for comprehensive strategies is widely accepted. Yet, strategies vary widely in their design.

**Objectives:** To understand the principles of strategy design, synthesize the evidence underlying these principles and explore how, in practice strategies compare to 'best-practice' principles and to one another.

**Methods:** Scoping review of conceptual and empirical literature; Content analysis of select public health strategy documents; interviews with key informants

**Results:** The literature review reveals several conceptual approaches resulting in a list of 10 key principles for strategy design. The empirical basis for these principles is very weak. Preliminary analysis of select strategy documents demonstrates that public health strategies tend to adhere to few of the principles and vary widely in their designs

**Conclusions:** There is a need for better evidence about how best to design strategies and for more research about the actual effects of different strategy designs under a variety of contexts. The current practice of strategy design indicates much room for improvement.

What are the implications of your research to inform future policy or practice initiatives? Better understanding of strategy design has the potential to inform the development of public health strategies so as to improve the likelihood of their achieving desired objectives.

The People Assessing Their Health (PATH) process: Building capacity for communities to determine their health and well-being — Anne Colleen Cameron

**Background:** The WHO Commission on the Social Determinants of Health (2010) contends that the structural determinants and conditions of daily life determine health and actions required to improve the conditions of daily living include tackling inequitable distributions of power, money, and resources; assessing the impact of policies and programs; and raising awareness of the social determinants of health. The PATH process is a health promotion/community development process that enables community members to critically analyze their own situation and identify the factors that determine the health of their community. Developed in northeastern Nova Scotia in 1996, it has been used in a number of communities around Nova Scotia, across Canada, and internationally in India, Thailand, Sierra Leon, Ghana, and in South Africa.

**Objectives:** To describe the steps involved in the PATH and the community health impact assessment (CHIA) process.

Target Groups: Community-based public health practitioners in Canada

#### **Activities:**

- Sharing stories of lessons learned from implementing PATH and CHIA locally and internationally
- Discussing the benefits and challenges of implementing these processes in public health units in Canada

**Deliverables:** A demonstration of how PATH and CHIA processes increase people's understanding of health inequities and the SDOH, increase critical analytical capacity, and take control over factors affecting health.

What are the implications of your policy or practice initiative to inform future research? The PATH process is an approach and tool to address complex challenges and ensure equity and health for all through the development of a CHIA tool which the community can use to systematically assess the potential impact of any policy, program or project on the health of their community and make decisions as to how to improve the positive aspects of the policy and mitigate the negative aspects. Researching the effect of the PATH process on people's agency to act and change would contribute significantly to health promotion

#### Public health impacts of free trade agreements – Jia Hu

Co-authors: Yassen Tcholakov, Eric Young

**Background:** Trade liberalization, while having the potential to increase the socio-economic status of individuals is also often accompanied with direct and indirect public health consequences which may outweigh their expected benefits. Free trade agreements (FTAs) have the potential of disrupting public policy coherence. For instance, countries may face higher drug prices and may have to limit regulations on harmful substances like tobacco and alcohol in order to abide by FTAs. Many countries, including Canada, have been sued by companies for introducing pro-health policies. Public health practitioners should be aware of policy consequences of FTAs in order to adequately advise policymakers in the decision-making processes.

**Objectives:** Provide an introduction of FTAs and their core regulatory components such as Investor-State Dispute Settlement (ISDS) mechanisms;

- Explain the health effects of FTAs, particularly how they can impact regulations on unhealthy substances as well as their effects on drug pricing; and
- Discuss strategies for mitigating adverse health effects of FTAs.

# **Target Groups:**

- Researchers;
- Public health practitioners;
- Policy-makers

#### **Activities:**

- Didactic session on FTAs and health;
- Discussion on mitigation strategies for FTAs including policy/regulatory and advocacy activities;
- Development of potential deliverables such as a policy brief on a FTA like the TPP for the Canadian Government or ideas for scientific articles for policy-makers and public health professionals.

#### **Deliverables:**

- Review historical overview of free trade agreements and their consequences on health;
- Sensitize to the health impacts of trade liberalization;
- Engage advocacy on policy making on trade liberalization in order to create health informed trade agreements.

What are the implications of your policy or practice initiative to inform future research? A greater awareness of the potential health effects of FTAs can drive further research in the area. More research on non-direct effects such as the health effects of employment changes would be very helpful in guiding informed policymaking. Furthermore, research on the effectiveness of health mitigation strategies such as Health Impact Assessments is much-needed.

# Bringing health research to policy: Understanding the role and procedures of the Federal Standing Committee on Health (HESA) – Robert Rivers

**Background:** Federal government committees are comprised of groups of lawmakers who conduct studies and make policy recommendations to the Parliament on a variety of topics. The Federal Standing Committee on Health (HESA) is "empowered to study and report on all matters relating to the mandate, management and operation of Health Canada. [...] The Committee is also responsible for the oversight of four agencies that report to Parliament through the Minister of Health: Canadian Institutes of Health Research (CHIR); Patented Medicine Prices Review Board (PMPRB); Canadian Food Inspection Agency (CFIA); and Public Health Agency of Canada (PHAC)." (HESA Mandate Overview)

#### **Objectives:**

- Introduce participants to the rules and procedures of HESA and the role of this committee in parliamentary processes
- Provide participants with insight into how researchers can anticipate when health topics will be studied by HESA
- Outline how participants can effectively contribute their health research evidence to the studies being conducted by HESA

**Target Groups:** Researchers of all levels who would like to learn how to actively engage with the Federal Government on health policy.

**Activities:** This is an oral presentation that will cover the procedures governing HESA and how health researchers may engage HESA to contribute evidence to policy.

**Deliverables:** Participants will learn how topics are selected for study by the Committee. Participants will also learn how evidence from their own area of expertise could be communicated to and utilized by HESA.

What are the implications of your policy or practice initiative to inform future research? Through understanding how HESA operates, participants will be more prepared to actively engage with the process of policy-making at the Federal Government level. This engagement may have important implications for future directions in the realms of both health policy and health research.

#### ORAL PRESENTATION 25 – PUBLIC HEALTH FOOD SECURITY, LITERACY AND PARTNERSHIPS

Thursday 8 June 11:00-12:30 Room 303

Community food security interventions: What works and why? Results of a Cochrane systematic review and integrated knowledge translation – Elizabeth Kristjansson

**Co-authors:** Alejandra Dubois, Professor Mark Lawrence, Hilary Thomson, Catherine Burns, Selma Liberato, Kate Wingrove, MacKenzie Barnett, Rebecca Armstrong, Patrick Labelle, Vivian Welch, Jane Platts, Barbara Szijarto, Kate Swensson, Peter Milley, Jean Donoso

**Background:** Community Food Security (CFS) interventions aim to tackle food insecurity in high income countries (HICs), however, their effectiveness is uncertain. Evidence synthesis from such interventions is essential to evaluate effectiveness and identify insights for future development. Herein, we report on a Cochrane systematic review and process evaluation of CFS interventions. We also discuss our Integrated Knowledge translation. This project involves 14 experts from academia in addition to public health, nutrition and health policy practitioners and decision makers from Canada, Scotland and Australia.

#### **Objectives:**

- Conduct a systematic review and process evaluation of interventions for CFS.
- Practice Integrated Knowledge Translation to ensure that results are relevant and used.

**Methods:** Knowledge users (KU) helped shape our logic model, review questions, PICO, search, results interpretation and KT strategy. Primary outcomes are household food security, dietary intake and physical, mental and social health. We searched thirteen electronic databases from 1980 to July 2016. We conducted meta-analyses where possible. The process evaluation is ongoing. To facilitate participatory analysis, we are holding a 'Data Party' for the entire team.

**Results:** We identified 24,213 records. After screening titles and abstracts, we included 444 papers to review full text for inclusion/exclusion; 86 other abstracts came from hand-searching. We included 45

studies thus far. Studies of food subsidies, income supplements, pricing incentives, healthy corner stores, collective kitchens, community gardens and farmer's market vouchers are included. We report the effects of each intervention and assess explanatory factors in the context and implementation.

**Conclusion:** Our team, including KUs, will ensure wide dissemination through a data party, list serves, seminars, conferences, webinars and newsletters.

What are the implications of your research to inform future policy or practice initiatives? This review has important implications for food security policy and programs.

The value of valence in policy formation for public health problems: an analysis of household food insecurity – Lynn McIntyre

Co-authors: Patrick B. Patterson, Catherine L. Mah

**Background:** Despite high-level political recognition of household food insecurity (HFI) as a public health problem, the issue has achieved little attention in policy interventions in Canada. What is missing? We suggest that the recently articulated construct of 'valence' may be useful in answering the question.

**Objectives:** We examined the valence characteristics associated with HFI in Canada.

**Methods:** This analysis used four datasets on HFI in Canadian public policy: 1) statements by legislators in parliamentary debates; 2) evidence presented by policy advocates in parliamentary and senate committees; 3) government-commissioned scientific reports, and 4) interviews with HFI policy entrepreneurs. We conducted conventional content analysis on 432 extracts to analyze the valence of the HFI concept based on operationalization of valence as the emotional quality of an idea.

**Results:** In Canadian public policy, the HFI concept is characterized by low intensity, negative valence, associated with themes of deepening poverty, food becoming costlier, the struggles of people facing HFI, and HFI as a source of health risk. In contrast, statements with positive valence were linked with topics such as prosperity from poverty reduction and human rights. People often drew on quantified information when they talked about the idea of HFI, which dampened valence intensity.

**Conclusions:** Theorists of valence have suggested that greater abstraction allows a policy idea to be more widely attractive, increasing the valence intensity. For HFI in Canada, a valence analysis demonstrates that the issue is framed negatively and narrowly which results in a loss of valence. The most intensely positive valence in policy rhetoric on HFI occurs in aspirational statements related to eliminating poverty.

What are the implications of your research to inform future policy or practice initiatives? Scientific indicators of social problems, such as the HFI metric, have low valence but high authority. Public health may wish to consider and analyze valence in policy messaging.

Halifax Food Policy Alliance: Working in partnership to achieve a healthy, just and sustainable food system in Halifax – Madeleine Waddington

Co-authors: Trevor Arnason, Valerie Blair, Aimee Gasparetto, Rita MacAulay, Ali Shaver

**Background**: The way we design our cities, develop policies and engage communities at the local level all impact our food system. In 2012, the Halifax Food Policy Alliance (HFPA) was formed as a partnership of individuals and organizations, who are striving to build a healthy, just and sustainable food system for Halifax in order to achieve the vision:

# Halifax: where no one is hungry and everyone has nutritious food that they enjoy, for generations to come, sustained by local producers.

Public Health is one of many key stakeholders in the HFPA. The work of the alliance aligns with the public health direction to support the creation of healthy communities through policy, engagement and knowledge mobilization.

#### **Objectives:** The HFPA works to:

- Build awareness of existing and emerging food system opportunities;
- Connect and foster dialogue to strengthen collaboration and advance action across the food system and;
- Inform and support food related policies and initiatives.

**Target Groups:** Municipal elected officials, decision-makers and staff, local food champions, and residents of Halifax

**Activities:** The HFPA has led and supported many initiatives in efforts to raise awareness and solidify the connection between food and food systems issues with the Municipal policy agenda. These include:

- assessing the current state of the food system in Halifax
- creating tools to support planning processes
- conducting policy scans of food related policies;
- participating in research projects;
- engaging community food leaders to move research to action

#### **Deliverables:**

- Food Counts report
- Food Planning toolkit
- Social Return on Investment Report
- Food leaders workshop

#### What are the implications of your policy or practice initiative to inform future research?

- Establishing roles for alliances to support and advance food systems work at the local level
- Understanding the development of municipal policies conducive to healthy, just and sustainable food systems
- Defining opportunities where the Municipality can play a role in food systems
- Participating in the generation of evidence related to the economic and social benefits of the HFPA

# Canadian adaptation of a health literacy assessment tool to inform nutrition labeling policy and education – Elizabeth Mansfield

Co-authors: Rana Wahba, Elaine De Grandpre, Doris Gillis, Mary L'Abbe

**Background:** Assessing health literacy of the Canadian population is important to Health Canada's policy and education strategies for nutrition labelling to ensure that those with marginal health literacy are not disadvantaged.

**Objectives:** To develop and validate an electronic adaptation of The Newest Vital Sign (NVS), an American 6-question interview-led health literacy assessment tool using a nutrition label, for use in Canada.

**Methods:** The NVS was updated with current Canadian nutrition label information and translated into Canadian French. A total of 77 interview-led NVS assessments in French (n=23) and English (n=54) with

individuals of varying health literacy levels (50% adequate, 50% marginal or lower) were undertaken by project staff to determine appropriate multiple choice (MC) distractors for each of the NVS questions. Voice overs were included for each NVS component read by the interviewer. 180 adults (90 English /90 French) spanning socioeconomic levels, were recruited from multicultural catchment areas in Ottawa, Ontario and Antigonish, Nova Scotia. A crossover randomized design with a washout period of 3-4 weeks was used to establish that self-assessment with the electronic MC-NVS instrument obtained consistent results with the traditional interviewer-led tool.

**Results:** 142 participants (72 English; 70 French) completed both the interviewer-led and the electronic-MC-NVS tools. Health literacy levels were "adequate" among 62% of English and 47% of French participants using either tool. Few participants scored differently between the two NVS versions. The electronic MC-NVS version took significantly longer to complete than the traditional tool.

**Conclusions:** Health literacy levels determined with the Canadian versions of interviewer-led NVS and the electronic-MC-NVS tools were equivalent.

What are the implications of your research to inform future policy or practice initiatives? This electronic Canadianized NVS tool can be used to ensure that development of labelling policies and educational resources address the needs of Canadians across health literacy levels.

#### Promoting food literacy: Facilitators and barriers to educational interventions – Emily Truman

**Background:** Like health literacy, "food literacy" provides individuals with proficiency in skills/knowledge that enables them to make informed choices contributing to improved long-term health and wellbeing. Given rising levels of obesity and poor eating habits, food education is needed to enable Canadians to make informed choices in a complex food landscape. Food literacy programs are growing in popularity in public health, but they still face significant barriers to implementation.

**Objectives:** This presentation examines food literacy research to: 1) identify facilitators and barriers to educational interventions, and 2) to suggest best practices for improved implementation.

**Methods:** A scoping review of food literacy research was undertaken which located 1049 abstracts, identifying 28 unique studies that report facilitators and barriers to acquiring food skills/knowledge, and to the implementation of educational interventions. Data was extracted on study type, country of origin, population targeted, and facilitators and barriers to implementation.

**Results:** The 28 studies reported a wide variety of facilitators and barriers to food literacy skills/knowledge and to program implementation. Study types are diverse, with eleven different approaches across the 28 studies. The highest number of studies (46%) are Canadian in origin. The majority of studies focusing on food skills/knowledge targeted adult populations (57%), while the majority of those about educational interventions targeted adolescents and children (80%).

**Conclusions:** Research on food literacy is an emerging area of study which identifies facilitators and barriers to two important areas of food education: skill/knowledge acquisition, and program implementation. Better understanding of these factors will contribute to improved program content and operation for adults and children/adolescents.

What are the implications of your research to inform future policy or practice initiatives?: A more thorough understanding of the challenges facing food literacy initiatives will contribute to enhanced ability to implement successful educational initiatives that contribute to improved population health.