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# **Early Child Development as a Determinant of Health: Knowledge to Action**

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***Blazing Our Trail... Tools, Tactics & Taking Charge***  
**Community Health Nurses Conference,  
Calgary, Alberta  
June 18, 2009**

## Outline

- Situate the social determinants of health as prime factors in population health using a health equity lens on public health programs
- Share our working definition and model of KSTE
- Discuss KSTE successes and challenges in early child development in bridging the gap between public health practitioners and researchers
- Share the lessons learned and the opportunities



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# Goals of All National Collaborating Centres

- Synthesize, translate, and exchange evidence-based knowledge to support front-line public health practitioners and policy-makers in Canada
- Identify gaps in the use of evidence in public health practice and policy making
- Strengthen national profile with significant contacts and networking across Canada
- Consult with front-line public health practitioners to identify promising practices, policy options and research gaps



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# NCCs Core Business

Knowledge synthesis, translation and exchange

- “getting evidence in the hands of decision makers”
- practice, program and policy
- identify gaps in knowledge



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# Determinants of Health

When looking at the health of our nations:

- consider non-medical factors - the *determinants of health* - that affect well-being.
- the determinants intersect and interact with each other, so that the health of any individual is a complex summation of factors.



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# Community Health Nursing is...

Fundamentally concerned with action and advocacy to address:

- the actions of individuals, such as health behaviours and lifestyles
- factors such as income and social status, education, employment and working conditions, access to appropriate health services, and the physical environment
- determinants of health, which in combination, create different living conditions which impact on health



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# Determinants of Health

- Income and Social Status
- Social Support Networks
- Education & Literacy
- Employment and Working Conditions
- Social Environments
- Personal Health Practices and Coping Skills
- Biology & Genetic Endowment
- Physical Environments
- Healthy Child Development
- Health Services
- Gender
- Culture

(Public Health Agency of Canada)

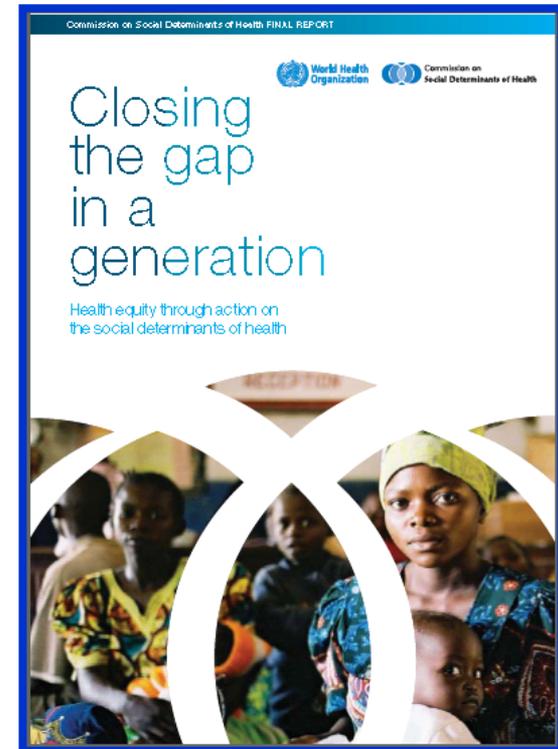
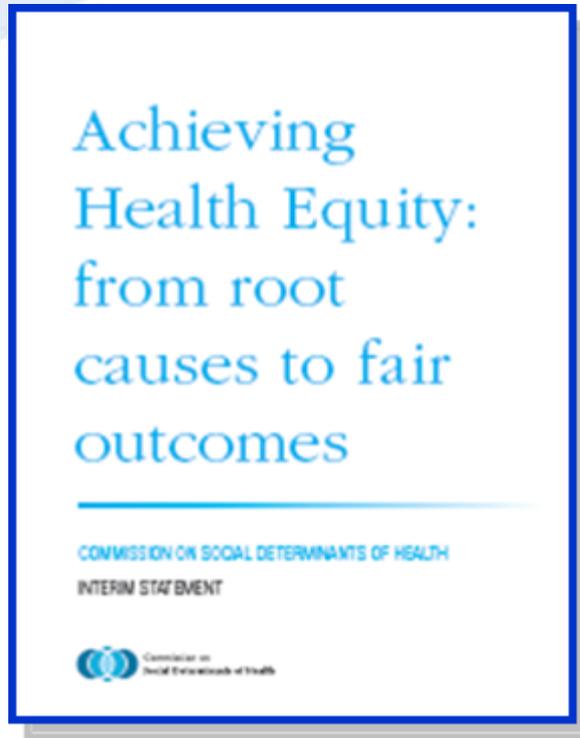


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# Global Concern: World Health Organization Commission Social Determinants of Health

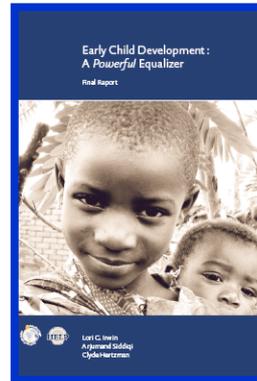
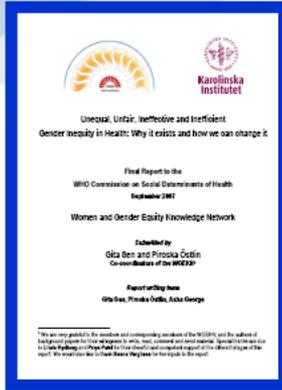


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# WHO Commission: Knowledge Networks



- Women and gender equity
- Early child development
- Employment conditions and health inequalities



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# Women and Gender

- Gender inequality damages the health of millions of girls and women around the world. It can also be harmful to men's health, despite the tangible benefits it gives them through resources, power and control.
- Taking action to improve gender equity in health is one of the most direct ways to reduce health inequities and ensure effective use of health resources.



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# Women and Gender

- The WHO Women and Gender Equity Knowledge Network identifies seven key actions: re positive change for gender equity in health.
- Address the essential structural dimensions of gender inequality
- Challenge gender stereotypes and adopt multilevel strategies to change the norms and practices that directly harm women's health



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# Women and Gender

- Reduce the health risks of being women and men by tackling gendered exposures and vulnerabilities
- Transform the gendered politics of health systems by improving their awareness and handling of women's problems as both producers and consumers of health care, improving women's access to health care, and making health systems more accountable to women



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# Women and Gender

- Take action to improve the evidence base for policies by changing gender imbalances in both the content and the processes of health research
- Take action to make organizations at all levels function more effectively to mainstream gender equality and equity and empower women for health by creating supportive structures, incentives, and accountability mechanisms



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# Women and Gender

- Take action to make organizations at all levels function more effectively to mainstream gender equality and equity and empower women for health by creating supportive structures, incentives, and accountability mechanisms
- Support women's organizations, which are critical to ensuring that women have voice and agency.



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# Employment Conditions

- Employment enables the satisfaction of basic needs and the pursuit of other interests
- People with high levels of work-life conflict feel...
  - Lack time
  - Low energy levels
  - Stress, anxiety and guilt
  - Lack of control over their work and work arrangements



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# Employment Conditions

- Possible work solutions to achieve work-life balance
  - Flexible work arrangements
  - Employee assistance programs
  - Child and eldercare services
  - Health and wellness initiatives
  - Leaves of absence

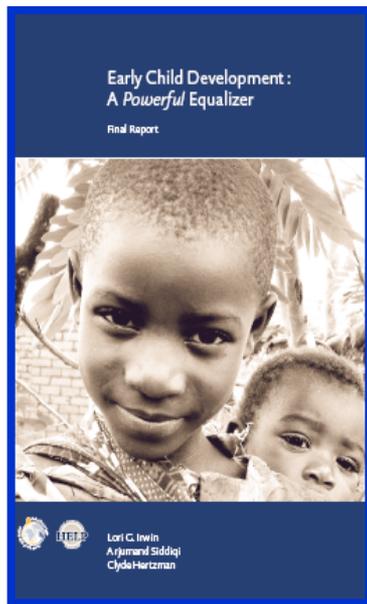


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# Early Child Development: A Powerful Equalizer



Irwin, Siddiqi & Hertzman, 2007

- ECD strongly influences basic learning, school success, economic participation, social citizenry and health
- Developmental approach
- Knowledge synthesis about opportunities to improve ECD
- Framework for understanding the environments that influence early development



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# Healthy Child Development

- The early child period (0-8yrs) is considered to be the most important developmental phase throughout the lifespan.
- Healthy early child development (ECD) — includes the equally important physical, social/emotional and language/cognitive domains of development — strongly influences well-being, obesity/stunting, mental health, heart disease, competence in literacy and numeracy, criminality and economic participation throughout life.

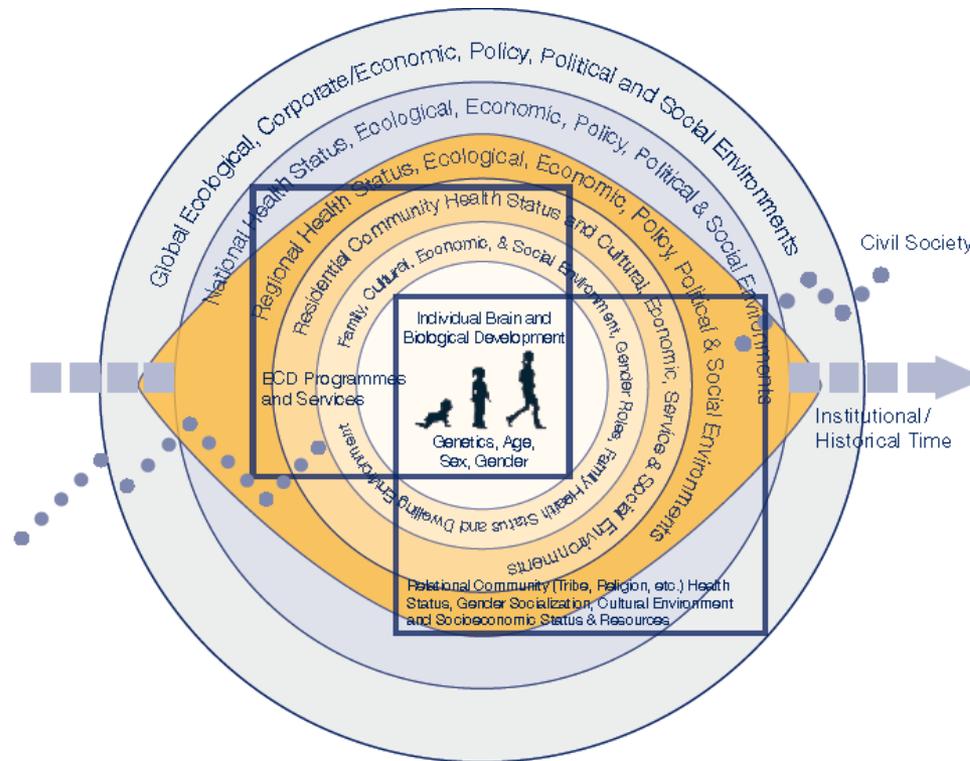


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# Total Environmental Assessment Model for Early Child Development



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Source: WHO Commission on Social Determinants of Health. (2007). Early Child Development: A Powerful Equalizer. WHO: Switzerland.

# How Do We, CHNs, Use Our Knowledge of The Social Environment?

We know, based on 2004 & 2005 Statistics

- Almost 8% or 684,000 Canadian families were poor
- Almost 12% or 788,000 Canadian children were living in poverty
- Just under ½ of all poor children live in lone-parent families,
- Investment of \$9,400 to bring them up to the poverty line



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# How do We, CHNs, Use our Knowledge of the Social Environment?

We also know, based on 2004 & 2005 Statistics

- 49% of recent immigrant families live in poverty
- 40% of off-reserve First Nations children live in poverty
- 34% of children in visible minority families are poor
- Child poverty has consistently fallen in Quebec for the past 10 years

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# Healthy Child Development

We also know:

The effect of prenatal and early childhood experiences on subsequent health, well-being, coping skills and competence is very powerful

Children born in low-income families are more likely than those born to high-income families to have low birth weights, to eat less nutritious food, and to have more difficulty in school



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# How Does Poverty Impact Child Health?

- Poor physical health (combination measure)
- High infant mortality - 6.5 per 1,000 dying in the first year of life in the poorest fifth of Canadian urban neighbourhoods compared to 3.9 per 1,000 in the richest fifth
- Possibility of more children with anti-social behaviour, conduct problems, hyperactivity and inattention & other behavioural challenges



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# How Does Poverty Impact Child Health?

- Low birth weight:
  - Higher rates of mortality & illness
  - Lower rates of growth
  - More developmental challenges
  - More health related limitations in life
- Obesity:
  - 25% among low-income compared to 16% within higher-income families



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# How Does Poverty Impact Child Health?

- School and cognitive difficulties, with low-SES children:
  - Less prepared for learning when they begin school
  - Poorer educational outcomes
  - Higher drop-out rates



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# The National Collaborating Centre for Determinants of Health

What can we do?

What is KSTE?

- Knowledge synthesis, translation and exchange
- An emerging science; new divisions within departments, new job titles, new competencies
- Part of the requirements for successful grant funds
- KT activities among public health practitioners, policy makers, and researchers can bridge the gap between research producers and users (2 way)



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# Knowledge Translation (KT)

“.... The exchange, synthesis, and ethically sound application of research findings within a complex system of relationships among researchers and knowledge users; the incorporation of research knowledge into policies and practice, thus translating knowledge into improved health of the population” (Kiefer et al., 2005).

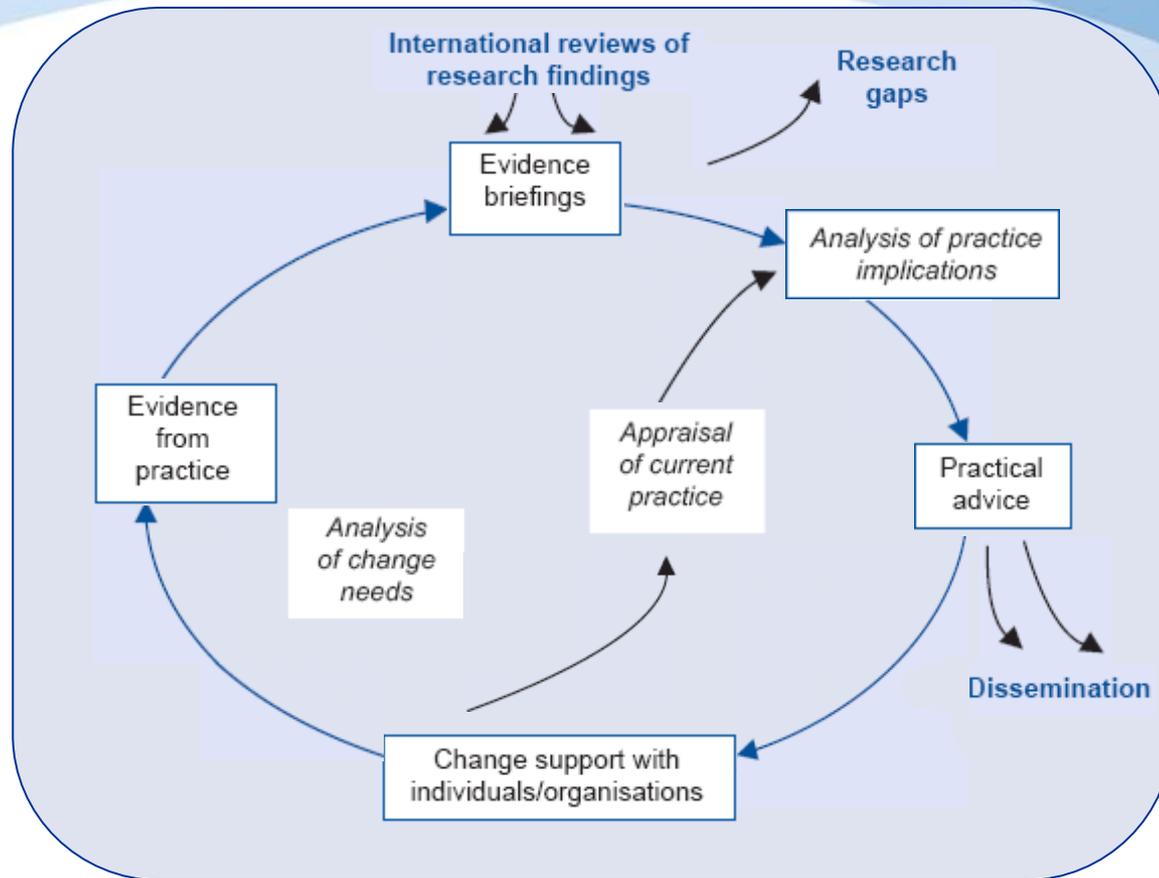


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# Evidence into Practice Cycle



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Source: Kelly, Michael P; Viv Speller, Jane Meyrick  
*Getting Evidence into Practice in Public Health*. National Health  
Service Health Development Agency, 2004.

# Early Child Development Activities

- Environmental scan
- Pan-Canadian inventory of public health early child development home visiting programs
- Home visiting forum
- Annotated bibliography
- Discussion paper
- TEAM ECD fact sheet and scenario
- Evidence review
- Review of the reviews
- Business case
- School readiness



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# Environmental Scan

## Goals:

1. Learn more about existing ECD programs and services in Canada
2. Understand the challenges, issues and successes
3. Identify the role (contribution) of public health in Early Child Development

Summer and early fall 2008: a series of focused conversations with key partners and referred contacts

Outcome: 3 focus groups & ~60 people participated



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# What we learned?

## Topics

- Early Child Development is a Priority
- Poverty
- Home Visiting
- School Readiness

## Issues

- Human Resources
- Business case
- Access to evidence
- Service Models, Accessibility and Coordination
- Who are the key experts in the ECD field in Canada?
- What are the ECD programs and activities across Canada?
- Peer network of early child development practitioners



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# Inventory of Public Health Early Child Home Visiting

Purpose: To gather relevant information about Public Health Early Child Home Visiting Programs across Canada

Process:

- Scanned for what had been done in this area
- Developed and tested the inventory tool
- Populated the inventory from the websites
- Conducted inventory interviews

Information has been gathered from 8 provinces (2 under way), 3 territories, FNIH, PHAC & several international programs



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# Inventory of Public Health Early Child Home Visiting

## Synthesis of the information:

Pan-Canadian range of programs

- Common and unique features (goals, models, tools, evaluation)
- Strength based, culturally sensitive

Public health nursing is foundation

- Screening, assessment, engagement, case management
- Building relationships and capacity
- Supervision



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# Inventory of Public Health Early Child Home Visiting

## Determinants of Health

- Early Child Development
- Equity, health inequality
- Poverty
- Collaboration and partnership

## Evidence base

- Evidence then and now
- Evaluation
- Information and data
- Business case
- Experiential knowledge



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# Inventory of Public Health Early Child Home Visiting

## Canadian context

- Tools
- Models
- Curriculum
- First Nations, Inuit & Métis communities
- Rural and remote

Growing recognition of the importance for support to all families with children

- Universal vs. targeted services
- Range or “web” of services
- Continuum



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# Inventory of Public Health Early Child Home Visiting

## Future Activities:

- Disseminate completed the reports and summaries
- Develop Regional profiles
- Create and Support Networks
- Forum or exchange mechanism around issues – evaluation, tools, curriculum



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# Annotated Bibliography on Early Child Development Home Visiting

Purpose: Provide published articles to decision makers in an accessible way

- Searched peer-reviewed, refereed journals
- 1993 - 2008
- Found >140 articles in more than 50 journals
- 17 Canadian



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# Annotated Bibliography on Early Child Development Home Visiting

## Theme –

Considerable debate and contradiction regarding the benefit, the practice of home visiting and who the visitors should be (i.e. public health nurses vs. paraprofessionals)



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# Early Child Development Forum

## *Exploring the Contribution of Public Health Home Visiting*

- Co-hosted by the National Collaborating Centre for Aboriginal Health and the NCCDH
- October 2008
- Saskatoon, Saskatchewan



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# Forum Participant Priorities

Tools – screening and assessment

Training

Business Case

Human Resources

Models

Network (Communication, Community of Practice)

Evaluation

Striving for Excellence

Cultural Implications



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# Review of Reviews

Purpose: Bring together evidence on home visiting as a delivery strategy to promote maternal and child outcomes

- Evidence summarized
  - Child outcomes
  - Maternal outcomes
  - Parenting outcomes
  - Program moderators
- Research Gaps

Next steps: Internal and external review, Products



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# Implications of our work

- Include the evidence about the determinants of health as we set health priorities
- Address the socio-economic gradient
- Reduce inequities in health status



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- **National Collaborating Centre for Determinants of Health (2008). *Synthesis of 'Unequal, unfair, ineffective and inefficient: Gender inequity in health: Why it exists and how we can change it'* WHO Knowledge Network Final Report (G. Sen, P. Ostlin & A. George). Antigonish, Nova Scotia: National Collaborating Centres for Public Health.**



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## Acknowledgements:

Faith Layden, Anna Macleod, Lesley Poirier, Karen Weir, Bonnie Hamilton Bogart, Kristin MacLellan, Alan Shiell, Margaret Leighton, Diana Daghofer

*The NCCDH is hosted by St.FX University, in Antigonish, Nova Scotia & receives funding from the Public Health Agency of Canada*

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