



# Knowledge Translation – Public Health Perspectives

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April 16, 2009



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# Overview

Evidence in Public Health

Knowledge Translation (KT) and  
Evidence-Informed Decision-Making

Shifting Paradigms of KT

Current Opportunities

KT in Practice

- *National*
- *International*

Some Practical Ingredients  
for Success

Summary



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# Challenges for facilitating use of knowledge in Public health

- Work often done in silos in highly structured organizations
- Few incentives to share resources and knowledge
- New information produced at increasing rate
- Many stakeholders with multiple needs but limited coordination mechanisms
- KT under-resourced
- Potential for inconsistent information between knowledge providers



# Nature of Interventions in Public Health

## Implications for evidence

- Complex, multi-faceted programs that cannot be randomized
- Natural, community environments and complex set of factors that cannot be controlled
- Time lag to see final outcomes,
- Role of **context** in interpreting and using knowledge/evidence, importance of assessing applicability & transferability



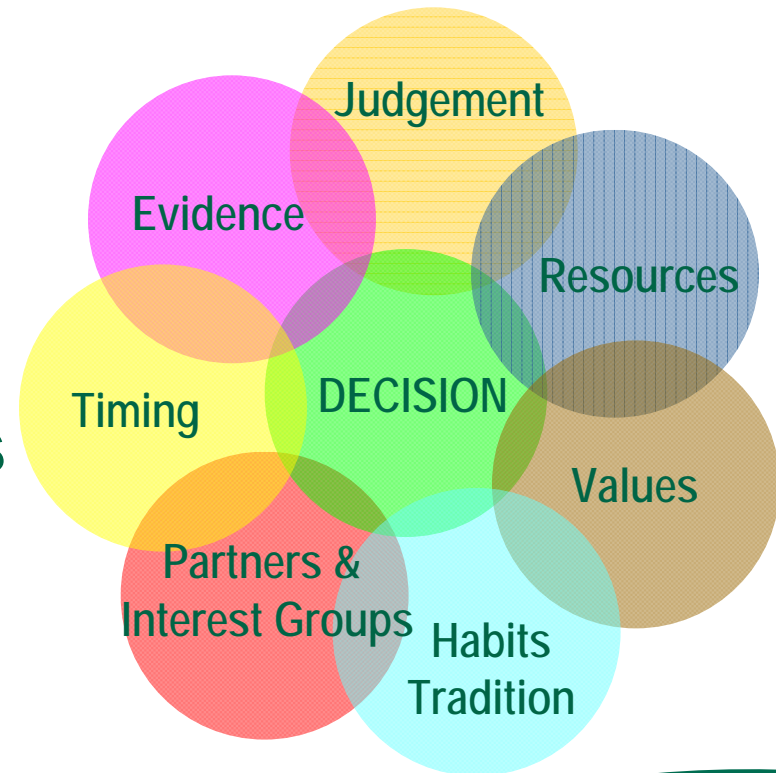
# Evidence based or Evidence informed?

- **Evidence in Public Health**

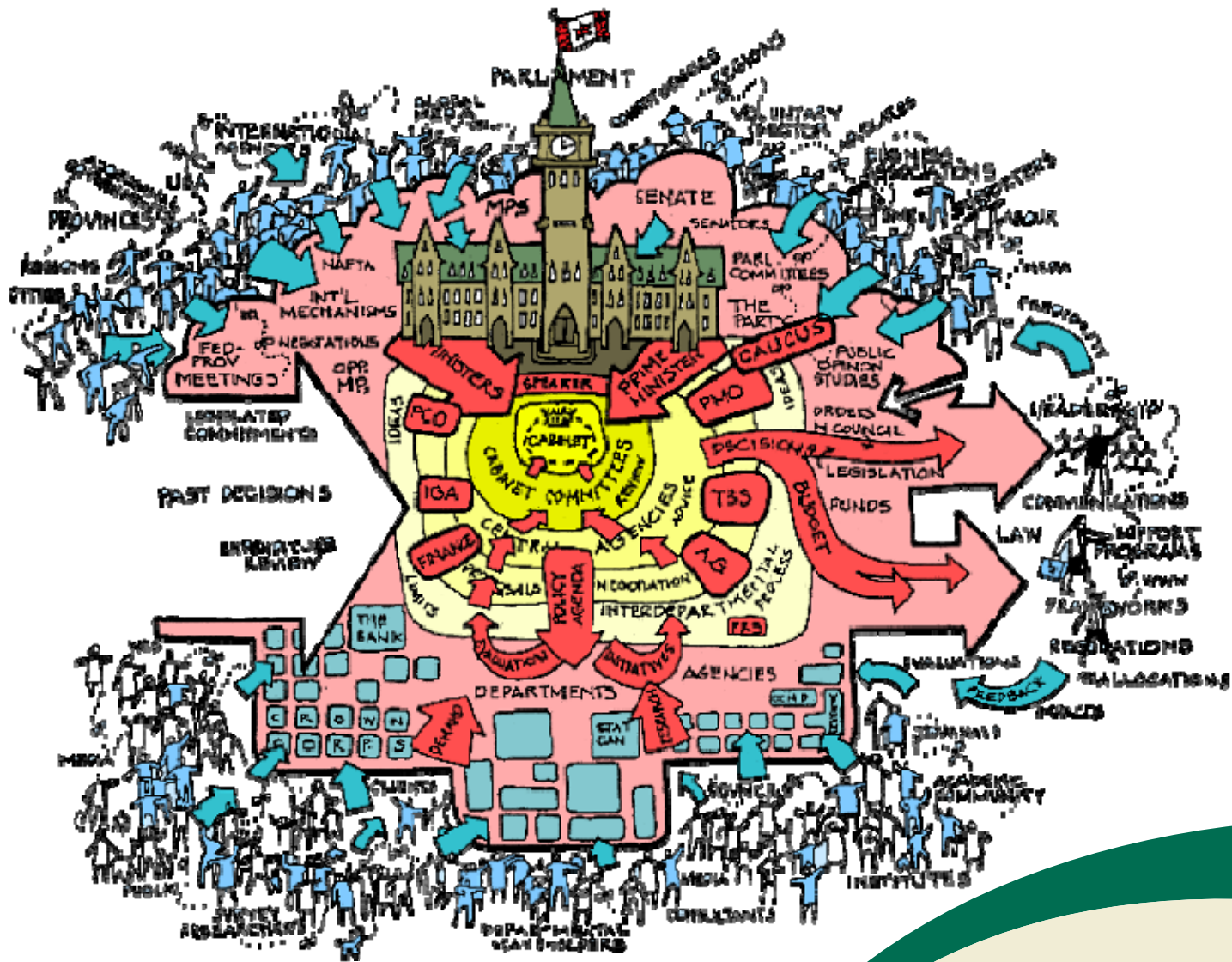
- Research
- Surveillance
- Practice/experience
- Evaluation findings

- **Other factors/influences**

- Media
- Advocacy
- Politics
- Timing
- Opinions etc.



# Policy Decision-making Process



Milne, 2008



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# Long Lag Period Between Knowledge and Action

National Collaborating Centre for Healthy Public Policy

## The Tobacco Story in Canada: 1900 until today



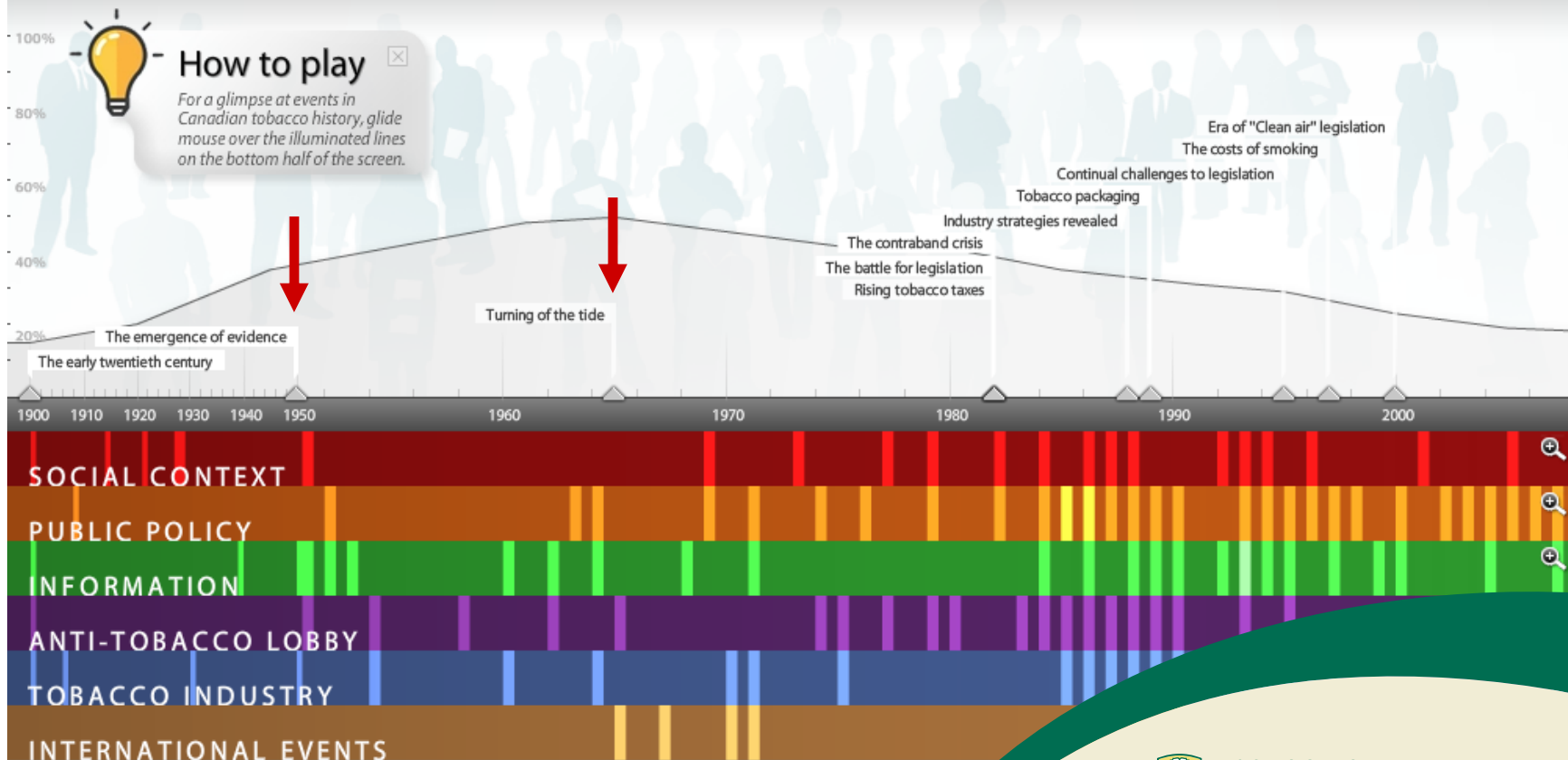
TIMELINE

EPISODES

WHAT HAVE WE LEARNED?

BIBLIOGRAPHY & LINKS

### Prevalence of smokers in Canada (males and females, 15 years and older) (%)



Credits



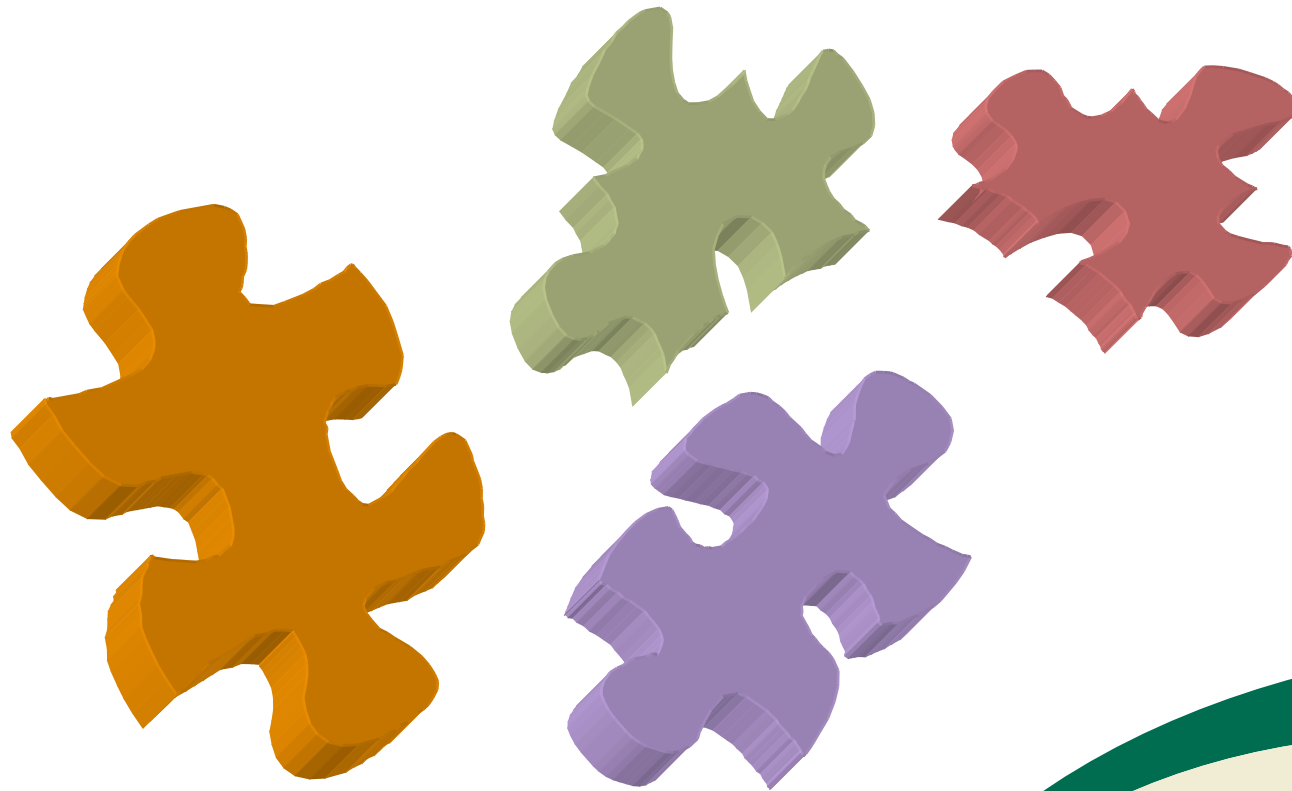
Centre de collaboration nationale  
sur les politiques publiques et la santé  
National Collaborating Centre  
for Healthy Public Policy

<http://www.ccnpps.ca/515/Timeline-Tobacco+story.htm>



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# ***So how does “Knowledge Translation” fit with Evidence-Informed Action?***



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# Definitions and Terms

- Knowledge Translation (KT)
  - Making users aware of knowledge/innovations and facilitating their use of it to improve health
  - Closing the gap between what we know and what we do (reducing the know-do gap)
  - Moving knowledge into action
- Confusing terminology:
  - knowledge mobilization, knowledge development and exchange, knowledge transfer, dissemination,
  - ....



# Key Elements of KT

- Knowledge synthesis
- Dissemination
- Knowledge exchange
- Ethically sound application of knowledge



# Why Should I Care About KT?

- Empirical work has shown that the simple availability of knowledge does not guarantee use.
- Inefficient use of limited health resources!
- Large amount of information, but insufficient:
  - Overall synthesis to support action
  - Dissemination/exchange
  - Uptake by decision makers
  - Application of knowledge

*“Are we having an impact?”*



*“My question is: Are we making an impact?”*



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# Some KT Theories

- Push {*researcher action, e.g. dissemination*}
- Pull (*user demand, capacity building*)
- Knowledge Mobilization and Exchange



# Knowledge Brokers

- Knowledge brokering links researchers and decision makers, facilitating their interaction so that they are able to:
  - better understand each other's goals and professional culture,
  - influence each other's work,
  - forge new partnerships, and
  - use evidence into decision making.
  
- Individuals or organizations can be knowledge brokers



adapted from Murphy, 2006



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# Knowledge Brokers



## *Case example: Tobacco*

- Canadian Council for Tobacco Control (CCTC)
- The CCTC acts as a **knowledge broker** to:
  - Bring people and organizations together
  - Link key players and decision makers
  - Ensure timely and practical transfer of critical knowledge and skills, and
  - Support, promote and further a comprehensive approach to tobacco control .



# Shifting Paradigms

## Old Paradigm

- Researchers do research
- They communicate it effectively
- Recipients use the results . . .

***One way knowledge transfer***



## New Paradigm

- Researchers ***and*** users select topic, questions
- Researchers ***and*** users bring different expertise
- Joint interpretation, *application* in specific context . . .

## ***Knowledge translation***

*Multi-directional, and multiple inputs from research, practice, experience and culture*



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# Shifting Paradigms?

**Goal:** more use of  
research



**Goal:** responsive and  
relevant research

Communication &  
dissemination



Genuine partnership  
mutual respect

Increasing user capacity



Focus on organizational  
structure and culture

KT literature



Management literature



Change management

Info sharing



Power sharing





# Current Opportunities

- Increased research/community collaboration
- Increased multidisciplinary intervention research
- Increased emphasis by research funding agencies:



**CIHR**  
Canadian Institutes of  
Health Research



Canadian Health Services Research **Foundation**



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# KT Action at CIHR



## KT Focus

## Funding mechanisms

### Synthesis

- CIHR funds the Canadian Cochrane Network and Centre
- KT Synthesis
- Operating grants competition

### Integrated KT

- Partnerships in Health System Improvement (PHSI)
- Strategic research funded through institutes
- Meeting, Planning and Dissemination grants to develop collaborative relationships and grant proposals

### End of Grant KT

- Allowable expense as part of a grant application
- KT Supplement Grants
- Meeting, Planning and Dissemination grants to disseminate results

### Science of KT

- Operating grants competition-KT Panel
- Strategic calls from the KSE Branch on theories and methods of KT





# Knowledge Brokering

- CHSRF is evaluating the impact of knowledge brokering on organizations wishing to incorporate research into their decision-making processes through demonstration projects

*The objectives of the demonstration site program are:*

- 1) to stimulate the implementation of structures, processes, or people in decision-making organizations dedicated to linking researchers with decision makers in their organizations and facilitating their interactions; *and*
- 2) to increase the appropriate use of quality research in the decision-making processes of successful applicant organizations

*Each of the six sites will undertake formative and summative evaluations of their individual projects.*



# Examples of KT in Practice

- ***National***

- The Canadian Heart Health Initiative (CHHI)
- National Collaborating Centres (NCC)
- Canadian Best Practices Portal (CBPP)

- ***International***

- EVIPNet (Evidence-Informed Policy Network)
- Commission on Social Determinants of Health

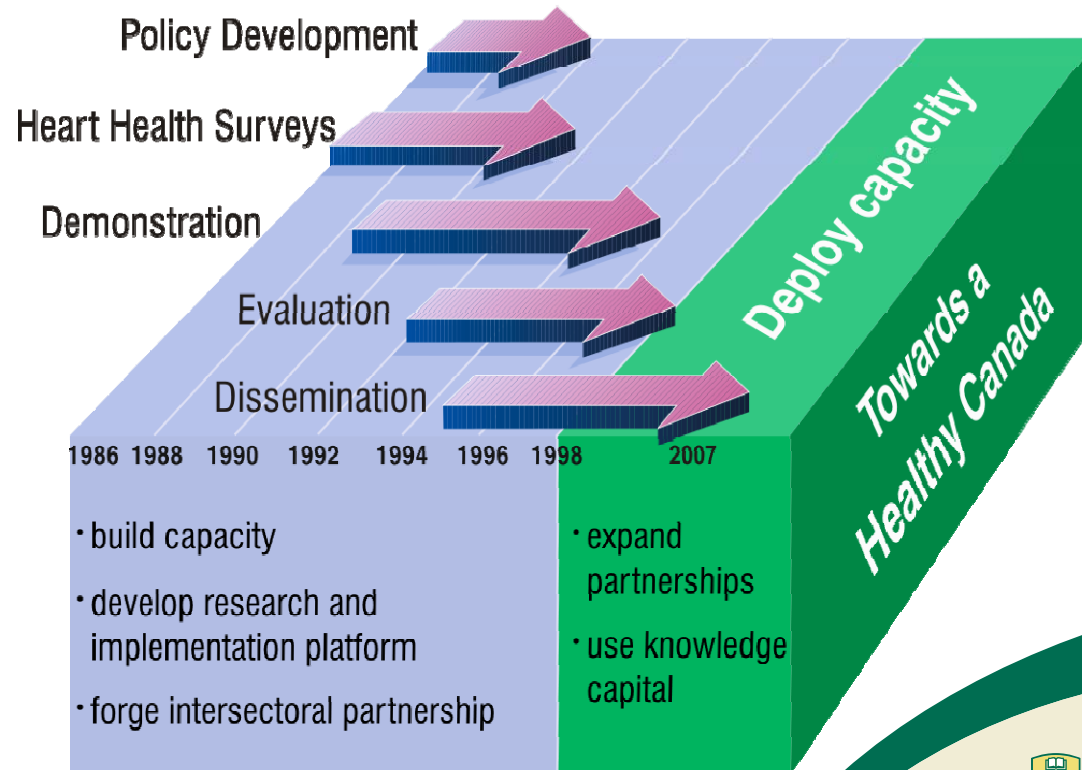


# The Canadian Heart Health Initiative

## *Linking Research, Policy and Action*



a planned, phased approach









Canada, 2001



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# National Collaborating Centres (NCCs)

NCC	An Example of a Current Activity related to KT
 <p data-bbox="241 414 651 495">National Collaborating Centre for Aboriginal Health</p>	<p data-bbox="682 381 1974 503">In Aboriginal Health Policies – developing a comparative inventory of policies, with accompanying case studies, for use as a research tool to inform policy-makers and practitioners.</p>
 <p data-bbox="241 576 651 657">National Collaborating Centre for Methods and Tools</p>	<p data-bbox="682 576 1491 625">Launching the online Registry of Methods and Tools.</p>
 <p data-bbox="241 738 651 820">National Collaborating Centre for Infectious Diseases</p>	<p data-bbox="682 706 1932 787">Partnering with the NCC for Aboriginal Health on the development of an evidence review and educational tools for cervical cancer prevention.</p>
 <p data-bbox="241 901 651 982">National Collaborating Centre for Healthy Public Policy</p>	<p data-bbox="682 868 1974 990">Emphasizing knowledge sharing and dissemination, particularly through workshops, while initiating an interactive tool for assessing and responding to the public health community's needs.</p>
 <p data-bbox="241 1063 651 1144">National Collaborating Centre for Environmental Health</p>	<p data-bbox="682 1031 1953 1153">Conducting a multi-year project to enumerate past cases of waterborne illnesses in Canada and identify drinking water system risk factors (guided by a steering committee of policy-makers, practitioners, and researchers).</p>
 <p data-bbox="241 1226 651 1307">National Collaborating Centre for Determinants of Health</p>	<p data-bbox="682 1193 1585 1396">Identifying and disseminating systematic reviews and gaps relative to early child development and public health interventions with cross-cutting themes of women and gender equity, employment and working conditions.</p>



# Canadian Best Practices Portal for Health Promotion and Chronic Disease Prevention



- **Purpose:** to improve policy and program decision-making by enabling access to the best available evidence on chronic disease prevention and health promotion
- **Target audience:** Decision makers in health promotion, public health and chronic disease prevention, including:
  - Frontline public health workers (e.g. health promotion planners)
  - Non-government and voluntary organization program coordinators
- All posted interventions are screened and assessed for effectiveness

[http://cbpp-pcpe.phac-aspc.gc.ca/web\\_tour-eng.html](http://cbpp-pcpe.phac-aspc.gc.ca/web_tour-eng.html)



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# International KT Action



- **EVIPNet (Evidence-Informed Policy Network)**
  - EVIPNet Portal <http://www.evipnet.org/php/index.php>
  - is a WHO initiative that encourages policy-makers in low and middle-income countries to use evidence generated by research.
  - Promotes the systematic use of health research evidence in policy-making
  - Promotes partnerships to facilitate policy development and implementation
  - Uses best evidence available

## **Activities:**

- production of policy briefs, research syntheses
- deliberative forums, networking opportunities



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# International KT Action



- Commission on Social Determinants of Health
  - Launched in March 2005
  - brings together leading scientists and practitioners to provide evidence on policies that improve health by addressing the social conditions which people live and work
- Objectives:
  - To support policy change
  - Establishing Health as a shared goal
  - Help build a sustainable global movement for action on health equity and social determinants
- Activities:
  - Country action
  - Knowledge Networks
    - E.g. Women and gender equity Knowledge Network
    - Reports that helped inform the Commission's *Closing the gap in a generation: Health Equity Through Action on the Social Determinants of Health Report*



# Practical Ingredients for Success

- Researcher/community collaboration
- Role of credible champions
- Aligning with larger policy trajectories
- Linking with existing organizational activities
- Addressing concerns of decision-makers
- Using effective communication strategies



# Researcher/Community Collaboration

## Action Research – University of Alberta

- Healthy Alberta Communities
- Addiction and Mental Health Research Laboratory
- Community-University Partnership for the Study of Children, Youth, and Families (CUP)



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# Role of Credible Champions

- People and their interactions matter more than the message
- On-going liaison and institution inter-connections
- Personal contact and trust-building through quality relationships over time can offer systems change potential
- Necessary for:
  - Access to decision-making settings
  - Credibility



*In memoriam* **Dr. Andrés Petrasovits**  
February 11, 1937 – July 24, 2001



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# Aligning with Larger Policy Trajectories

- Aboriginal agenda
  - Growing recognition of specific needs/rights of Aboriginal communities
- Children and family agenda



# Addressing Concerns of Decision Makers

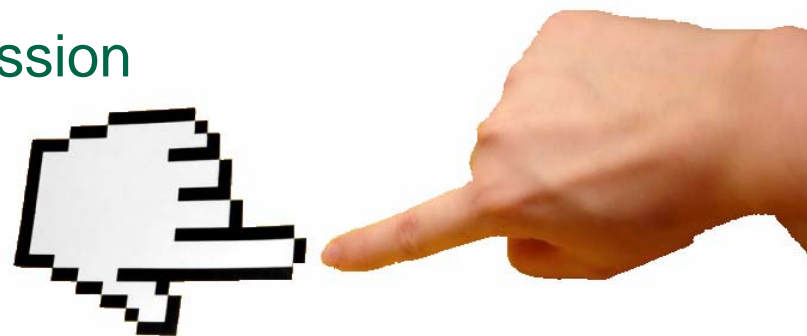
- Presenting a solution to an existing problem, NOT need for more research
  - Include short term objectives



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# Using Effective Communication Strategies

- **Focus to specific audience (tailored message)**
  - CHSRF 1-3-25 Format
  - Use of language, concepts of decision makers
- **Use of local case studies**
  - “Stories” make issues real
  - Speak to organizational values, mission
- **Credible messenger**
- **Use of visuals**
  - Geographic Information Systems (GIS)
    - Better decisions through mapping and models
    - Mapping of social determinants of health
    - Visuals and Colors (rather than stats) to communicate epidemics



# What Can Universities do to Facilitate KT?



- Incentives for engaged scholarship in the review process of faculty
- Facilitate multidisciplinary KT curriculum
- Integrated KT faculty position / focal point





# Closing Reflections

- KT from a Public Health perspective is important as it is inherently focused on continuous learning
- More opportunities and incentives for researchers to engage in collaborative action and co-production of knowledge with various knowledge users
- Strategic use of evidence



*“A little knowledge that acts is worth infinitely more than much knowledge that is idle.”*

**Khalil Gibran (1883-1931)**



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# *Thank You*

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