



Health
Canada

Santé
Canada

Healthy
Environments and
Consumer Safety

Santé
environnementale
et sécurité des
consommateurs

Canada



Evidence in Public Policy Decision-making

February 12, 2007

Presentation to the McLaughlin Centre for Population Health Risk
Assessment

Outline

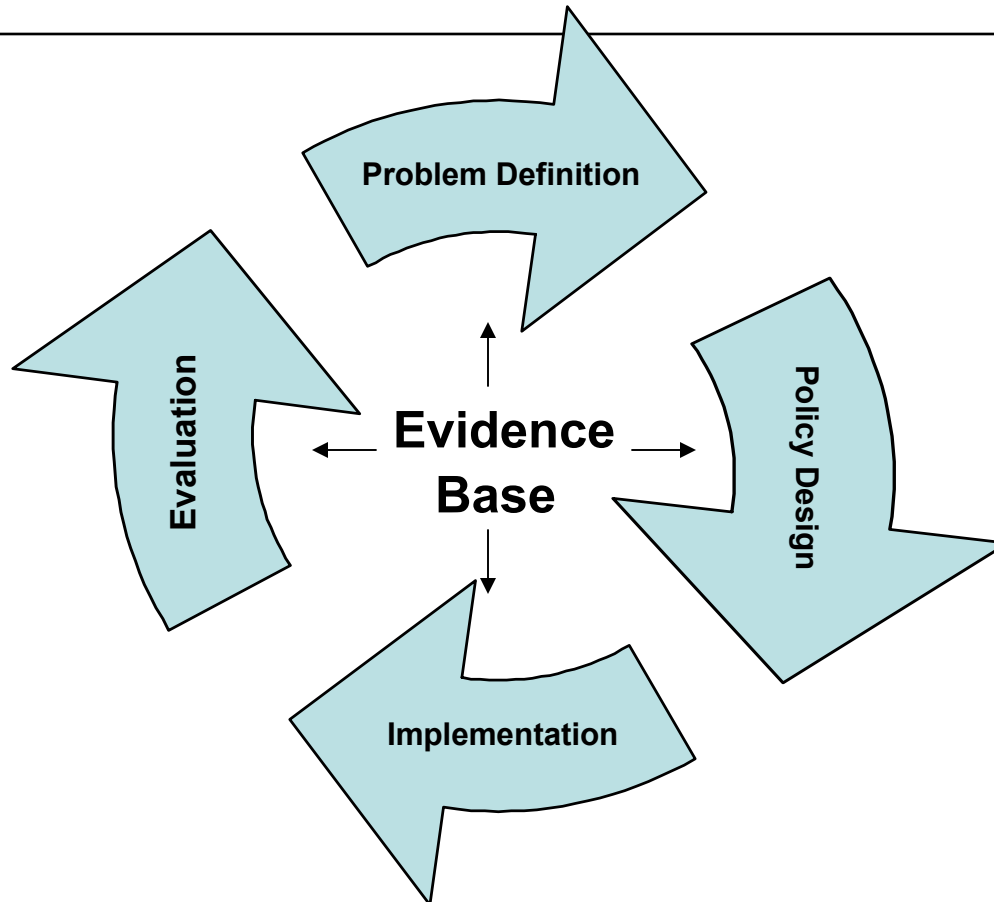
- The nature and considerations with respect to the role of evidence in public policy decision-making and policy development

Making the case for action on Health and the Environment

The nature of government policy making (decision-making) is complex...

- Issues themselves are complex:
 - Involve a variety of jurisdictions
 - Myriad of stakeholders/interests
 - there are a myriad of considerations: economic, legal, international
 - must co-ordinate within and among departments
- There must be a systematic approach to information gathering and making decisions...
- Government and decision-makers are increasingly more accountable for decisions and results...lessons from Krever
- You can't take politics out of decision-making

Evidence is critical at all stages of the decision\policy making process..



There can be challenges with how and when evidence is used to support decision-making...

- Evidence takes time to accumulate\ costs can be prohibitive
- Evidence is not always definitive
- Need to balance different kinds of evidence:
 - Hard evidence (empirical research quantitative data) versus softer evidence (normative\qualitative e.g. public opinion survey etc)
 - Public perception of risks versus scientific risk assessment
- Quality of evidence can be challenged:
 - Bias, methodology, domestic data
- Decisions based on different thresholds of evidence:
 - Incomplete information – assumptions and projections vs conclusive

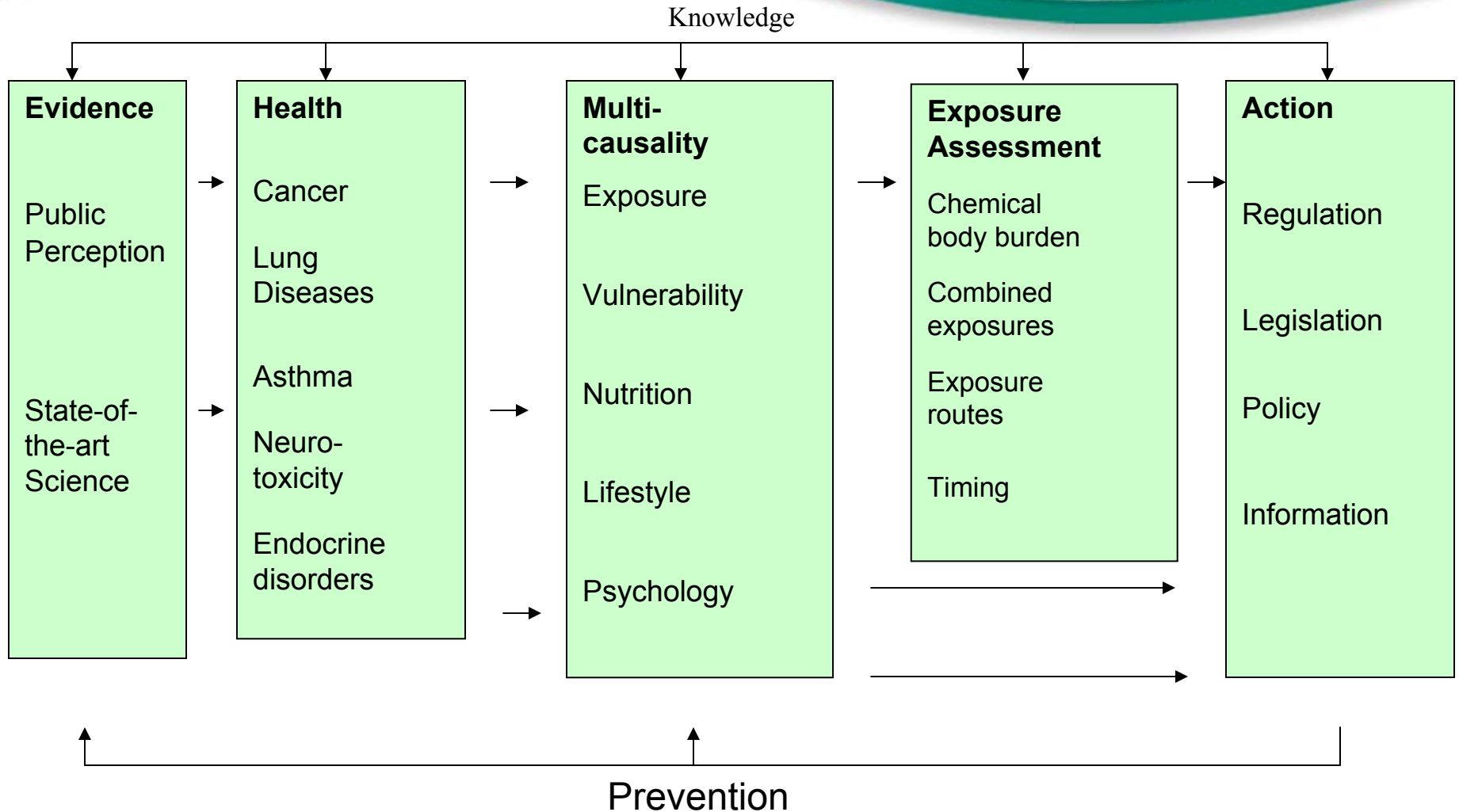
A Case for Action on Health and the Environment:

- We know that environmental factors contribute to many health problems:
 - Roughly one quarter of global burden of disease is linked to environmental factors
- Canadians are aware of the connection and are concerned:
 - Chemical safety=cancer prevention
 - Air quality=less respiratory disease
- In Canada:
 - air pollution is a factor in 5900 deaths per year in Ontario, or 1 in 12 deaths (based on a study of 8 Canadian cities);
 - Environmental factors are responsible for 30% of asthma and 5% of cancers in children; and,
 - 12% of Canadian children are estimated to have asthma; the prevalence of asthma has increased 4-fold over the last 20 years.
 - The Ontario Medical Association estimated that air-pollution related illness cost the province \$507 million in direct health care costs in in 2005 and an additional \$374 million in lost productivity

There are still questions to be answered...

- What is the impact on the health of at risk groups, especially children?
- How disease in Canada be prevented by modifying the environment?
What are the long-term effects of multiple hazards and cumulative exposures on human health?
- What would be the most effective interventions and costs?
- How disease in Canada be prevented by modifying the environment?
- What are the contributions of the environmental risks to health in Canada?

A Framework: Knowledge to Action



Assessing the Environmental Burden of Illness can provide valuable information for policy makers...

- Analysing causality and estimating importance of environmental factors to disease... is key
- Effects of exposures-diseases through different sources
- Measuring strengths of associations...

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