

A (re) vision for tobacco control research in 2010

Paul McDonald, PhD



University of Waterloo

www.phr.uwaterloo.ca

Interdisciplinary Capacity Enhancement
advancing the science to reduce tobacco use

Rehaussement des compétences par l'interdisciplinarité
faire progresser la science pour réduire l'usage du tabac

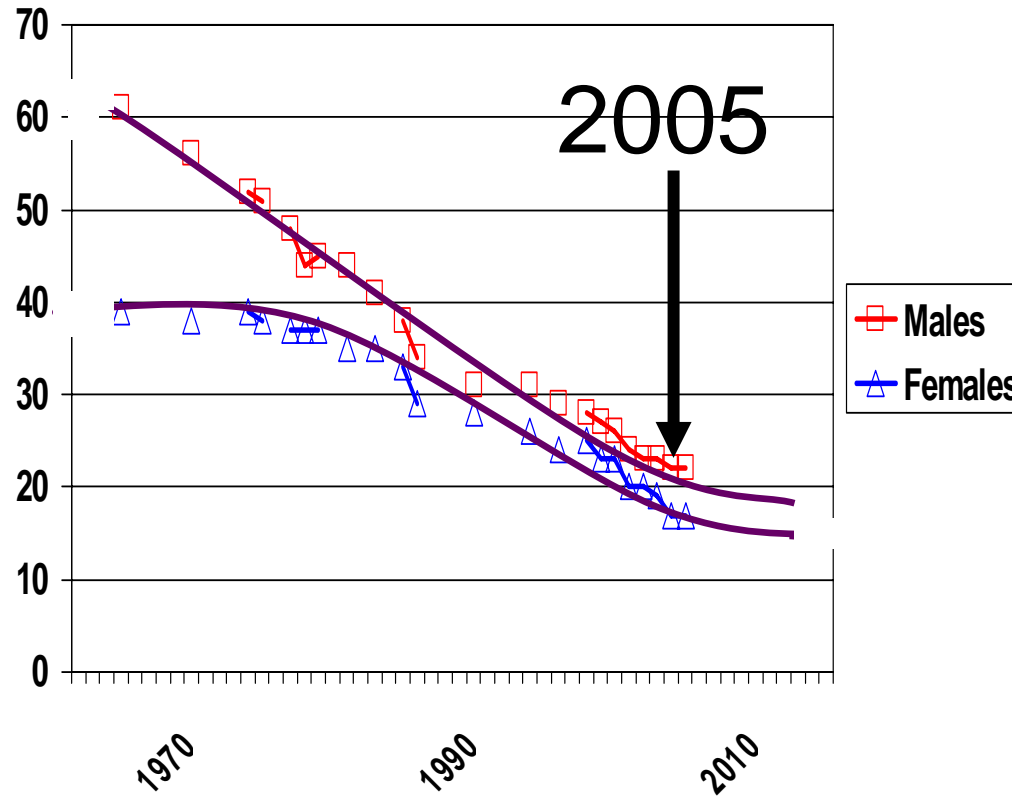
www.ice-rci.org



Without immediate innovations in tobacco control, drops in prevalence rates (and tobacco related burden) will soon become asymptotic.

Prevalence rates smoothed by weighted least squares, adjusted for age and population growth

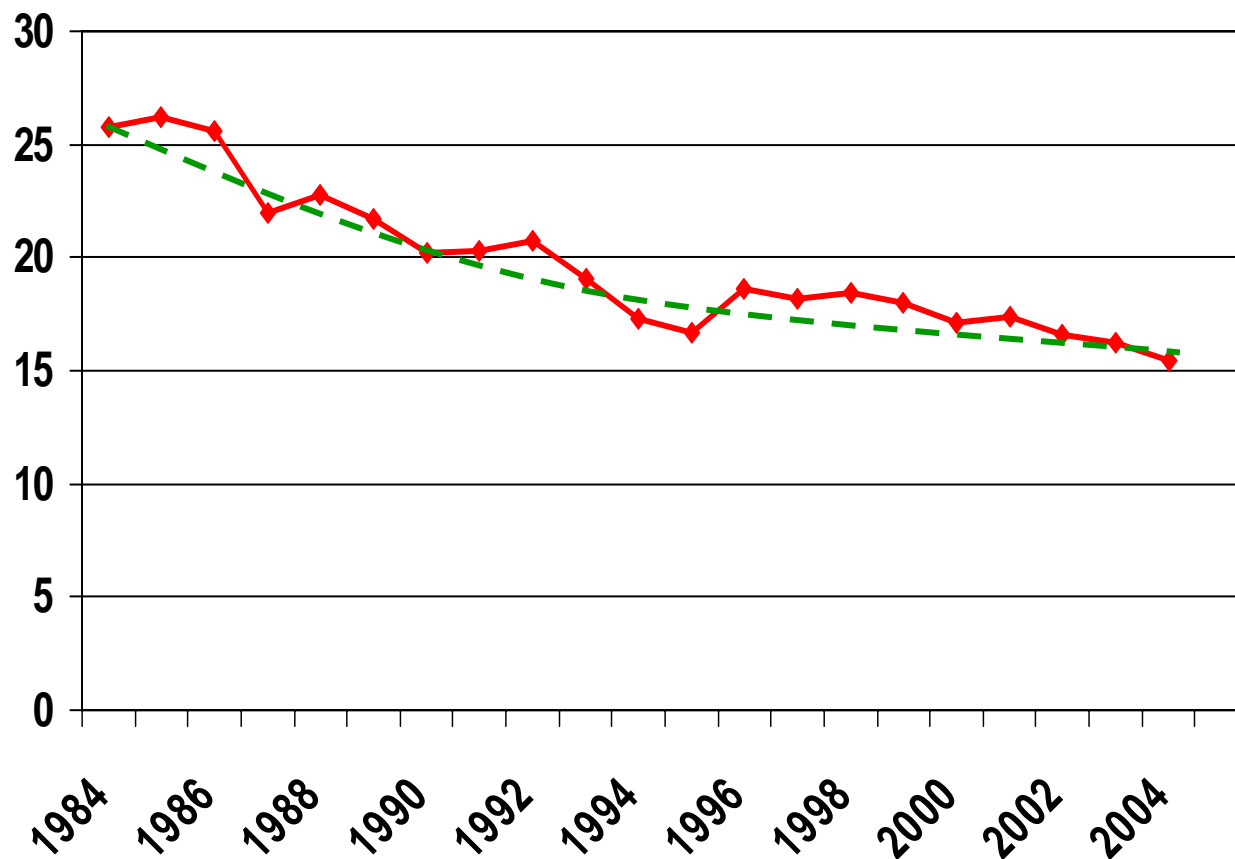
Per cent
of
adult
population



Source: Various surveys

Prevalence of current smoking in California, Age 18+, 1986 to 2004

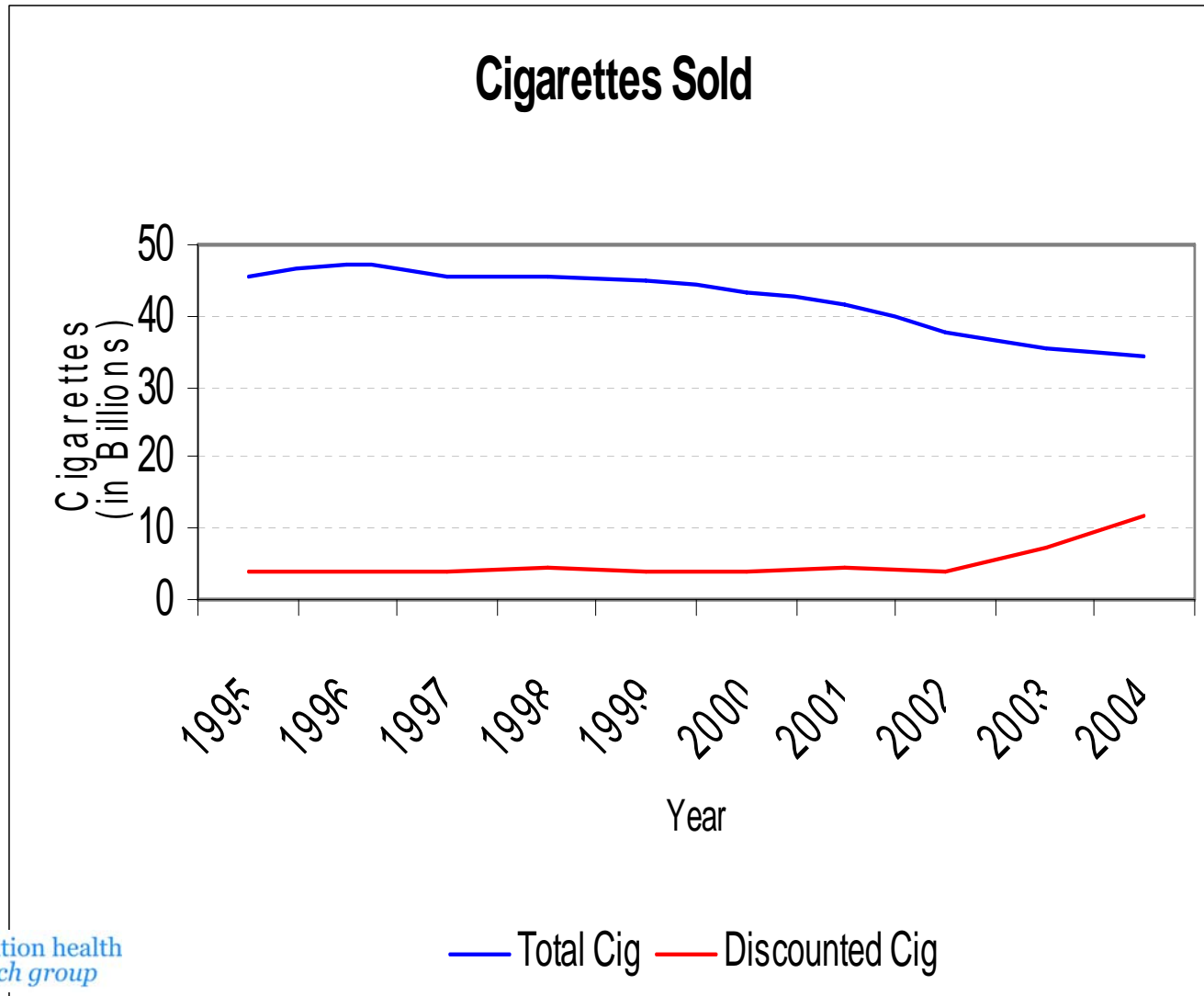
Per cent
of
population
age 18+



Why?

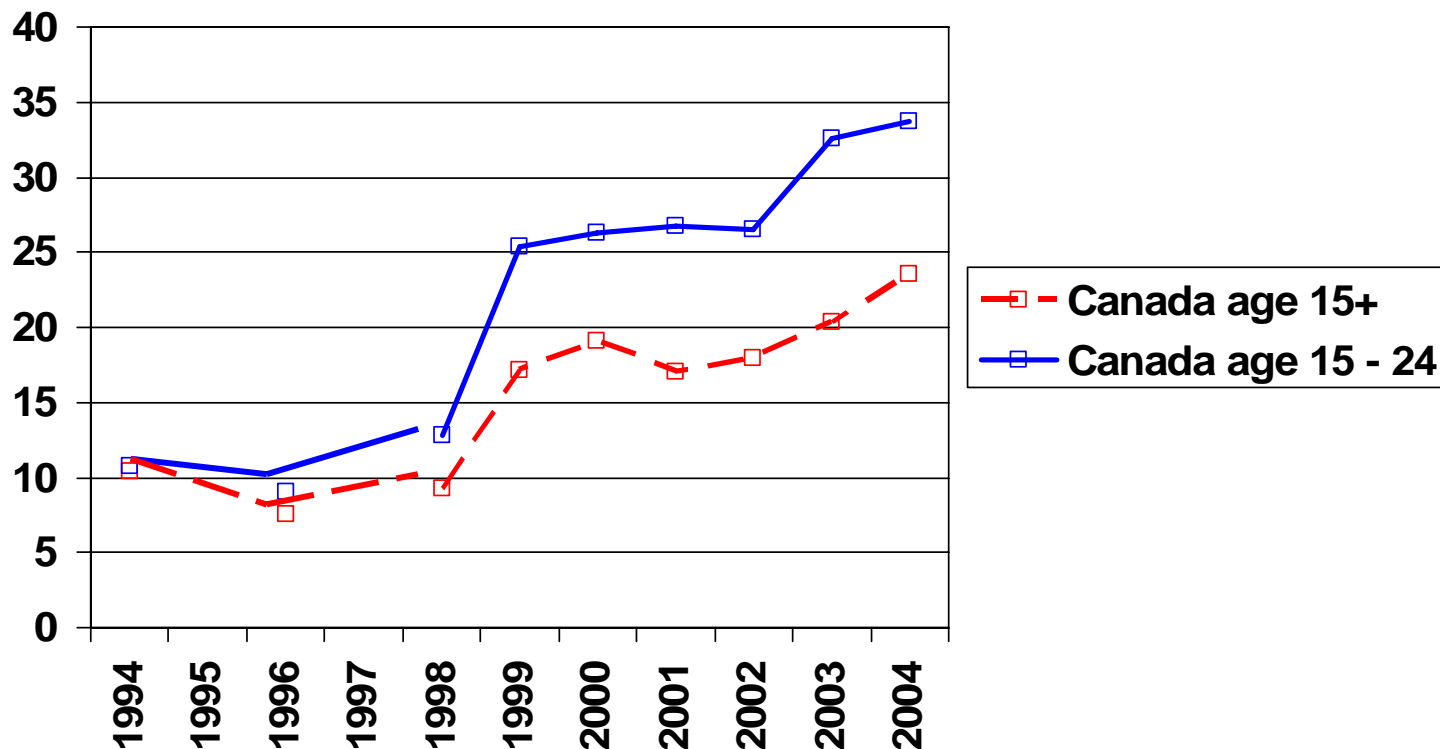
- The characteristics of tobacco users and patterns of tobacco use has changed
- The tobacco industry has adapted to current tobacco control strategies
- **Therefore, current tobacco interventions are fatigued or increasingly irrelevant**

The tobacco industry and consumers are adapting: Discount cigarette use



Proportion of current Canadian smokers who smoke less than daily, 1990 - 2004

Per cent



Implications of more episodic smoking

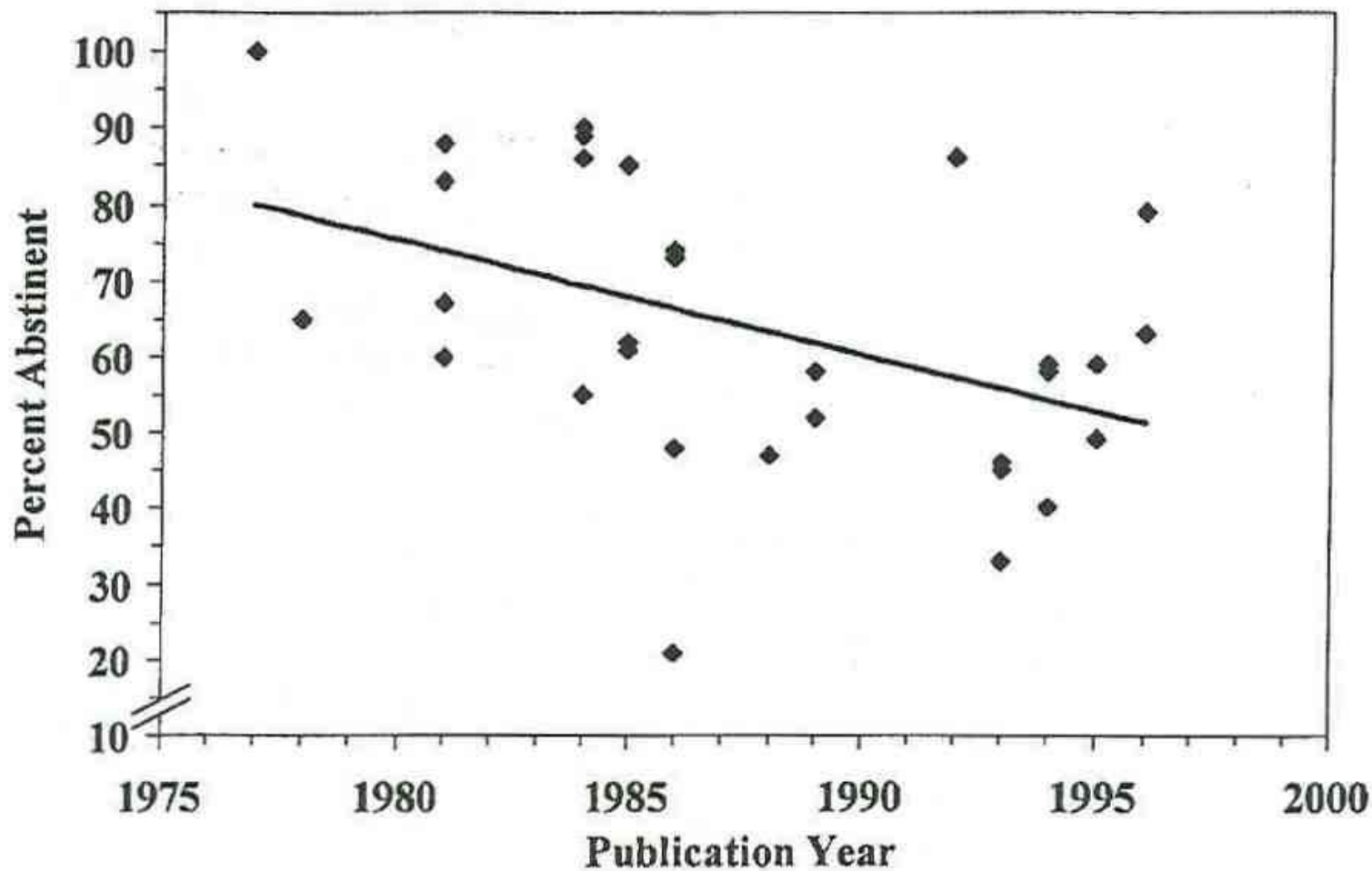
- “Light” and occasional smokers are less price sensitive to tax increases and better able to adapt to no-smoking restrictions
- Occasional smokers may believe they have reduced the risk of tobacco use to a manageable level



New marketing developments

- NRT and other products are being promoted as a means of coping with smoking restrictions; therefore, smoking restrictions in public places may have less effect on motivation to quit

Relationship between year of publication and end of treatment abstinence rates for group counseling that used CBT



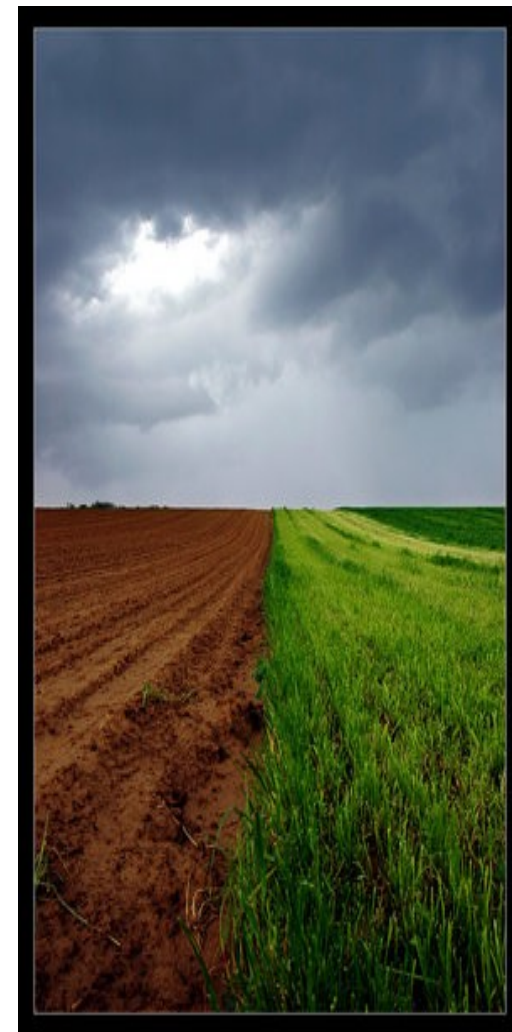
Action for (re)vision:

Proactively convince decision makers of the need for continued investment in tobacco control and research.

Is there a need for research on how to convince decision makers?

The funding horizon. Storm or sustenance?

- CTCRI up for review in 2008.
- Funding for CIHR tobacco training grants end in 2008. (\$3.2 million)
- Funding for Interdisciplinary Capacity Enhancement grants end in 2009 (\$4.5 million)
- Federal Tobacco Strategy is under review and has recently been cut by another \$10 million/yr.



Action for (re)vision

Develop and adopt more sophisticated, integrated models of tobacco use and intervention based on interactions of:

Genetic factors

Physiological responses

Cognitive and affective factors

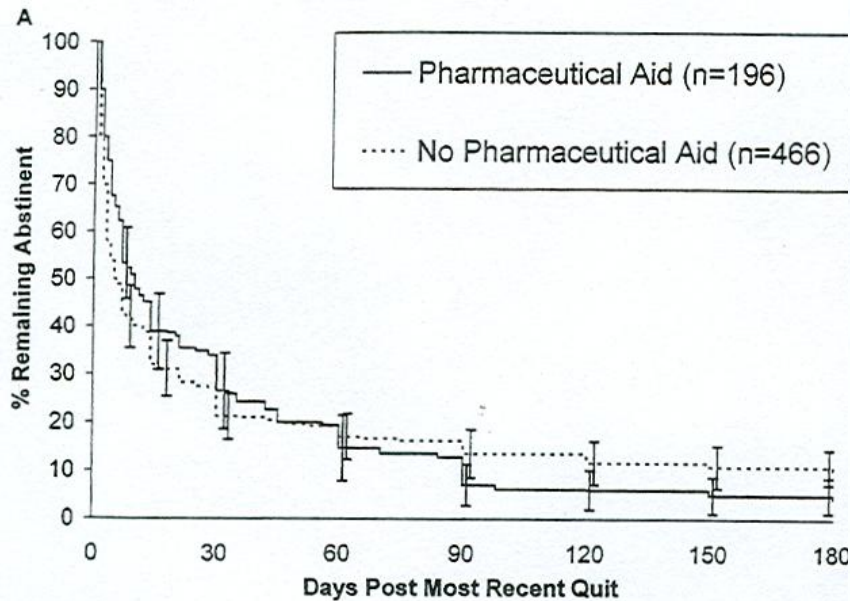
Social structure and organization

Physical environmental influences

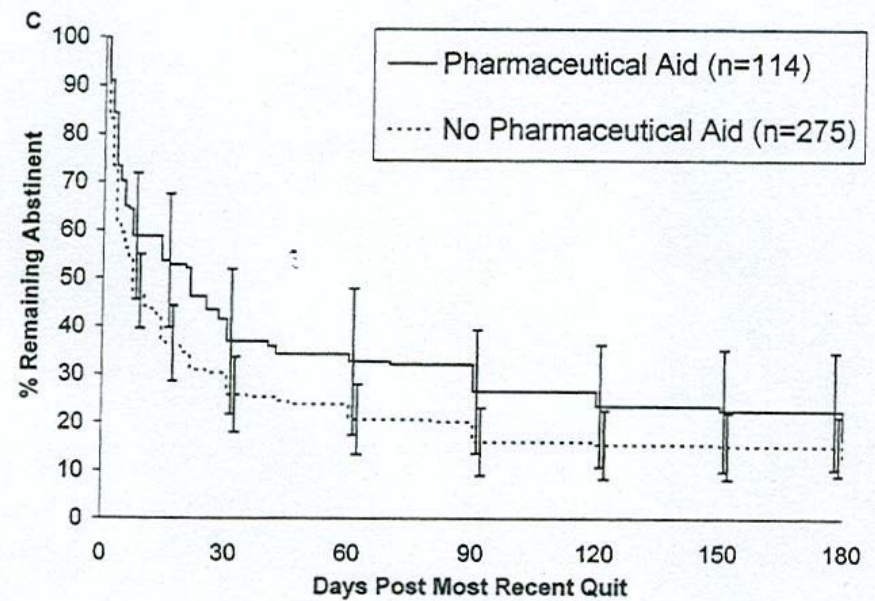
Gene-environment interaction

- Novak, Breslau & Kessler
 - 891 pairs of MZ and DZ twins aged 25-74
 - Heritability index (for daily smoking) = .50, but...
 - H (low SES childhood) = .25
 - H (for high SES childhood) = .79
- ...Can inform decision about interventions that will reduce disparities in tobacco related disease

Interaction of pharmacotherapy and smoke free homes



Effect of pharmacotherapy when the user's home is not smoke free and there is another smoker in the house



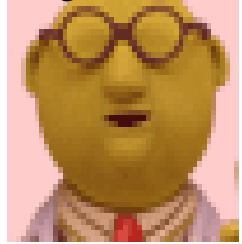
Effect of pharmacotherapy when the user's home is smoke free and there is another smoker in the house

Action for (re)vision:

Enhance efforts to produce relevant, persuasive research on the most important tobacco control issues.

Current view of research translation (research as enlightenment and retail)

Ex-tinguished researcher



Dr. McDonald

Distinguished researcher



Dr O'Loughlin



Drs. Frank and Butler-Jones



Leading edge evidence-based practitioners

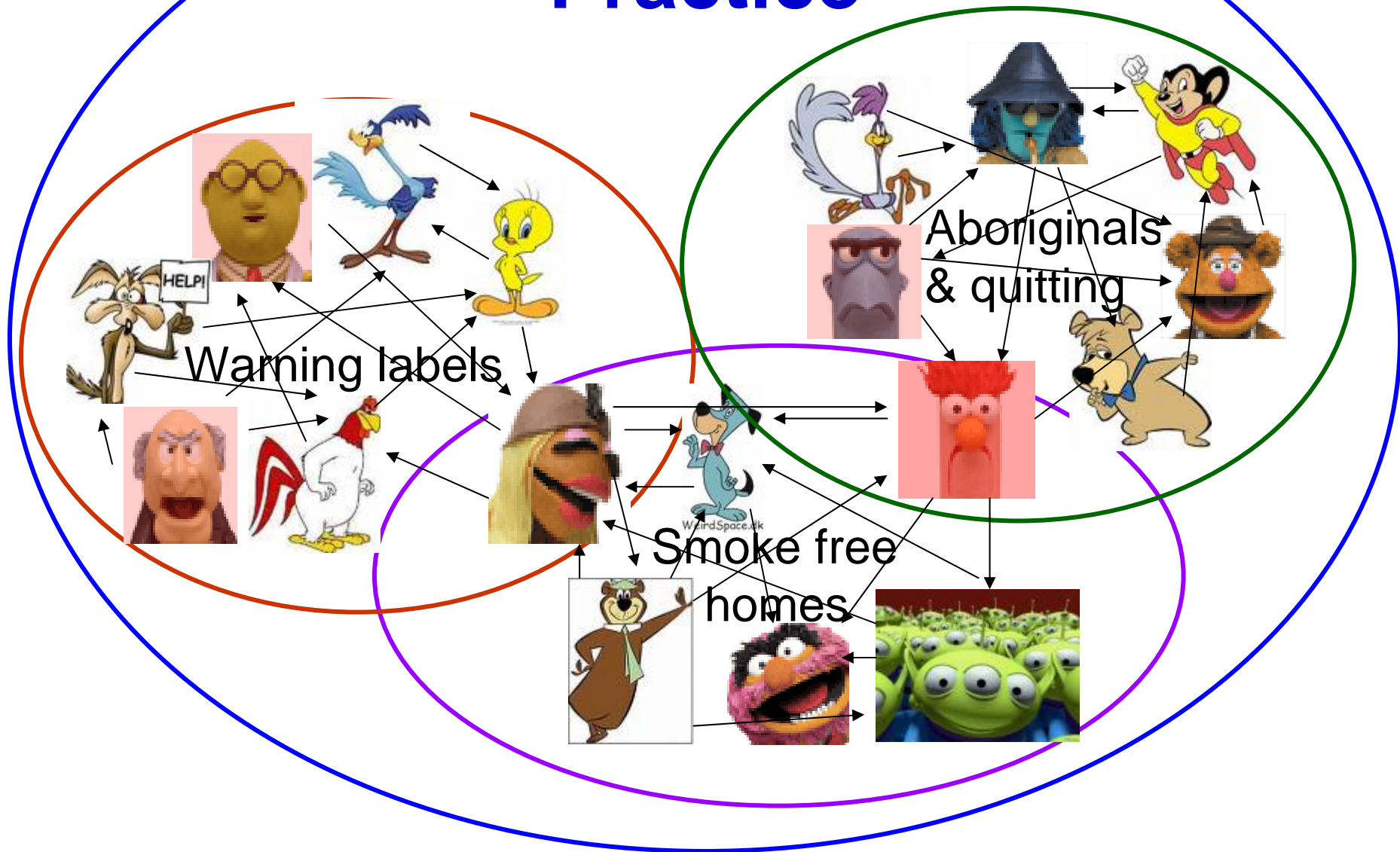
Problems and limitations

- Its too slow
 - Average of 17 years from research to practice (Swan, 2003)
 - Tobacco industry adapts faster than we do
 - Best practices based on evidence with past smokers
- Evidence base is mis-aligned with practice and policy needs (making it difficult to apply the lessons learned)
 - Low external validity (Green, 2006)
 - Non-compelling outcomes
 - Low priority problems/missed opportunities
- Few incentives for new investigators to become involved in applied research

A new way of doing research and practice

- A Community of Research and Practice
 - Multi-disciplinary teams of researchers, practitioners and policy developers collectively building knowledge around specific problems, practices or policies of mutual interest in a way that enhances social capital (reciprocity, trust, cohesion) and impact for tobacco control.
- External validity, relevance, and persuasiveness is enhanced
- Mutually negotiate methods and outputs (journal articles, policy briefs, etc.)
- Rapid translation and incentives to be involved

A Community of Research and Practice



Action for (re)vision

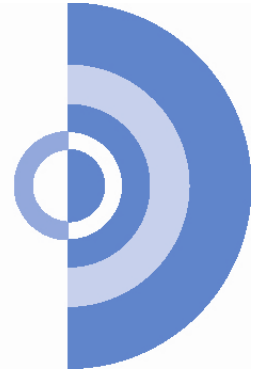
- **Expand academic criteria for:**
 - Peer reviewed funding decisions
 - More weight on potential impact and external validity
 - Tenure and promotion
 - More credit for influencing policy and practice
 - Recognize the time required to build and work in partnerships
- **Do more to recognize and encourage applied and trans-disciplinary research**
 - Dedicated personnel awards (e.g., CIHR/PHAC Chairs in Public Health)
 - Money for population intervention research
 - Policy makers and practitioners must recognize scientists

For more information...

www.ice-rci.org

Interdisciplinary Capacity Enhancement
advancing the science to reduce tobacco use

Rehaussement des compétences par l'interdisciplinarité
faire progresser la science pour réduire l'usage du tabac



McDonald, Viehbeck, Robinson, Leatherdale & Nykiforyk (submitted). Building capacity for evidence-based decision making in public health: An example from Canadian tobacco control.