The International Tobacco Control Policy Evaluation Project: Evaluating and Understanding the Impact of Policies of the Framework Convention on Tobacco Control

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"*Tobacco is the most effective agent of death ever developed and deployed on a worldwide scale.*"

– John Seffrin, President,
ACS and UICC (2002)

"*Tobacco use is unlike other threats to global health. Infectious diseases do not employ multinational public relations firms. There are no front groups to promote the spread of cholera. Mosquitoes have no lobbyists.*"

– WHO Zeltner Report (2000)

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ЧЕКМАСДАН ЁШЛИК
ГАШТИНИ СУР

BRITISH AMERICAN
TOBACCO
UZBEKISTAN

*Мен ўз йўлимни
танладим!*

Болалар ва ўсмирлар учун
тарбиявий дастур

Ўзбекистон Республикаси

1998-2000

足球甲级队A组联赛 Marlboro League

Facing the Challenge

Estimated cumulative tobacco deaths 1950-2050
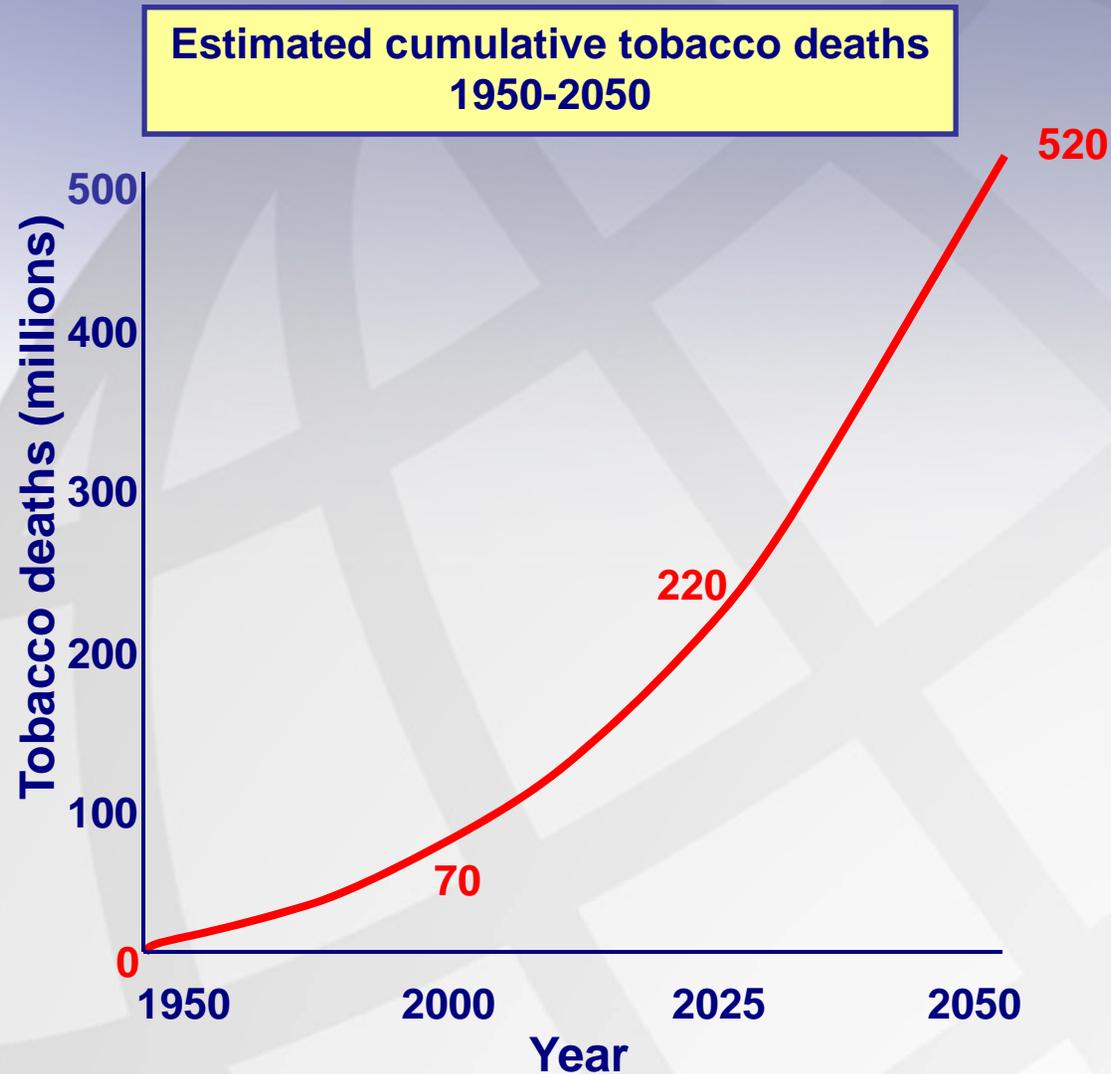
What must we do to flatten the curve?

Population-level interventions such as FCTC policies

Y-axis: Tobacco deaths (millions) — 0, 100, 200, 300, 400, 500

X-axis: Year — 1950, 2000, 2025, 2050

Data labels: 70, 220, 520

World Bank. *Curbing the epidemic: Governments and the economics of tobacco control.* World Bank Publications, 1999. p80.

Demand Reduction Provisions of the FCTC

◆ Packaging and labelling (Article 11)
  — Warnings
  — Elimination of misleading descriptors (e.g., "light" "mild")

◆ Advertising, promotion, and sponsorship (Article 13)

◆ Protection from exposure to tobacco smoke   (Article 8)

◆ Price and tax measures to reduce demand (Article 6)

◆ Dependence and cessation (Article 14)

◆ Education, communication, training, public awareness (Article 12)

Potential of Policies to Flatten the Curve

Estimated cumulative tobacco deaths 1950-2050
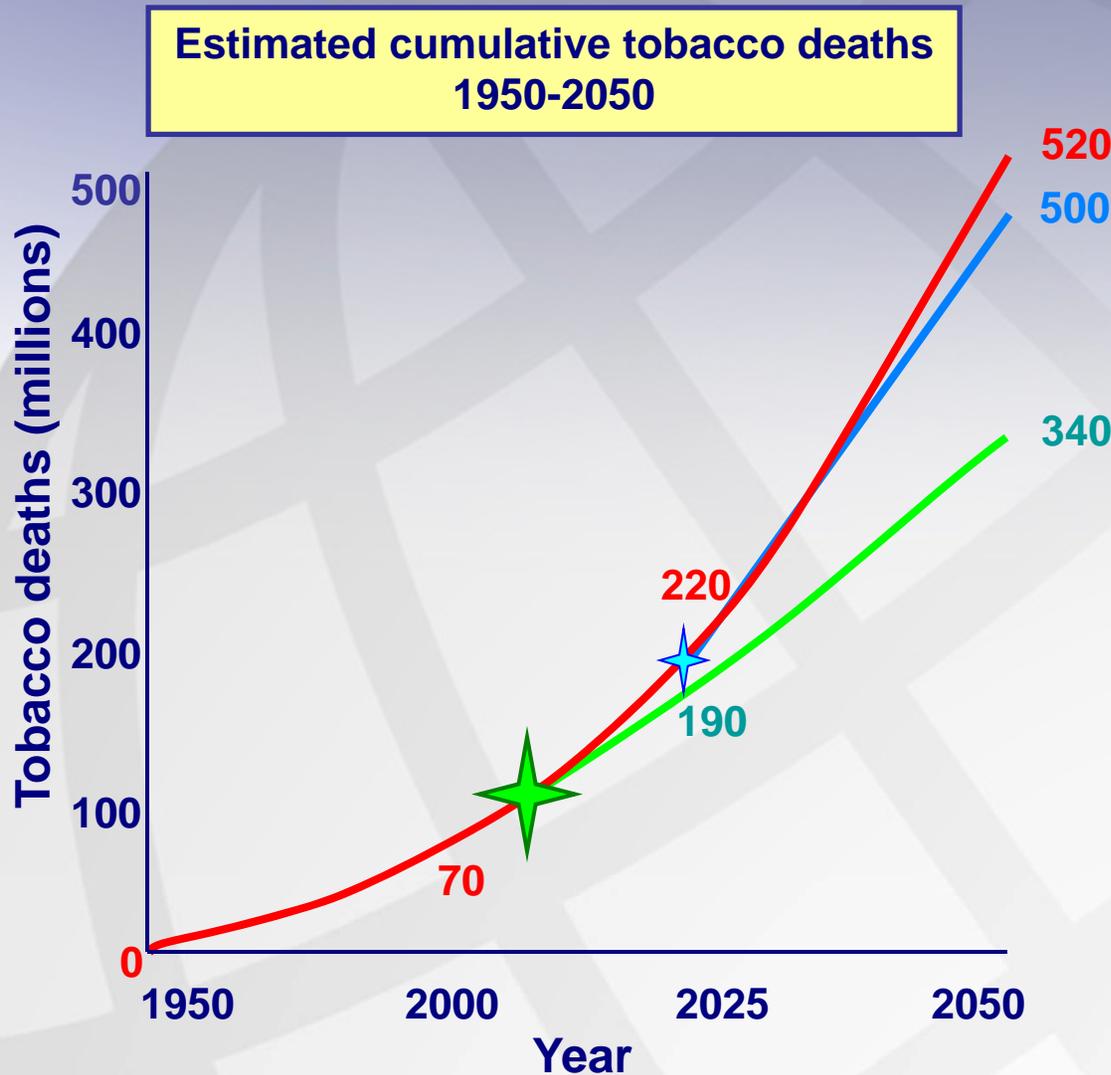
Impact of policies depends on factors including:

– **Intervention date**

– **Effect size**

World Bank. *Curbing the epidemic: Governments and the economics of tobacco control.* World Bank Publications, 1999. p80.

Article 11—Warnings and messages

- **should be 50% or more** of the principal display areas but **shall be no less than 30%...**

- **may be** in the form of or include pictures or pictograms

- **shall contain information on relevant constituents and emissions**

"Each Party shall, within a period of three years after entry into force of this Convention for that Party, adopt and implement, in accordance with its national law, effective measures..."

What does "effective" mean?

Does size matter? Are graphic images effective?

Opportunities Afforded by the FCTC

◆ **Opportunity for science:**

– Time-limited opportunity to study population-based interventions: (1) measure the impact of policies and (2) identify the causal mechanisms for policy impact

◆ **Opportunity for evidence-based policy:**

– Create the evidence base to inform the creation of <u>effective</u> tobacco control policies

– Determine the relative strength of FCTC policies

– Counteract disinformation and misinformation from the tobacco industry

Challenges to Evaluating Policies

◆ Not possible to conduct randomized controlled trials (RCTs) on policies

◆ But it <u>is</u> possible to evaluate the impact of policies using natural experiments ("quasi-experiments")

  1. Multiple country comparisons: <u>international</u> studies

  2. Common methods and measures across countries

  3. Cohort studies: focus on impact on <u>individuals</u>

The International Tobacco Control Policy Evaluation Project

Canada

United States

Australia

United Kingdom

Ireland

Thailand

Malaysia

South Korea

China

Mexico

Uruguay

France

New Zealand

India

Netherlands

Sudan

Bangladesh

Russia

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The ITC Surveys

| Country	Mode	N (smokers)	N (others)	2002	2003	2004	2005	2006	2007	2008
Canada	☎	2,000		■	■	■	■	■	■	■
United States	☎	2,000		■	■	■	■	■	■	■
United Kingdom	☎	2,000		■	■	■	■	■	■	■
Australia	☎	2,000		■	■	■	■	■	■	■
Ireland/Scotland	☎	2,000	900 NS			■	■	■	■	■
Thailand	👥	2,000	1,000 Youth				■	■	■	■
Malaysia	👥	2,000	1,000 Youth				■	■	■	■
South Korea	☎	1,000						■	■	■
China	👥	5,600	1,400 NS					■	■	■
Mexico	👥	1,000						■	■	■
Uruguay	👥	1,000						■	■	■
New Zealand	☎	2,000							■	■
France	☎	1,700	500 NS						■	■
Netherlands	☎	3,000 ?	1,000 NS?						■	■
Sudan	👥	3,000 ?	900 SL?						■	■
India	👥	12,000 ?	2,000 SL?							■
Others										■

Research Goals of the ITC Project

Goal 1: Rigorous evaluation of national-level tobacco control policies of the FCTC:

Goal 2: To understand <u>how</u> and <u>why</u> these policies work (if they work)

Policy ➡ **?** ➡ Behavior
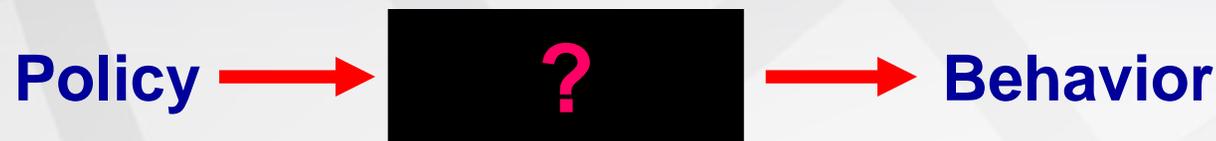
What's inside the black box?

Goal 3: Disseminate findings to policymakers
- **Build evidence base for FCTC**
- **Promote evidence-based policies**

Warning Labels: Article 11 of the FCTC Evidence from the ITC Project

Warning Labels in the U.S. vs. Canada

United States

UNDERAGE SALE PROHIBITED

SURGEON GENERAL'S WARNING: Smoking Causes Lung Cancer, Heart Disease, Emphysema, And May Complicate Pregnancy.

– Since 1984
– 4 messages
– Side of pack

Canada

WARNING
CIGARETTES CAUSE MOUTH DISEASES
Cigarette smoke causes oral cancer, gum diseases and tooth loss.
Health Canada

MACDONALD
EXPORT 'A'
25 Cigarettes • Full Flavour
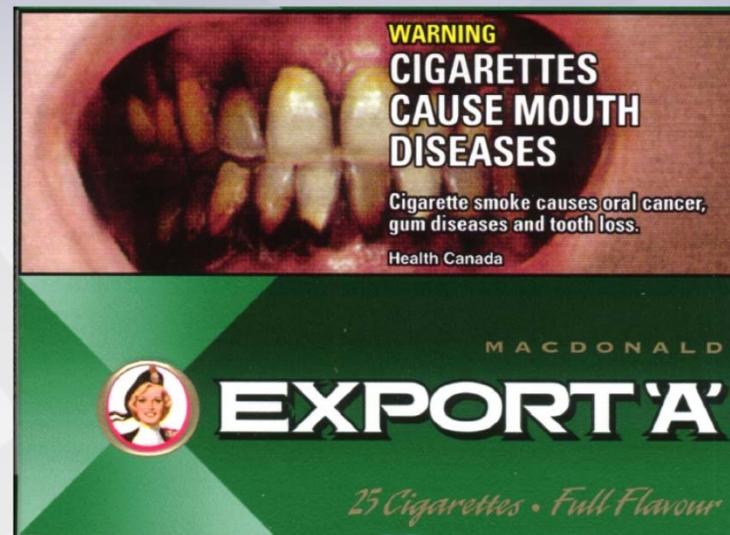
– Since 2001
– 16 messages
– 50% of front and back
– New set coming in 2008

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Examples of Graphic Warnings

Canada (2001)
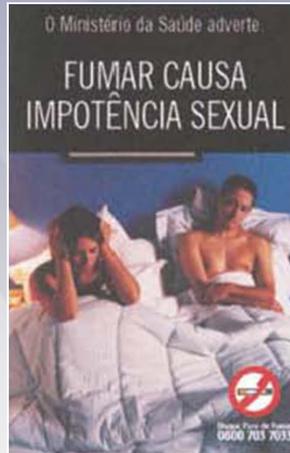
Brazil (2002)

Singapore (2004)

Venezuela (2005)

Thailand (2005)

Australia (2006)

European Union (?)

Visual Impact of the Canadian Warning Labels

United States
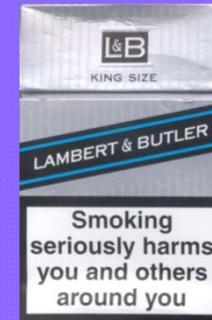
Canada
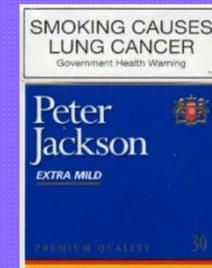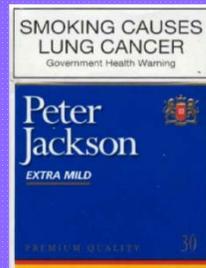
Enhancing warning labels increases label salience/noticing

Respondents who noticed warnings often or very often in the past month

Legend: CAN, AUS, US, UK

Y-axis: 0, 20, 40, 60, 80, 100
X-axis (Year): 2002, 2003, 2004, 2005
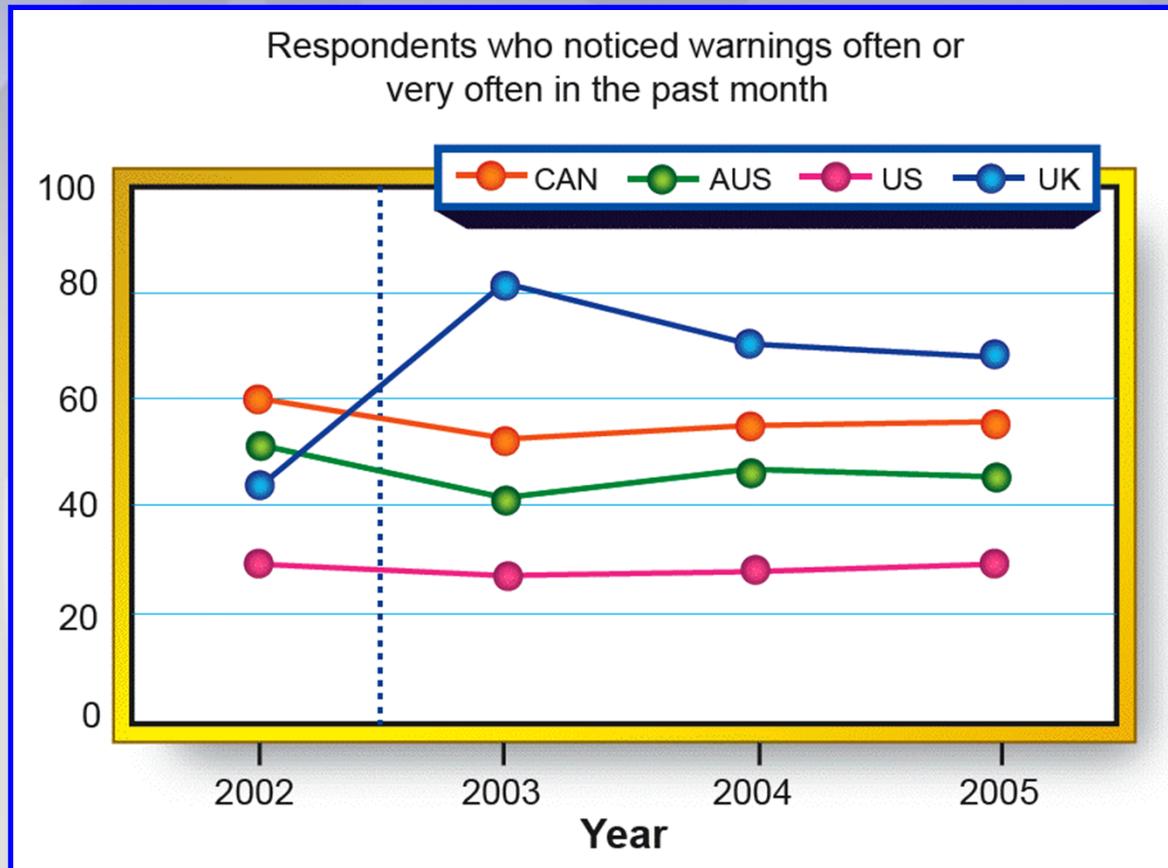
Results from Hammond et al. *Am J Prev Med* **(2007) Released today**

The enhancement of warning labels in the U.K. had a huge impact on labels salience/noticing. But this is a measure of noticing, where mere novelty alone would be expected to have a huge effect

Thinking about the health risks of smoking

Respondents reporting the warnings made them think about the health risks in the past month

(Asked only at Waves 2–4)
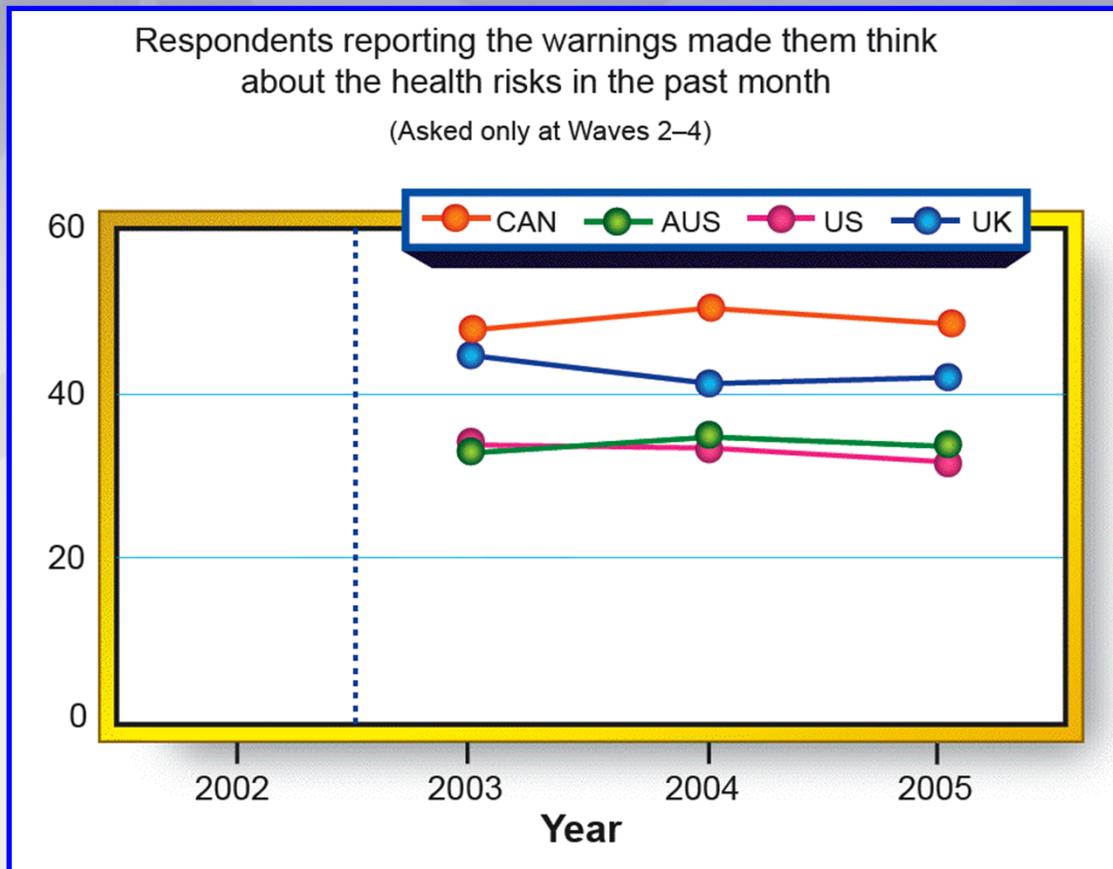
Hammond et al. *Am J Prev Med* (2007)

Still a significant increase in U.K. compared to the other countries, but not above Canada. Evidence for limitation of effect of mere text/size enhancements relative to graphic elements.

Do warning labels increase knowledge?

Smoking causes impotence:	Canada	Aus.	U.K.	U.S.
Wave 1	60	36	36	34
Wave 2				

Only Canada had a warning label about impotence at Wave 1, but then U.K. added an impotence label between Wave 1 and Wave 2

Do warning labels increase knowledge?

Smoking causes impotence:	Canada	Aus.	U.K.	U.S.
Wave 1	60	36	36	34
Wave 2	63	45	50	33

Substantial increase in knowledge about impotence in the U.K. compared to the other three countries after the label on impotence was introduced in the U.K.

In U.K.: 14% more smokers = About 1.5M smokers
In U.S.: 14% more smokers = About 7M smokers

Implications for FCTC Implementation

Minimal Standard vs. Recommendations:

– **should be 50% or more** of the principal display areas but **shall be no less than 30%...**

should be

– ~~may be~~ in the form of or include pictures or pictograms

Results from the ITC Project suggest that countries who implement the FCTC label policy at its highest level will experience greater impact, compared to the minimal standard

Warning Labels of Malaysia, Thailand, China

Thailand

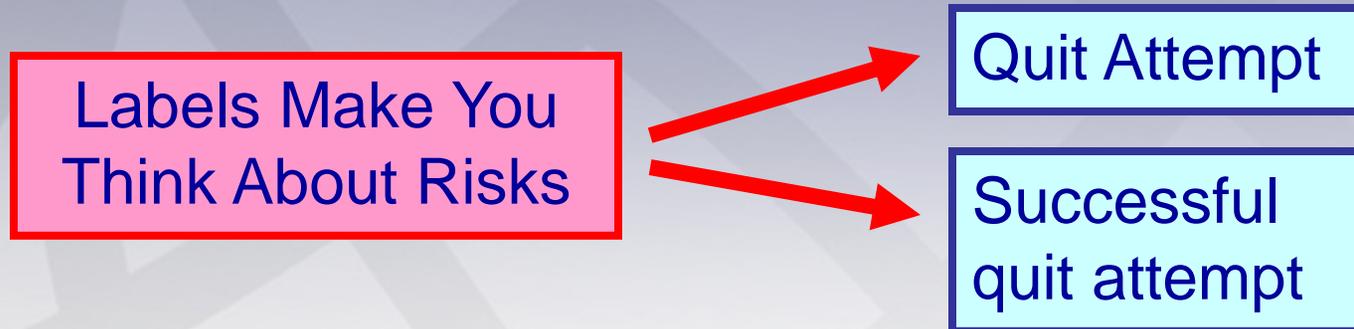**Malaysia**

China

United States

Relationship Between Labels and Quitting

Labels Make You Think About Risks

Quit Attempt

Successful quit attempt

Smokers who report that the labels make them more likely to think about risks of smoking were:

— more likely to **attempt to quit**   (OR = 1.14)*

— more likely to **successfully quit** (OR = 1.89)*

* Statistically significant at p < .05

Controlling for Gender, Age, Income, Education, Ethnicity, Prior Quit Attempts, Intentions to Quit

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Concluding Thoughts

◆ Population-level interventions are needed to fight the growing tobacco epidemic.

◆ FCTC: opportunity for research and for using research to inform policy

◆ NCI-supported research is making a difference throughout the world and is creating evidence base for future U.S. efforts

International Tobacco Control Policy Evaluation Project
http://www.itcproject.org
http://www.roswelltturc.org

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* ITC Surveys currently in development