

FCTC Article 11 Tobacco Warning Labels

Evidence and Recommendations from the ITC Project



MAY 2009

HEALTH WARNINGS

An essential tool for communicating tobacco health risks

Health warnings are the focus of Article 11 of the Framework Convention on Tobacco Control (FCTC), the world's first health treaty. More than 160 countries inhabited by over 80% of the world's population are parties to the FCTC and are required to implement 'effective' policies on health warnings. This report is designed to present policymakers with research evidence from the International Tobacco Control (ITC) Policy Evaluation Project, the world's most extensive research dedicated to evaluating the impact of policies of the FCTC. ITC research findings provide an evidence base that defines the components of effective warning labels and strongly supports the implementation of vivid, pictorial warnings. In short, the ITC Project offers evidence-based answers to the question: "What is effective and what is not effective for policies on health warnings?"

Although impossible to achieve, the challenge for warning labels is to convey the devastating health impacts of the product contained within.

How can we communicate the fact that this product will kill 1/3 to 1/2 of its regular users at an average loss of life of about one decade?

Health warnings on cigarette packages are among the most prominent sources of information about the harms of smoking and

tobacco use. More smokers report getting information about the risks of smoking from packages than any other source except television.¹ Health warnings are an extremely cost-effective public health intervention compared to other tobacco prevention efforts such as paid mass media advertising, given their tremendous reach and frequency of exposure. Smokers who smoke 20 cigarettes per day, for example, are potentially exposed to the warnings at least 7300 times per year. Non-smokers, including children and youth, also report high exposure and awareness of health warnings on packages.² Research conducted by the ITC Project has proven that warning labels are an effective risk communication tool for:

1. Educating/informing smokers and non-smokers about the many negative health consequences of smoking.
2. Motivating and encouraging smokers to quit and non-smokers not to start smoking.
3. Providing information to enhance efficacy for quitting.

There is another important reason for implementing strong health warnings on tobacco packages. Tobacco packaging is used by the tobacco industry to reinforce brand imagery, to minimize perceptions of risk, and to suggest incorrectly that some types of cigarettes are less harmful than others (e.g. use of "mild" and lighter colour packages to suggest less harm). Effective warning labels can counteract misleading messages and convey the health risks of smoking and exposure to second hand smoke.ⁱ

FCTC Article 11 Guidelines for health warnings

Article 11 of the FCTC states that health warnings on cigarette packages **should cover at least 50 percent** of the principal display areas (both the front and back) of the tobacco package, but at a minimum must cover at least 30 percent of the principal display areas. It also requires that warnings be rotated; large, clear, visible and legible; and approved by the competent national authority. Strong international guidelines for Article 11 adopted in November 2008 during the Third Conference of the Parties recognize the evidence that effectiveness of health warnings increases with their size and that pictorial warnings have a greater impact than text-only warnings. The Guidelines recommend **pictorial warnings on at least 50% of the package** and call for key requirements for the content, position, and size of warnings (SEE TEXT BOX).

Canada was the first country (2001) to implement pictorial warning labels that are compliant with the FCTC Article 11 Guidelines. As of May 2009, more than two dozen countries have passed legislation requiring large pictorial health warnings on cigarette packages. Other countries are currently preparing strong warning label policies in response to the new FCTC Guidelines.

ARTICLE 11 GUIDELINES

- Labels should appear on both front and back of the package
- Labels should be at the TOP of the package
- Labels should be as large as possible (at least 50% of the package)
- Labels should include full colour pictures
- Labels should rotate multiple messages
- Labels should include a range of warnings and messages
- Labels should include information on harms of tobacco smoke
- Labels should provide advice about cessation
- Labels should list constituents without numbers

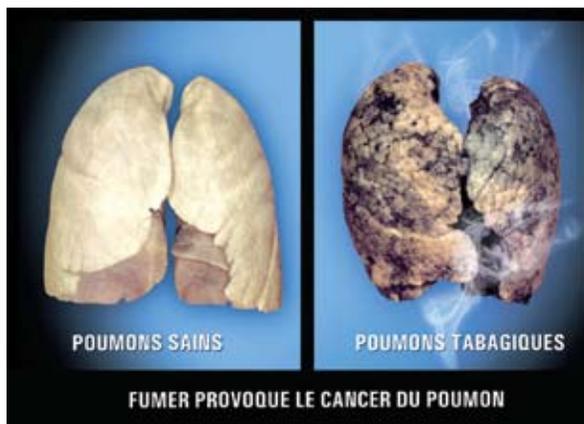
¹ Hammond D, Fong GT, McNeill A, Borland R, Cummings KM. 2006. Effectiveness of cigarette warning labels in informing smokers about the risks of smoking: findings from the International Tobacco Control (ITC) Four Country Survey. *Tobacco Control* 2006;15 (Suppl III):iii19-iii25.

² Hammond D 2009. FCTC Article 11. Chapter 1. Tobacco Labeling Toolkit. Evidence Review.

ⁱ Note that Warning Labels are only one of three requirements of FCTC Article 11. See FCTC Article 11 Fact Sheet on Emission and Constituent Labelling and FCTC Article 11 Fact Sheet on Misleading Information and Plain Packaging at www.tobaccolabels.org for more comprehensive guidance on Article 11.



Australia (2006)



Mauritius (2009)

The ITC Project and evaluation of health warnings

About the ITC Project

The ITC Project is the first-ever international cohort study of smoking, with an emphasis on national-level tobacco control policy evaluation. Launched in 2002 in Canada, United States, United Kingdom and Australia (the ITC Four Country Survey), the ITC Project now consists of cohort surveys of representative samples of adult smokers in 19 countries – Canada, United States, United Kingdom, Australia, Ireland, Scotland, Thailand, Malaysia, South Korea, China, Mexico, Uruguay, New Zealand, France, Germany, the Netherlands, Brazil, Bangladesh and Mauritius. In late 2009, ITC surveys will be launched in Bhutan and India. One broad objective of the ITC Project is to create an international evaluation system to measure the impact of tobacco control policies of the FCTC as well as other tobacco control initiatives as they are implemented in ITC countries.

ITC survey methods

The ITC Project conducts annual national-level surveys to collect information to evaluate FCTC policies and other tobacco control activities. The longitudinal cohort design of the ITC Project, in which individuals are measured on the same key outcome variables over time, allows stronger conclusions to be drawn about whether graphic warnings increase attention that smokers pay to the warnings, whether this is associated with increases in perception of the health risks, and whether this leads to quit attempts and successful quitting. Smokers (and non-smokers in some countries) are asked more than 200 questions to measure smoking and quitting behavior, health knowledge, psychosocial mediators, and awareness of and support for policies on smoke-free, taxation, warning labels, and advertising and promotion (SEE SIDEBAR).ⁱⁱ Using a strong common conceptual approach with multiple survey measures, the ITC Project can test how policies change or fail to change behaviour and identify areas where improvement in policy impact might be achieved.

The ITC Project is conducting prospective cohort surveys to evaluate the impact of tobacco control policies (especially those of the FCTC) and other interventions (e.g. mass media campaigns) in countries inhabited by 50% of the world's population, 60% of the world's smokers, and 70% of the world's tobacco users.

ⁱⁱ ITC surveys can be downloaded from the ITC Project website at www.itcproject.org

ITC survey health warning label measures

Cigarette packages in virtually every country include health warning labels. Yet the size, number and the way the health information is presented differs notably between countries. The use of standardized methods and measures across all ITC surveys ensures that the effectiveness of health warning labels can be compared across countries in order to provide guidance on best practice in the design of warning labels.

ITC surveys include a broad set of questions to assess health warning label effectiveness. For example, to measure warning label **salience** respondents are asked: (1) how often they had *noticed* the warnings over the past month, (2) whether they had *read or looked closely* at them (both on 5-point scales: “never” to “very often”). To measure **behavioural responses**, respondents are asked to what extent, if at all, warning labels had (1) *stopped them from having a cigarette* when they were about to smoke one, (2) *made them think about the health risks* of smoking, and (3) *led them to think about quitting smoking*. Respondents are also asked about avoiding the warnings (cover-up, keep out of sight, use cigarette case, or avoid particular labels).

³ Hammond D et al. 2006.

⁴ Borland R et al. 2009. *Impact of Graphic and Text Warnings on Cigarettes Packs: Findings from four countries over five years – submitted to Addiction.*

⁵ Borland R et al. 2009.

⁶ Hammond D et al. 2006.

⁷ Hammond D 2006. *Health knowledge and warning labels: Results from the ITC PES Study. Presented at American Public Health Association Annual Meeting. 2006 October 27; Boston, MA.*

⁸ Thrasher JF, Hammond D, Fong GT, Arillo-Santillán E. 2007. *Smokers' reactions to cigarette package warnings with graphic imagery and with only text: A comparison of Mexico and Canada. Salud Pública de México, 49 (Suppl).*

⁹ Borland R and Lal A. 2004 *Position of cigarette packs. Unpublished Report, VicHealth Centre for Tobacco Control, Melbourne, Victoria, Australia.*

The ITC four country survey: powerful evidence in support of enhanced warning labels (especially pictorial warnings)

Considerable evidence to support policymakers in implementing larger warning labels, including pictorial images, emerges from the International Tobacco Control (ITC) Four Country Survey (ITC-4), a cohort survey of approximately 9,000 adult smokers (18 years or older) in Canada, Australia, the United Kingdom, and the United States. Over the course of 5 waves of these national cohort surveys conducted between 2002 and 2006 (ongoing to 2014), the ITC Project has examined labeling policies of differing intensity over 4 countries and has longitudinally examined what happens when countries implement changes in text and size only, compared to when pictorial warnings are introduced. The findings below provide compelling evidence of the effectiveness of pictorial warnings in Canada and Australia and enhanced UK text warnings, establishing the case for strong implementation of the Article 11 Guidelines.

2001: Canada's Pictorial Warnings vs. Text-Only Labels

Canadian pictorial warning labels, which meet the FCTC Guidelines, were most effective in informing smokers about the risks of smoking compared to smaller, less comprehensive text warnings in Australia, the United Kingdom and the United States. Australia's text warnings, which were slightly below the FCTC minimum requirements, were more effective in conveying the range of health risks than the United States' side of pack text warning and the UK warning, both of which were well below the minimum FCTC standard.³



2003: UK Enhances Text-Only Warning Labels

After new, larger text warnings were implemented in the UK to meet the minimum FCTC Guideline, significantly more UK smokers reported reading and noticing health warnings and were significantly more likely to report that the health warnings had deterred them from having a cigarette compared to US and Australian smokers. Canadian smokers continued to report higher levels of impact than smokers in the other three countries.⁴

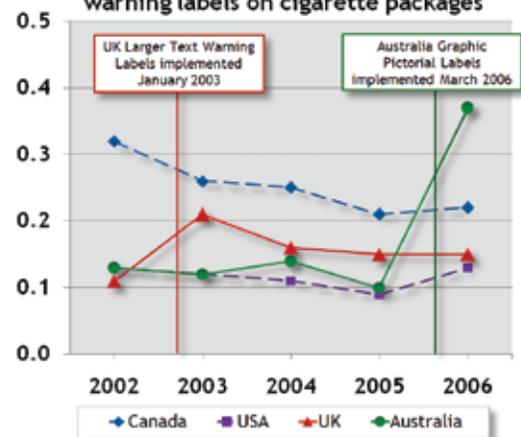


2006: Australia Introduces Pictorial Warning Labels

The introduction of pictorial warnings in Australia resulted in an increase in noticing and reading of warning labels, thinking about the health risks and quitting, reporting that the labels had made them forgo a cigarette they were about to smoke, and avoiding warning labels among Australian smokers. These **are all favorable** outcomes because they are associated with increases in quitting.⁵



Fig 1. Proportion of smokers who used at least one strategy to avoid warning labels on cigarette packages



The new graphic warnings in Australia (2006) led to a greater increase in avoiding warning labels than did the text-only warnings in the UK (2004). This is important because avoidance of warnings is associated with increases in quit attempts.

Pictorial warnings are more effective than text-only warnings

A vast body of health communication research has clearly shown that the use of pictures and vivid imagery results in messages that are more easily noticed and remembered. An understanding of both the health risks and severity of smoking are important factors in motivating smokers to quit. Consumer research, experimental studies, and population-based surveys consistently demonstrate the importance of using pictures in package health warnings. ITC Four Country Survey demonstrated that larger pictorial warnings, such as those implemented in Canada and other countries, are likely the most effective means of communicating the full range and severity of health risks to smokers. After Canada introduced large pictorial warnings labels in 2001, 91% of smokers in Canada said they had read the warnings and 84% of smokers viewed health warning labels as a source of health information, compared with 47% of US smokers, where only text-only labels are required. Pictorial warning labels increased awareness of the association between smoking and specific health hazards (e.g. lung cancer, heart disease, stroke, and impotence).

Enhanced health warnings increase knowledge of the risks of smoking

An ITC evaluation study of health knowledge and warning labels in Canada, the US, Australia, and the UK in 2002 demonstrated that a large proportion of smokers have inadequate knowledge of the harms of smoking: more than a quarter of smokers did not believe that smoking causes stroke, and fewer than half of smokers believed that smoking causes impotence. Knowledge of health effects was strongest among smokers in Canada, the only country that had pictorial warnings on 50% of the front and 50% of the back of the pack, and weakest among US smokers, where text warnings appear only on the side of the pack. In Canada, where health warnings include the message that smoking causes impotence, almost twice as many smokers (60%) were aware of this health effect compared to smokers from the US (34%), UK (36%), and Australia (36%), where this health outcome was not present in their text labels.⁶



Canadian Pictorial Warning Label (2001)

After UK text warnings were increased in size in early 2003 from 6% of the front and back to 30% of the front and 40% of the back surrounded by a border of 3-4 mm, and the number of warnings increased from 6 to 16 (two for the front and 14 for the back), smokers reported greater awareness of health risks. For example, after a warning label on impotence was introduced on UK labels, smokers' knowledge of this specific health effect increased substantially (from 36 to 50% of smokers) compared to Canada, US, and Australia.⁷

An ITC evaluation study found that Canadian smokers are also more likely than Mexican smokers to know that smoking causes stroke, impotence, and mouth cancer, as these smoking-related health outcomes are included on Canadian warning labels but not on Mexican labels.⁸

Size matters, but so does location

Which is better: 50% front and back (50-50) or 30% front and 90% back (30-90)?

This was the question that faced Australia in the design of their pictorial warnings, which were introduced in 2006. They chose to put the warning on 30% of the front and 90% of the back. This might have seemed like the better choice than 50% of the front and 50% of the back because the simple average of 30-90 is 60%, higher than 50%. But this simple average assumes that people look at the front and the back of the package equally. It is likely that people look at the front far more than the back of a package. In an observational study by Borland and Lal (2004)⁹, observers recorded which side was facing up of packs lying on restaurant tables in Melbourne. Over 90% of 160 observed packs were facing front-side up. This suggests that the proper way to evaluate different size options is to take into account how often people are exposed to the front vs. the back of cigarette packs. So what would this mean in the 50-50 vs. 30-90 decision? If the average is weighted for exposure, then the 50-50 option yields a HIGHER average exposure to the warnings than 30-90 when the person is exposed to the front of the pack at least twice as often as to the back. In addition, many countries require warnings in multiple languages and devote each side to a different language. This makes it even more important that the size on both sides of the pack be as large as possible.

¹⁰ Hammond D, Fong GT, McDonald PW, Cameron R, and Brown KS. 2003. Impact of the graphic Canadian warning labels on adult smoking behaviour. *Tob Control*. 12(4):391-395.

¹¹ Hammond D, Fong GT, Borland R, Cummings M, McNeill A, Driezen P. 2007. Text and Graphic Warnings on Cigarette Packages: Findings from the International Tobacco Control Four Country Study. *Am J Prev Med*. 32(3):210-217.

Graphic fear arousing images do not have negative effects

People have a general knowledge about the harms of smoking; however, pictorial warning labels describe the impacts of smoking in a vivid manner. Communications research suggests that vivid information is more easily noticed and better remembered. Decades of research studies suggest that fear appeals are effective in motivating behaviour change (i.e. quitting) especially if paired with information about how to avoid the fearful consequences (e.g. quit tips, where to find help about quitting). ITC research has found that negative emotional reactions to Australian pictorial warnings leads to avoidant behaviours (e.g. covering up the pack, keeping it out of sight, using a cigarette case, or avoiding particular labels) that can motivate quitting.²⁰ These findings are supported by surveys and focus groups conducted with smokers around the world.²¹ There is no evidence of adverse effects from graphic cigarette health warnings.



New Zealand (2008)



Uruguay (2009)

Larger, more comprehensive health warnings are more effective

In analyses of the first wave of the ITC Four Country Survey, conducted in 2002, the ITC Four Country Survey found that larger (50%), more comprehensive set of 6 warnings in Canada were more likely to be noticed and rated as effective by smokers, compared to labels in Australia, the UK, and the US: 60% of Canadian smokers noticed the warnings “often” or “very often” compared to 52% of Australians, 44% of UK smokers, and 30% of US smokers. Canadian smokers reported higher levels for every measure of label effectiveness.¹⁰

After UK health warnings were enhanced in 2003 to meet the minimum FCTC standard, the ITC Four Country Survey found that measures of warning label salience and self-reported impact significantly increased among UK smokers, whereas no increases were observed among smokers in Canada, Australia, or the United States. The proportion of UK smokers who noticed health warnings on packages “often” or “very often” increased from 44% to 82% – the highest among the 4 countries. UK smokers were more likely to report that the health warnings had deterred them from having a cigarette compared to US and Australian smokers.^{11,12}

Pictorial warnings sustain their effects longer than text warnings

A common phenomenon in health communication is message “wear-out”. As applied to health warnings, with repeated exposure over time, warnings may lose their effect. Enhanced text-only UK warnings introduced in 2003 were considerably more likely to be noticed than the Australian warnings, which were only slightly smaller, but had been in place for more than 8 years at the time of the survey.¹³ While declines in salience and impact were observed during the 2.5 years following the introduction of the new UK warnings, warning label wear-out was more prominent in the US, where labels are small and printed only on the side of the pack.¹⁴ Measures of salience and impact remained high in Canada even 4 years after implementation of large, pictorial warning labels. This suggests that larger, more vivid warnings are more likely to retain their salience over time than less prominent text-based warnings because they have less of a wear-out effect.¹⁵

Pictorial warnings increase motivation to quit

Evidence from ITC surveys suggests that health warnings can promote smoking cessation and that larger pictorial warnings are most effective in doing so.¹⁶ Large pictorial warnings increase knowledge of the harms of smoking, thoughts about the health risks, and behaviours (avoiding the warnings, forgoing a cigarette) that can then motivate intentions to quit and then quit attempts. ITC research shows that Canadian and Australian graphic warnings stimulated more cognitive responses, such as thinking about the health risks of smoking, than the UK text-based warnings.^{17,18} Additional evidence that health warnings can promote smoking cessation comes from non-ITC studies conducted in Brazil, the UK, the Netherlands, and Australia showing significant increases in call volumes to national telephone quitlines after contact information was included in package warnings.¹⁹

12 Hassan LM, Shiu, S, Thrasher, JF, Fong, GT, Hastings, G. 2008. Exploring the effectiveness of cigarette warning labels: findings from the United States and United Kingdom arms of the International Tobacco Control (ITC) Four Country Survey. *International Journal of Non-profit and Voluntary Sector Marketing* 13: 263-274.

13 Hammond D et al. 2007.

14 Hassan LM et al. 2008.

15 Hammond D et al. 2007.

16 Hammond D. 2009.

17 Hammond D et al. 2007.

18 Borland R et al. 2009.

19 Hammond D. 2009.

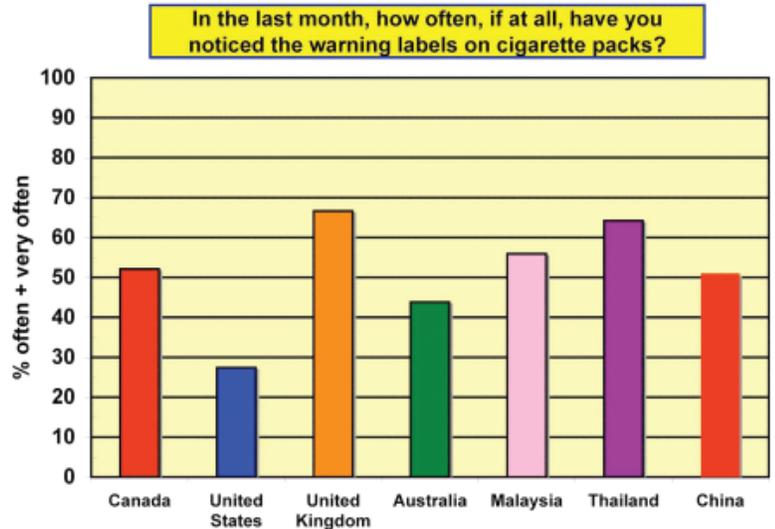
20 Borland et al. 2009

21 Hammond D. 2009.

22 Fong et al., 2009. *Impact of the Introduction of Graphic Health Warnings on Cigarette Packs in Thailand: Findings from the ITC Southeast Asia Survey. Presentation at the annual meeting of the Society for Research on Nicotine and Tobacco, Dublin, Ireland.*

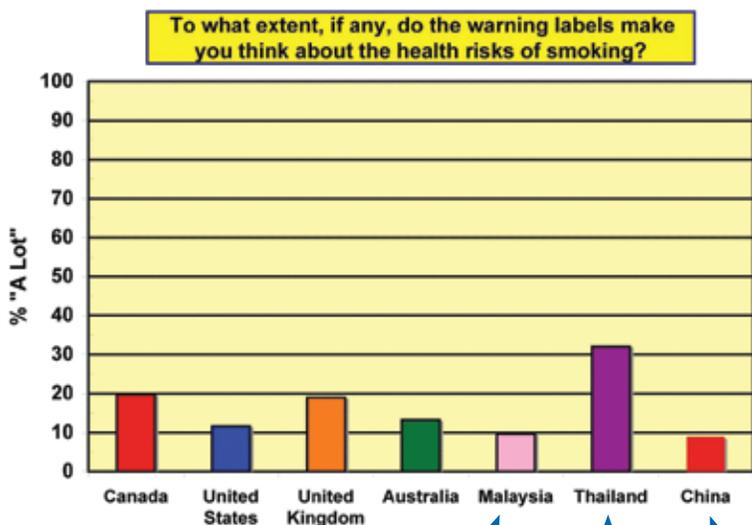
How important and effective are health warnings in low and middle-income countries (LMICs)?

The question arises as to whether warning label policies that are implemented in industrialized countries are as effective when implemented in low and middle-income countries. The ITC Project has found that smokers in low and middle-income countries such as Thailand, China, and Malaysia, are more likely to notice warning labels “often” or “very often” compared to smokers in higher income countries such as Canada, US, UK, and Australia. This may be because there are few sources of information available to convey the harms of smoking. Since warning labels are so prominent in these low and middle-income countries, they have the potential to influence smokers’ behaviours more than in high-income countries.



Source: Fong GT (2007, October)

In the three Asian countries, warning labels have the potential to have a strong impact on smokers (noticing is high), as shown in the above graph.



Source: Fong GT (2007, October)



The potential for effective warning labels is not fulfilled in Malaysia and China, where warnings are small and lacking in content and vividness, as shown in the graph on the left: the Malaysia and China levels for this important measure of warning effectiveness fall to very low levels (and, interestingly, at the same low level as the U.S., which is the only other ITC country to have warnings on the side of the pack).

ITC research in Asian countries (see ITC findings in Thailand and China on pages 8 and 9) suggests that health warnings may be even more important and potentially effective in LMICs. In countries where other sources of information about the harms of smoking are lacking, the health warning assumes even greater importance, and thus, the principles of designing strong and effective health warnings described in this brochure are even more important in LMICs.

Conclusion

Health warnings have greater importance in countries where there are fewer other sources of information about the harms of smoking (these are likely to be LMICs), but they need to be sufficiently prominent to fulfill their potential. Thus, health warnings would have greater importance in LMICs.

Source for the two graphs: Fong GT (2007, October). The International Tobacco Control Policy Evaluation Project: Evaluating Global Tobacco Policies of the Framework Convention on Tobacco Control. Plenary presentation given at the 8th Asia Pacific Conference on Tobacco or Health (APACT), Taipei.

THAILAND WARNING LABELS

Enhancing warning labels beyond FCTC minimum standard increases effectiveness

Design of the ITC Evaluation of New Pictorial Warnings in Thailand

The enhancement of warning labels in Thailand in 2006 from 30% text-only (FCTC minimum) to 50% pictorial (FCTC recommended; also consistent with the strong Article 11 Guidelines) was evaluated by comparing the change in Thailand before and after the enhancement to the change in Malaysia at about the same time, where the warning labels did not change. This is an example of a “quasi-experiment” (also known as a “natural experiment”), which in combination with other design features, provides a strong research design for evaluating policies.ⁱⁱⁱ

ⁱⁱⁱ For additional information about research methods for evaluating tobacco control policies, see the IARC Handbook 12 on Cancer Prevention: Methods for Evaluating Tobacco Control Policies (Section 2.1: Design issues in the evaluation of tobacco control policies.)

The ITC Thailand Survey found that increasing the label size and adding graphic images to warning labels greatly increases their effectiveness. In 2006, the warnings were enhanced to 50% of the pack plus graphic images—among the strongest warnings in the world. After implementation of these new warnings, the percentage of smokers stating that the labels made them think about the health risks “a lot” increased from 34% to 53%, and those stating that the labels made them “a lot” more likely to quit increased from 31% to 44%.²² The ITC Malaysia Survey—conducted at the same times—showed no such increases: their labels did not change during that time.

Malaysia will require pictorial warning labels on all cigarette packs sold by June 2009 and the ITC Southeast Asia Surveys will be evaluating their impact.

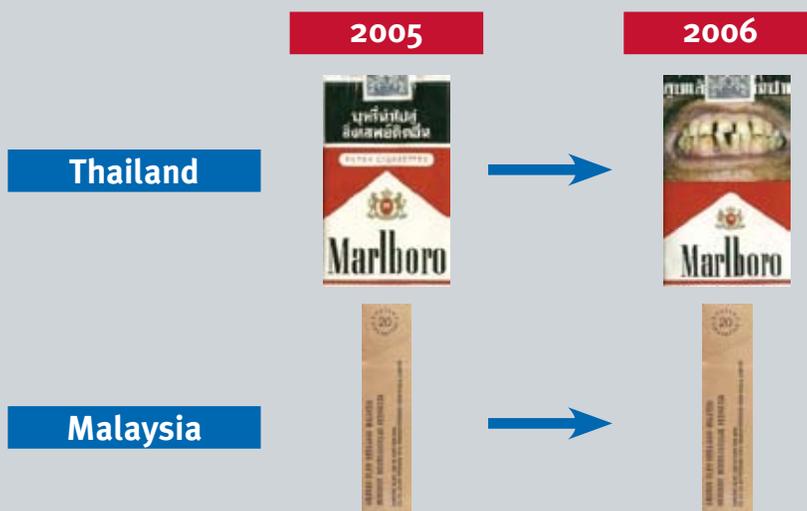
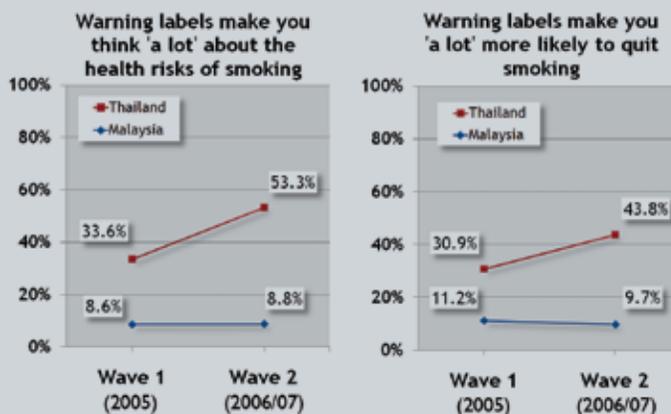


Fig 2. The effect of warning labels on cigarette packages on smokers in Thailand and Malaysia



The introduction of pictorial warnings in Thailand led to sustained increases in these two measures associated with quitting.

CHINA (Mainland) WARNING LABELS

Weak implementation of FCTC Article 11 results in less effective warnings

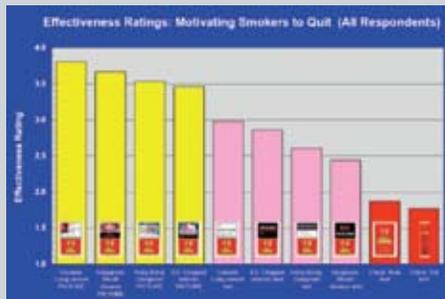
In 2008, China enhanced its health warning labels from text warnings on the side of the pack to larger text warnings on 30% of the front and 30% of the back. These new labels met only the minimum label size specified in the FCTC, but did not meet the standard set by the strong Article 11 Guidelines which were adopted shortly after the new Chinese warnings were released (see the box on page 2 that describes the Guidelines).



ITC China Warnings Study—8 Possible Warnings + 2 Real Warnings: compared and rated

	Canadian Lung Cancer	Singapore Mouth Disease	Hong Kong Gangrene	EU Clogged Arteries	Old (top) New (bottom)
Text Only					
Text + Picture					

+ the two actual Chinese warnings



SOURCE: Fong et al. 2009. <http://www.itcproject.org/keyfindi/chinalabel>

The two actual Chinese warnings (text-only; 30% of front and back) were rated the lowest of all 10 warnings on motivating smokers to quit. Consistent with the findings of the ITC-4, all of the picture warnings were rated higher than their corresponding text warnings on this important measure of label effectiveness.

An ITC experimental study conducted among 1200 adult smokers, adult non-smokers and youth across four cities in China (Beijing, Shanghai, Kunming, and Yinchuan) found that the new enhanced text-only Chinese warnings were much lower in effectiveness than pictorial+text warnings. The old (text on the side of the pack) and newly enhanced Chinese text-only warnings (30% on the front and 30% on the back of the pack, but not very distinctive), and eight alternative warnings that were created on Chinese packs using pictorial + text warnings from Canada, Singapore, Hong Kong and The European Union, were ranked and rated by participants on a number of dimensions, including perceived effectiveness in motivating smokers to quit and in convincing youth not to start smoking.

The results were remarkably consistent across adult smokers and adult non-smokers and youth, for all four cities and for males and females. All four pictorial+text warnings were rated and ranked highest on effectiveness in motivating smokers to quit and convincing youth not to start smoking (see graph above). The text-only versions of the four pictorial warnings were rated in the middle. Finally, the real newly enhanced Chinese text warnings (30% of front and back) were rated at the bottom of the set of 10 warnings, just above the old text warnings that had appeared on the side of the pack.

There is strong public support for large picture warnings

ITC research shows that smokers want to see more health information on cigarette packages. In all ITC countries, the percentage of smokers who want more information on cigarette packages is greater than the percentage of smokers who want less information, even in those countries where graphic pictorial warnings have already been introduced (see graph to the right).

New directions

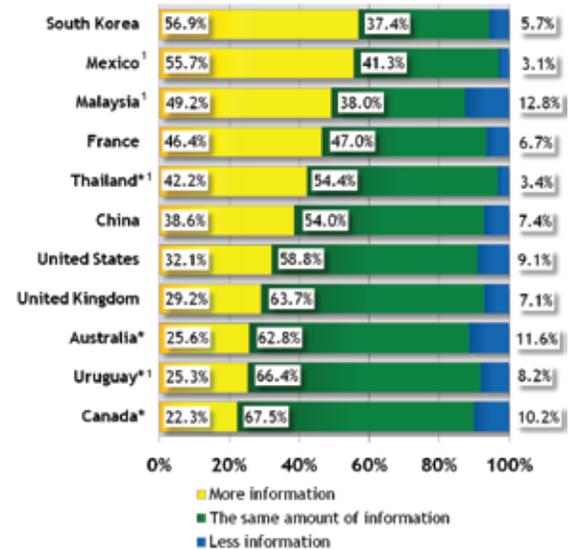
Brazil has implemented some of the most vivid and emotionally arousing pictorial warning label images in the world. Brazil's approach is based on research in the neurobiology of emotion showing that stimuli that are (a) very negative, and (b) high in arousal cause an avoidance response. The images on the new Brazil warnings were selected so that they were negative and highly arousing. The ITC Brazil Project—a collaboration with the National Cancer Institute of Brazil and the Brazil Ministry of Health—is evaluating whether such warnings are indeed more effective and whether the effectiveness of pictorial warnings is due (at least in part) to the negative emotion and high arousal caused by the images.^{iv}

iv. The following paper assesses the impact of Brazilian images and compares effectiveness with labels in Uruguay and Mexico: Thrasher JF, Villalobos V, Szklo A, Fong G, Pérez C, Sebríe E, Boado M, Figueiredo V, Arillo-Santillán E, Bianco E. Impact of cigarette package warning labels with pictures and text only: A comparison of reactions among Brazilian, Uruguayan and Mexican adult smokers. Salud Pública de México. In press.



Brazil Pictorial Warning Labels (2008)

Fig 3. Smokers' opinions on whether there should be more, less, or the same amount of health information on cigarette packages, by country (2008)



*Countries with graphic warning labels at time of survey
¹Countries with data from 2006.

Even in countries where there are pictorial warnings, smokers STILL want more health information on packs.

SUMMARY OF ITC EVIDENCE ON EFFECTIVE WARNING LABELS

- Warnings are a key, low-cost channel for informing people about the harms of smoking.
- Warnings increase knowledge about harms of smoking.
- Warnings lead smokers to think about the risks of smoking and to think about quitting, and these effects, in turn, are associated with future quit attempts.
- Change in warnings leads to increases in salience.
- Pictorial warnings are more effective than text-only warnings, likely because they are more emotionally arousing and present the harms of smoking in vivid and memorable ways.
- Larger warnings are more effective.
- Impact of warnings may be stronger in low-/middle-income countries, where there are fewer other sources of information about the harms of smoking.
- ITC findings and the research on effective health communication strongly support the Guidelines for Article 11 of the FCTC.

Warning labels in ITC countries (as of April 2010) *Year in brackets denotes year of implementation

Australia (2006)
30% front and 90% back



Bangladesh (2006)
30% front and back



Brazil (2002)
100% of either front or back



Canada (2001)
50% front and 50% back



Mainland China (2008)
30% front and 30% back



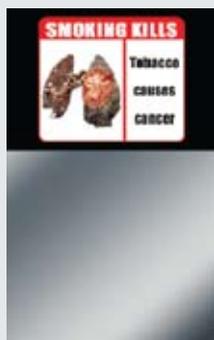
France (2003)
30% front and 40% back (EU Directive)



Germany (2003)
30% front and 40% back (EU Directive)



India (May 31, 2009)
40% front



Ireland (2008/09)
1 message 32% front or back and 1 message 45% of other side



Malaysia (June 2009)
40% front and 60% back



Mauritius (June 2009)
40% front and 90% back



Mexico (Sept. 2010)
Pictorial 30% front and Text 100% back and 100% side



Netherlands (2003)
30% front and 40% back (EU Directive)



New Zealand (2008)
30% front and 90% back



South Korea (1976)
30% front and 30% back



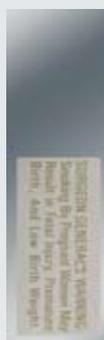
Thailand (2006)
50% front and 50% back



United Kingdom (2008)
Text 43% front and Pictorial 53% back



United States of America (1984)
Text warning on one side of pack



Uruguay (March 2010)
80% front and 80% back



Additional images are available on the Tobacco Labelling Resource Centre website at <http://www.tobaccolabels.org>

See also: Fong, G.T., Hammond, D., & Hitchman, S.C. (2009). The impact of graphic pictures on the effectiveness of tobacco health warnings. Bulletin of the World Health Organization, 87, 640-643.

<http://www.who.int/bulletin/volumes/87/8/en/index.html>

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FUTURE DIRECTIONS

The ITC Project continues to explore opportunities for collaborating with low and middle income countries to help policy makers design, implement, and evaluate FCTC policies.

THE ITC RESEARCH TEAM

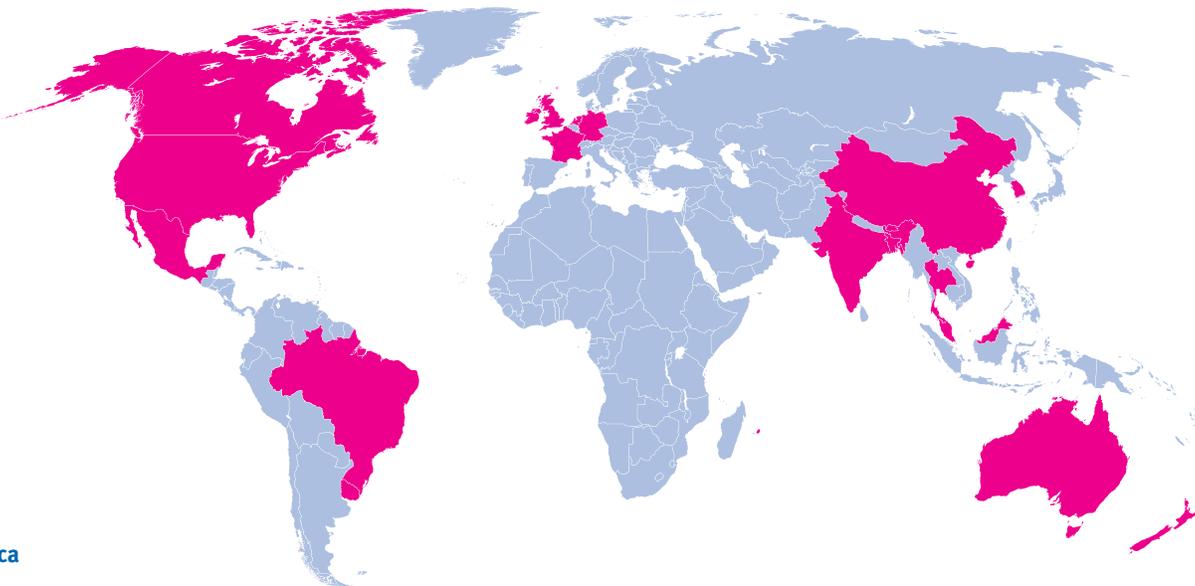
The ITC International Research team includes over 80 tobacco control researchers in 20 countries worldwide. Its Principal Investigators are:

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THE ITC PROJECT: EVALUATING THE IMPACT OF FCTC POLICIES IN...

20 countries • 50% of the world's population • 60% of the world's smokers • 70% of the world's tobacco users

Australia
Bangladesh
Bhutan
Brazil
Canada
China (Mainland)
France
Germany
India
Ireland
Malaysia
Mauritius
Mexico
Netherlands
New Zealand
South Korea
Thailand
United Kingdom
Uruguay
United States of America



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Tobacco Labelling Resource Centre <http://www.tobaccolabels.org/>

FCTC Guidelines for Implementation of Article 11 http://www.who.int/fctc/guidelines/article_11/en/index.html