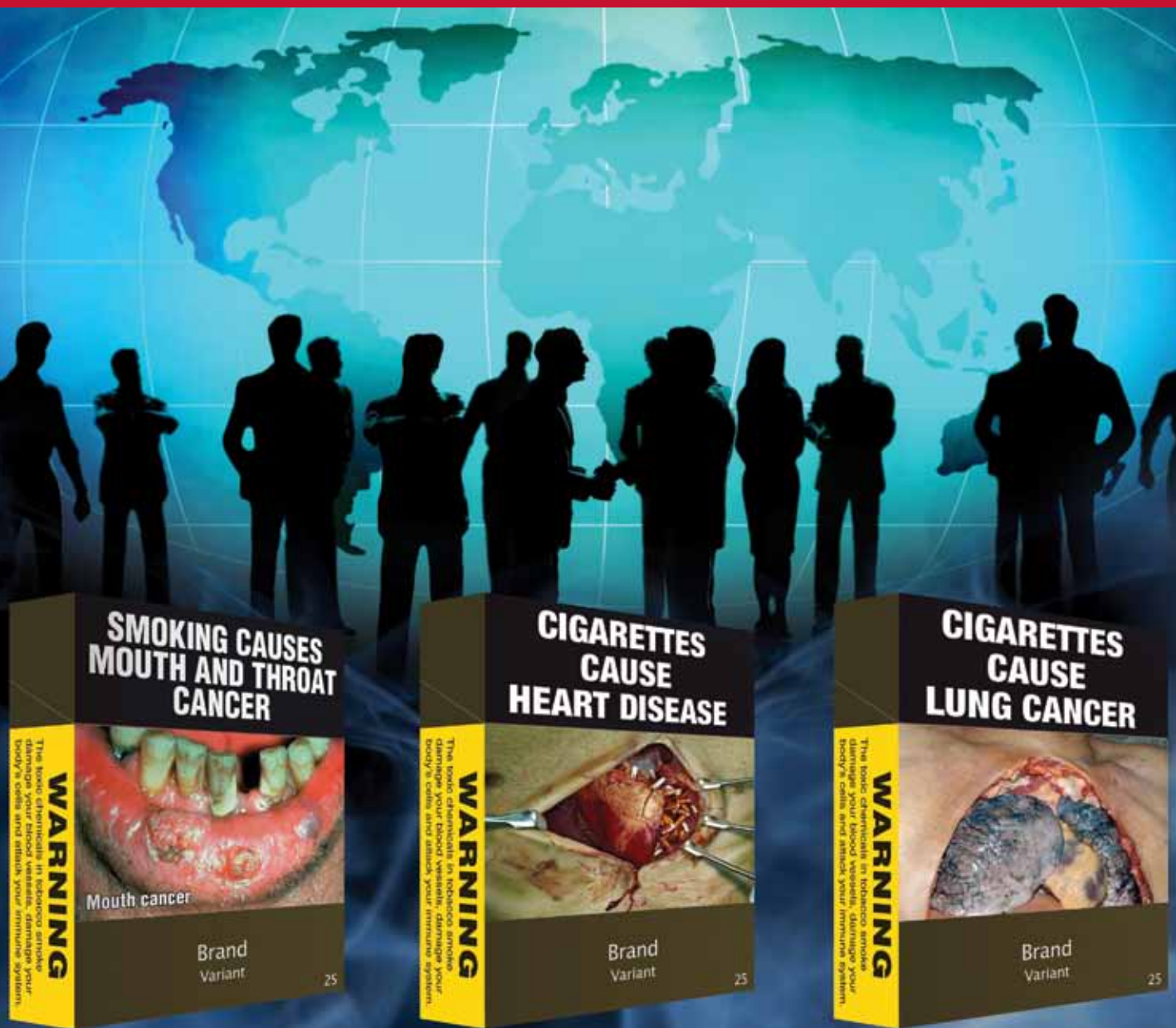


The International Tobacco Control Policy Evaluation Project Health Warnings on Tobacco Packages

ITC Cross-Country Comparison Report



MARCH 2012

UNIVERSITY OF
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itc
International Tobacco Control
Policy Evaluation Project

ITC Cross-Country Comparison Report

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BACKGROUND AND INTRODUCTION

Introduction to this Report and the ITC Project

With the number of tobacco-related deaths expected to increase from 100 million in the 20th century to 1 billion people in the 21st century, there is great urgency to disseminate research findings that can inform the development and implementation of effective tobacco control policies.

The International Tobacco Control Policy Evaluation Project (the ITC Project) was created in 2002 as an evidence-gathering system for evaluating the effectiveness of tobacco control policies of the WHO Framework Convention on Tobacco Control (FCTC). The ITC Project is now an international collaboration involving over 100 tobacco control researchers and experts across 23 countries inhabited by over 70% of the world's tobacco users. In each country, longitudinal cohort surveys of representative samples of tobacco users (and non-tobacco users in many countries) are being conducted, with an emphasis on measuring key indicators of policy effectiveness.

This report presents initial findings on cross-country differences on key indicators of the effectiveness of **health warnings** across 19 countries of the ITC Project. A primary objective of the ITC Project, and of this report, is to disseminate findings on the effectiveness of health warnings to policymakers and other public health stakeholders to promote strong evidence-based policies on labelling and packaging, as required by Article 11 of the FCTC.



Australia 2006

Importance of Health Warnings

Health warnings on tobacco packages are among the most important sources of information about the harms of smoking and of tobacco smoke pollution (also known as secondhand smoke) and are a key component of communication strategies to educate smokers and non-smokers about these harms.

Given their tremendous reach and frequency of exposure (pack-a-day smokers are potentially exposed to warnings over 7000 times per year³), health warnings are an extremely cost-effective public health intervention compared to other communication tools such as paid mass media advertising. Non-smokers also report high exposure and awareness of health warning labels, as tobacco packages are displayed each time the product is used or left in public view, and are also prominent in retail outlets in many countries.

Article 11 states that health warnings:

- Should not use misleading descriptors such as “light” or “low tar”
- Shall be rotating, large, clear, visible, and legible
- Should cover at least 50% of the principal display areas (but no less than 30%)
- May include pictures
- Shall contain information on constituents and emissions
- Shall be in the country's principal language(s)

Article 11 Guidelines (adopted Nov 2008) state that warnings:

- Should be at the top of the front and back of each package
- Should be as large as possible (more than 50%)
- Should include full colour pictures
- Should include two or more sets of rotating warnings with a range of messages
- Should prohibit the display of figures for emission yields

FCTC Guidelines for Effective Health Warnings

Health warnings are the focus of Article 11 of the WHO Framework Convention on Tobacco Control (FCTC), the world's first health treaty.

More than 170 countries are parties to the FCTC, and as such are required to adopt and implement large, clear, and rotating health warnings within three years of FCTC ratification. Additional guidelines for implementation of Article 11 were adopted in 2008.

As of February 2012, over 45 countries have passed legislation requiring pictorial health warnings.

Evidence from ITC Countries

Research studies conducted by the ITC Project provide an evidence base that defines the components of effective health warnings and strongly supports the implementation of large, vivid, pictorial warnings. Findings from specific countries include:

- The introduction of pictorial warnings in **Australia** resulted in an increase in noticing and reading of health warnings, thinking about the health risks and quitting, forgoing cigarettes, and avoiding the warnings; they also stimulated stronger cognitive responses and more reports of forgoing cigarettes than text-only health warnings in the **UK**.⁶
- In **Brazil**, health warnings contain graphic, emotionally evocative imagery, and these warnings had a greater impact on quit-related cognitions among smokers with lower compared to higher educational attainment. This greater impact of warnings among smokers with lower education was not found in **Uruguay**, where warnings included abstract representations of risk (e.g. a vial with skull and crossbones), or **Mexico**, which had warnings that contained only text at the time of data collection. Graphic imagery may work better than other types of imagery in addressing tobacco-related disparities associated with education.⁸
- After **Thailand** introduced pictorial warning labels, the percentage of smokers reporting that the warnings made them think about health risks and made them more likely to quit increased, but no such increase occurred in **Malaysia** - where warnings were text-only - over the same time period.⁹
- An ITC experimental study among smokers, non-smokers and youth in **China** found that pictorial warnings were rated by all groups as being more effective than text-only warnings for motivating smokers to quit, convincing youth not to start and informing the public of the dangers of smoking.¹⁰
- After **Mauritius** introduced pictorial warnings in 2009 on 60% of the front and 70% of the back of the pack - the first nation in the African region to put pictorial warnings on packs - smokers were more aware of specific harms of smoking, had more thoughts about quitting, and had emotional reactions that were associated with quitting.¹¹

RESEARCH EVIDENCE ON HEALTH WARNINGS

Evidence on Health Warning Effectiveness

There is extensive research evidence from the ITC Project and many other sources demonstrating that health warnings are an effective tool for:²⁻⁴

- **Educating** smokers and non-smokers about the harms of smoking
- **Motivating** smokers to quit and providing help and information to enhance efficacy of quitting
- **Encouraging** non-smokers, including youth, not to start smoking
- **Counteracting** misleading messages and brand imagery on tobacco packages



New Zealand 2008

Components of effective warnings:

- Large, prominent and contain salient features that make them stand out from the rest of the pack
- Contain vivid images and messages that depict health risks in an emotionally arousing manner
- Updated frequently to include new images and health information

Benefits of health warnings:

- Several studies report high levels of public support for pictorial warnings.^{5,6}
- Both adult and youth smokers report pictorial warnings to be a credible source of information.¹
- More smokers report getting information about the health risks of smoking from cigarette packages than any other source except television.⁷
- Pictorial warnings may be particularly important in communicating health information to populations with lower literacy rates.^{1,8}
- Evidence suggests that pictorial warnings may be more effective in low- and middle-income countries, where warning labels are one of the few or only sources of health information.⁵

ITC SURVEY METHODS AND MEASUREMENTS

ITC Survey Questions on Health Warnings

All ITC surveys are developed using the same conceptual framework and methods, and the survey questions are designed to be identical or functionally equivalent in order to allow strong comparisons across countries. The use of standardized methods and measures across all ITC surveys ensures that the effectiveness of health warnings and other policies can be compared across countries in order to provide guidance on best practices in tobacco control.

ITC surveys include a broad set of questions to assess health warning label effectiveness. These questions generally fall into three categories: salience, behavioral responses, and support for health warnings. The following survey questions represent ITC's key measures of health warning effectiveness:

| Measure | Survey Question | Response Options |
|-------------------------------------|--|--|
| Noticing Labels | In the last month, how often, if at all, have you noticed the warning labels on cigarette packages? | Scale of 1-5, from “never” to “very often” |
| Thinking About Health Risks | To what extent, if at all, do the warning labels make you think about the health risks of smoking? | Scale of 1-4, from “not at all” to “a lot” |
| More Likely to Quit | To what extent, if at all, do the warning labels on cigarette packs make you more likely to quit smoking? | Scale of 1-4, from “not at all” to “a lot” |
| Avoiding Labels | In the last month, have you made any effort to avoid looking at or thinking about the warning labels – such as covering them up, keeping them out of sight, using a cigarette case, avoiding certain warnings, or any other means? | Yes or No |
| Gave up a Cigarette | In the last month, have the warning labels stopped you from having a cigarette when you were about to smoke one? | Scale of 1-4, from “never” to “many times” |
| Amount of Health Information | Do you think that cigarette packages should have more health information than they do now, less information, or about the same amount as they do now? | Less, the same, more |

Methods for Cross-Country Comparisons

The following graphs present *initial* results from cross-country comparisons of ITC surveys conducted in 19 countries. The cross-country comparison data are meant to be qualitative descriptions. More formal statistical tests will be conducted for scientific publications, presentations, and reports arising from the cross-country comparison data. The percentages presented in the graphs were estimated from regression models that control for potential differences across countries in age, smoking status, and the number of times respondents were surveyed in each of the countries. The percentages also take into account the different sampling designs used in each of the countries.

The results presented in this report come from the most recent wave of ITC surveys of smokers conducted in each of the 19 countries with the year of each survey given after the country name.

Additional Notes:

- Across the 19 countries, there are considerable differences in prevalence of smoking among women. In non-Asian countries, female prevalence is often fairly close to that of males. But in the Asian countries, the female prevalence rate is much lower than that of males. Although in many of these countries women smokers were oversampled, the resulting sample size of women in Asian countries is still much lower than for men and too low for meaningful estimates. Thus, the graphs present ITC results in the Asian countries for male smokers only whereas for the non-Asian countries, results are presented for males and also for male and female smokers combined.
- In each graph, countries are presented in order of GDP per capita, from highest to lowest. They are also colour-coded according to three World Bank income classifications: High Income, Middle Income, and Low Income.

HEALTH WARNINGS IN ITC COUNTRIES

Note: This table displays information on the warning labels that were on cigarette packages at the time of the latest survey wave. Some countries have since updated their warnings, as noted in the last column. Examples of health warnings on packs at the time of the latest ITC survey are on the next page.

| Country | Year of latest ITC survey data | Year of implementation for warnings appearing at time of survey | Pictorial warnings at time of survey | % Front | % Back | Number of messages and rotation requirements (if available) | Year(s) of implementation for new warnings since latest survey |
|------------------|--------------------------------|---|--------------------------------------|---------|--------|--|---|
| Australia | 2010 | 2006 | Yes | 30 | 90 | 2 sets of 7 warnings, rotated at 12 month intervals | 2012 |
| Bangladesh | 2010 | 2006 | No | 30 | 30 | 6 warnings, 1 displayed at a time, should be rotated every 6 months | — |
| Brazil | 2009 | 2004 | Yes | 0 | 100 | 10 warnings | 2008 |
| Canada | 2010 | 2001 | Yes | 50 | 50 | 16 rotating warnings plus 16 messages inside the packs | 2012 |
| China (Mainland) | 2009-10 | 2008 | No | 30 | 30 | 3 messages, 1 is on all packs and 2 rotate with each other | — |
| France | 2008 | 2003 | No | 30 | 40 | 2 possible messages for front & 14 for back, must rotate on regular basis | 2011 |
| Germany | 2009 | 2003 | No | 30 | 40 | 2 possible messages for front & 14 for back, must rotate on regular basis | — |
| Ireland | 2006 | 2003 | No | 30 | 40 | 2 possible messages for front & 14 for back, must rotate on regular basis | 2008, 2013 |
| Malaysia | 2009 | 2009 | Yes | 40 | 60 | 6 rotating warnings; Malay on front and English on back | — |
| Mauritius | 2011 | 2009 | Yes | 60 | 70 | 8 warnings; French on front and English on back | — |
| Mexico | 2011 | 2010 | Yes | 30 | 100 | 8 warnings (image on front, text on back and one side of pack), 2 warnings from the set are displayed on packs at a time | — |
| Netherlands | 2011 | 2003 | No | 30 | 40 | 2 possible messages for front & 14 for back, must rotate on regular basis | — |
| New Zealand | 2008 | 2008 | Yes | 30 | 90 | 14 rotating warnings in English and Maori | — |
| Scotland | 2006 | 2003 | No | 30 | 40 | 2 possible messages for front & 14 for back, must rotate on regular basis | 2008 |
| South Korea | 2010 | 2009 | No | 30 | 30 | 3 rotating messages | — |
| Thailand | 2009 | 2009 | Yes | 55 | 55 | 10 warnings to be rotated at rate of 5000 cigarette packs per image | — |
| United Kingdom | 2010 | 2008 | Yes | 43 | 53 | 1 of 2 text messages on front, 1 of 14 pictures on back, rotated equally | — |
| United States | 2010 | 1984 | No | 0 | 0 | 4 messages rotated equally, must cover 50% of one side of the pack | 2012 (although legal challenges are likely to delay implementation) |
| Uruguay | 2010 | 2010 | Yes | 80 | 80 | 6 warnings, each must appear equally and be rotated every 12 months | — |

Health Warnings on Packs at the Time of the Latest ITC Survey

Australia



Bangladesh



Brazil



Canada



China (Mainland)



France



Germany



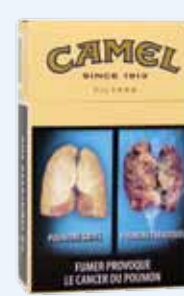
Ireland



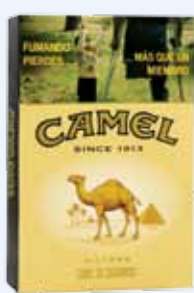
Malaysia



Mauritius



Mexico



Netherlands



New Zealand



Scotland



South Korea



Thailand



United Kingdom



United States



Uruguay



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

CROSS-COUNTRY COMPARISON GRAPHS

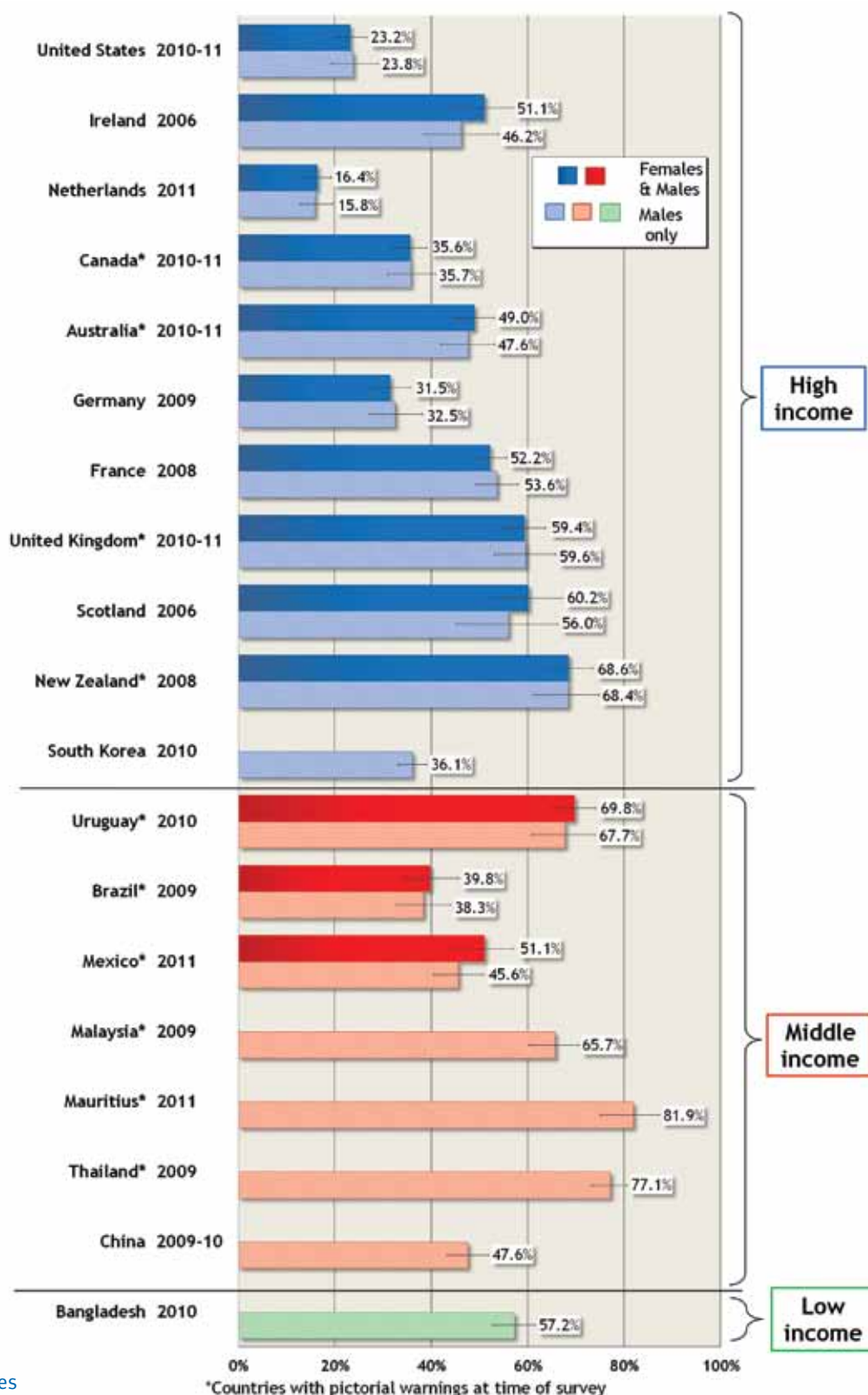
Noticing Labels

Figure 1. Percentage of smokers who noticed warning labels “often/very often”, by country

The percentage of smokers who noticed the health warnings on cigarette packages “often” or “very often” was lowest in the Netherlands (with text-only warnings) and highest in Mauritius (with pictorial warnings).

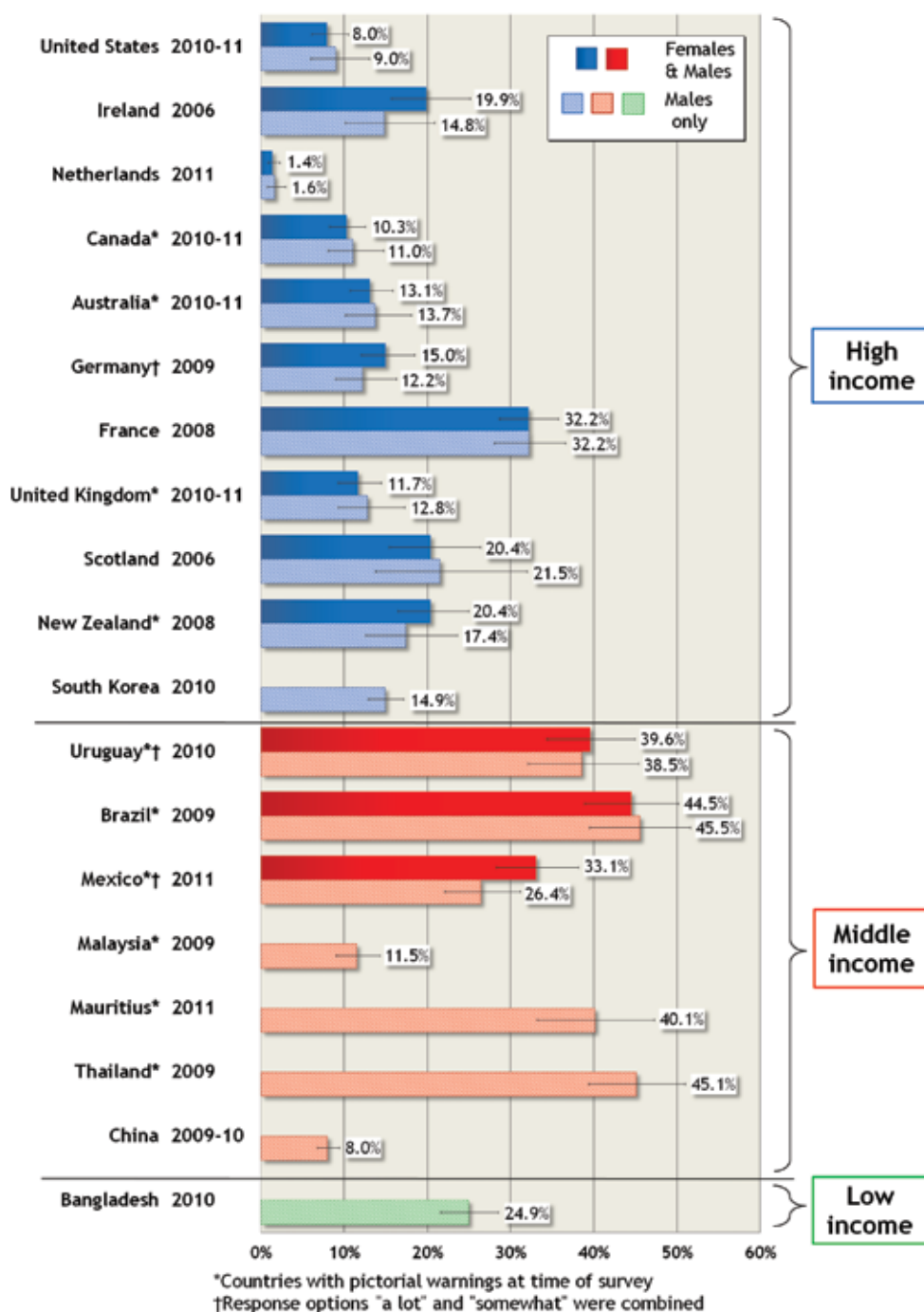
Of all the countries with pictorial warnings at the time of the survey, Canada (where the same health warnings had been in place for 10 years) had the lowest percentage of noticing the warnings.

Brazil, where warnings appear only on one side of the pack, had the lowest percentage of noticing among the seven middle income countries.



Thinking About Health Risks

Figure 2. Percentage of smokers who said warning labels made them think about the health risks of smoking “a lot”, by country



The percentage of smokers who thought about the health risks of smoking “a lot” was lowest in the Netherlands (with text-only warnings) and highest in Brazil (with pictorial warnings).

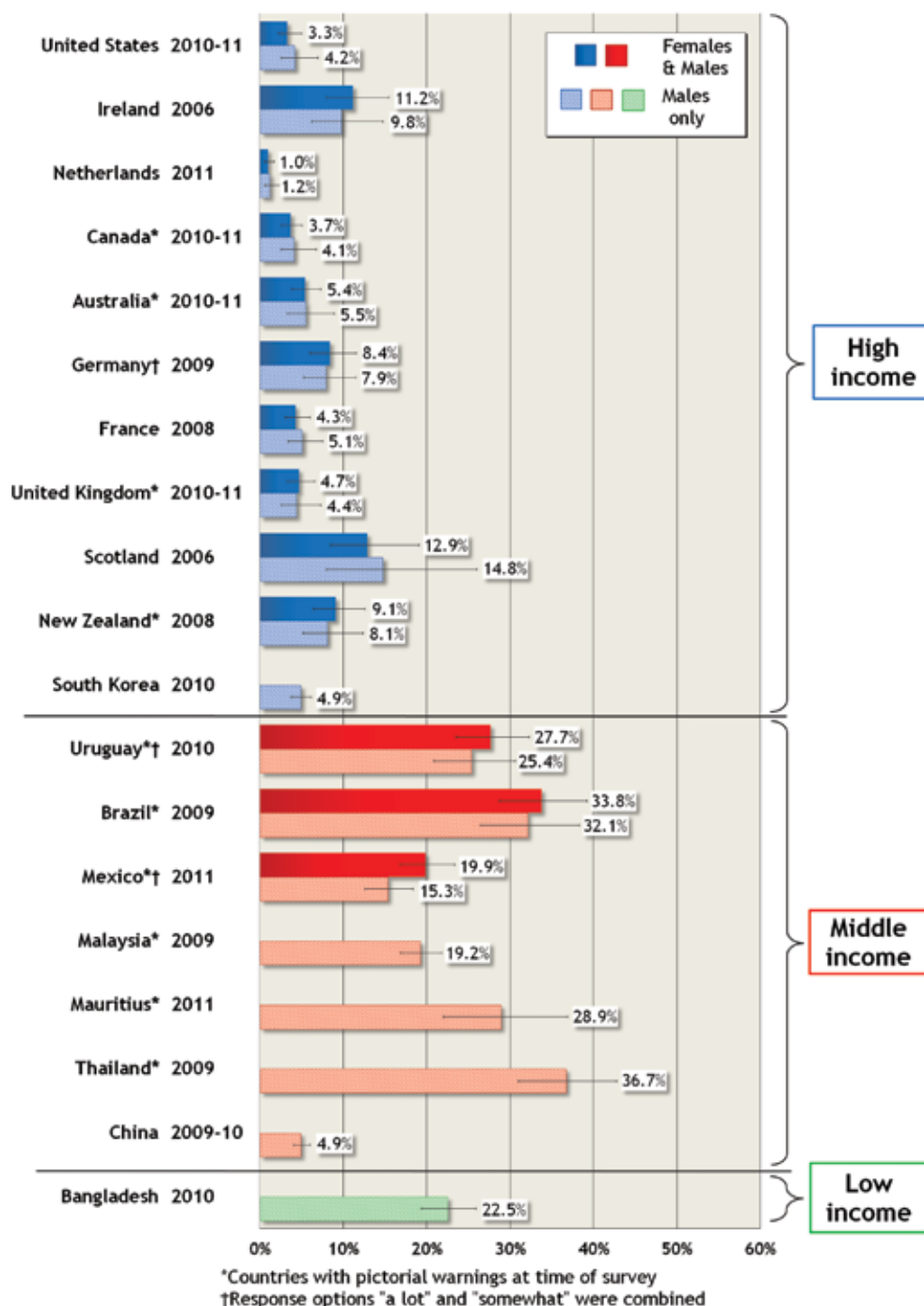
Only five countries had at least one-third of smokers report that health warnings made them think about the health risks “a lot” (Uruguay, Brazil, Mexico, Mauritius, and Thailand — all of which have pictorial warnings).

More Likely to Quit

Figure 3. Percentage of smokers who said warning labels make them “a lot” more likely to quit smoking, by country

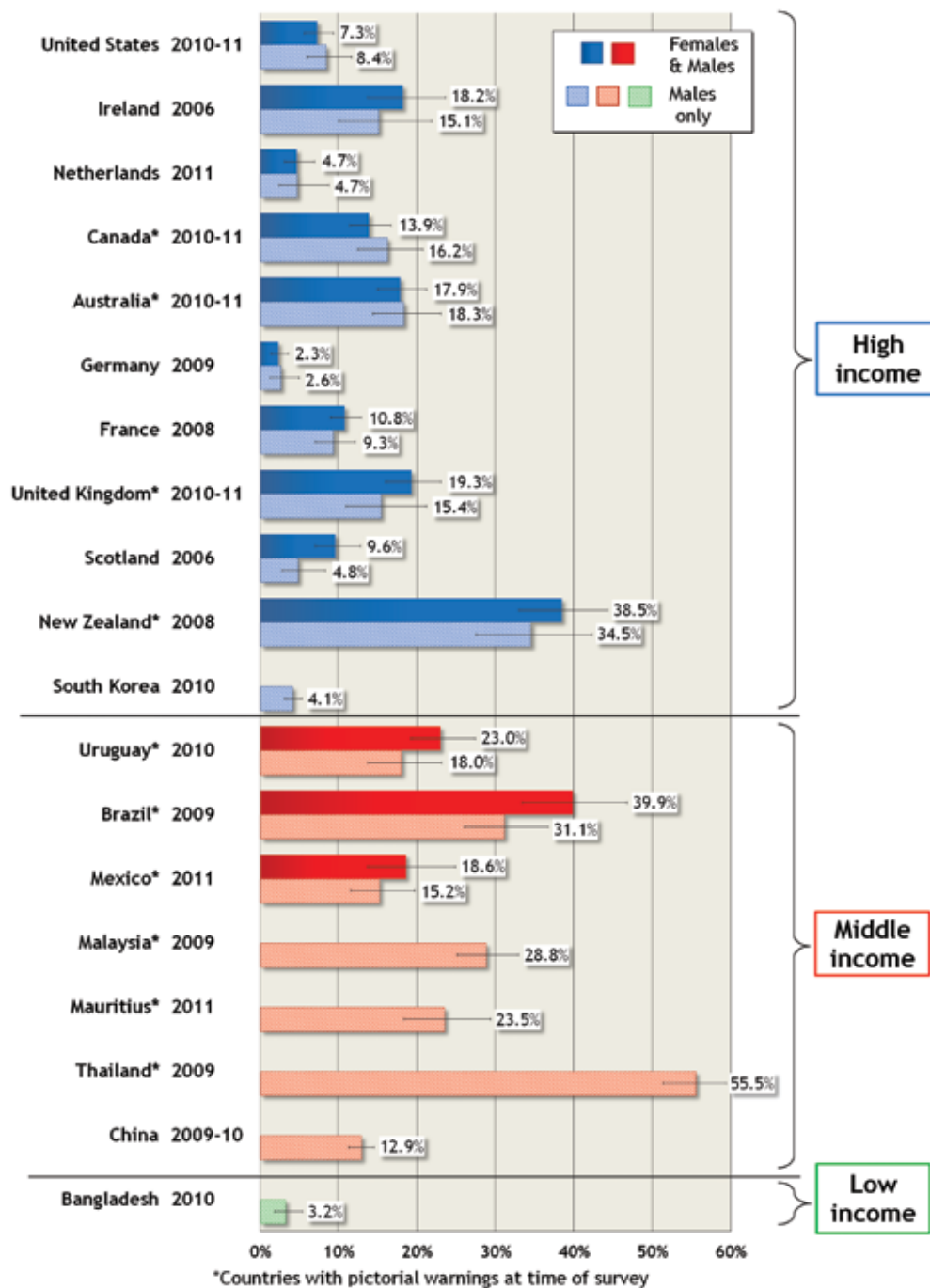
The percentage of smokers who said health warnings made them “a lot” more likely to quit smoking was lowest in the Netherlands (with text-only warnings) and highest in Thailand (with pictorial warnings).

Brazil and Thailand were the only countries where at least one third of smokers reported that warnings made them “a lot” more likely to quit smoking.



Avoiding Labels

Figure 4. Percentage of smokers who made an effort to avoid warning labels, by country

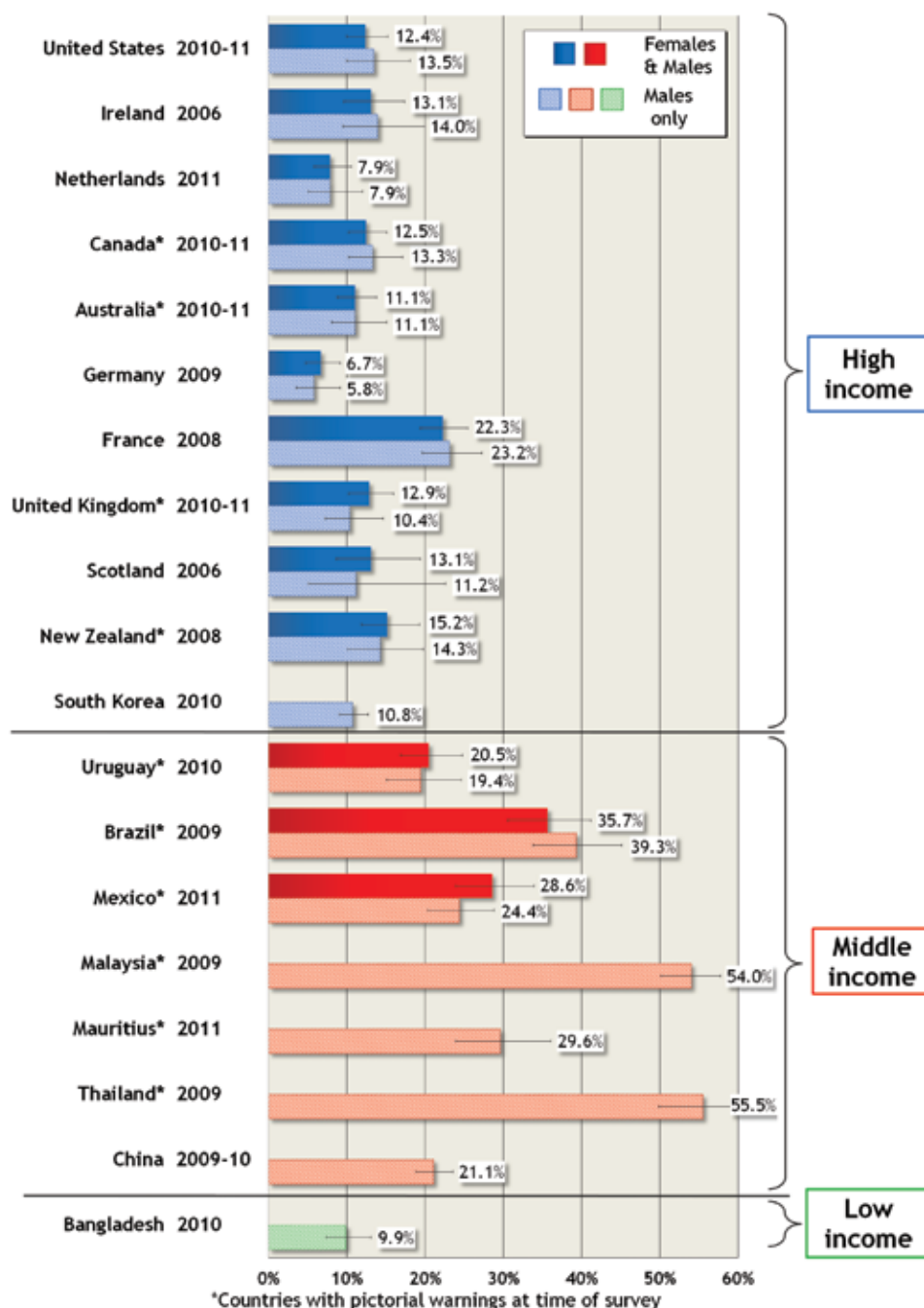


The percentage of smokers who reported that they made an effort to avoid the health warnings was lowest in Germany (with text-only warnings) and highest in Thailand (with pictorial warnings).

Thailand was the only country where the majority of smokers reported avoiding the labels in any way.

Gave Up A Cigarette

Figure 5. Percentage of smokers who gave up a cigarette at least once because of the warning labels, by country

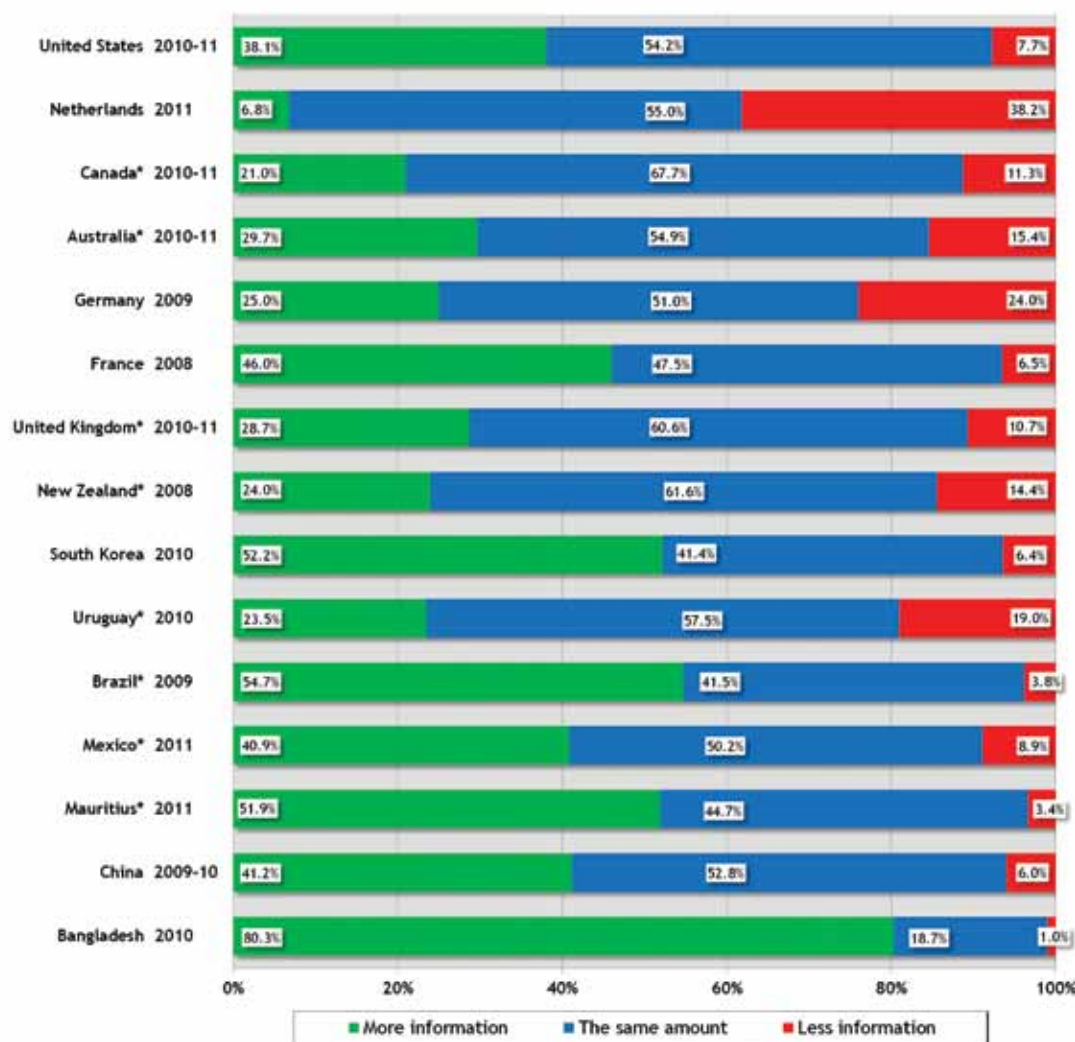


The percentage of smokers who gave up a cigarette because of the warnings was lowest in Germany (with text-only warnings) and highest in Thailand (with pictorial warnings).

Malaysia and Thailand were the only two countries where the majority of smokers said the health warnings stopped them from having a cigarette at least once in the last month.

Amount of Health Information

Figure 6. Percentage of cigarette smokers who think there should be more, less, or the same amount of health information on cigarette packages, by country



*Countries with graphic warnings at time of survey
NOTE: Data are from male smokers only

The percentage of male smokers who wanted more health information on packages was lowest in the Netherlands (a high-income country with text-only warnings) and highest in Bangladesh (a low-income country with text-only warnings)

In every country except for the Netherlands, the percentage of male smokers who want more information on packages was greater than the percentage who want less information, even in countries where pictorial warnings are in place.

Summary

- In general, pictorial warning labels demonstrated greater effectiveness than text-only warnings on all self-reported measures of health warning effectiveness.
- Thailand, Brazil, and Mauritius (where large, graphic warnings are in place) tended to show the highest levels of warning label effectiveness across the measures.
- The Netherlands and Germany (both of which have only small text warnings) tended to show the lowest rates of health warning effectiveness across the measures.
- The impact of health warnings may be stronger in low- and middle-income countries, where there are fewer alternative sources of information about the harms of smoking.
- In general, the effectiveness of the health warnings did not differ by gender.
- In all of the ITC countries, there is still room for improvement on every indicator of warning effectiveness.
- In almost every ITC country, the percentage of smokers who want more information on packages is greater than the percentage who want less information, even in countries where pictorial warnings are in place.
- These cross-country results show the importance of implementing strong pictorial health warnings in accordance with the Guidelines for Article 11 of the FCTC.

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Brazil 2008



Mauritius 2009

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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 100 tobacco control researchers in 23 countries worldwide. Its Principal Investigators are:

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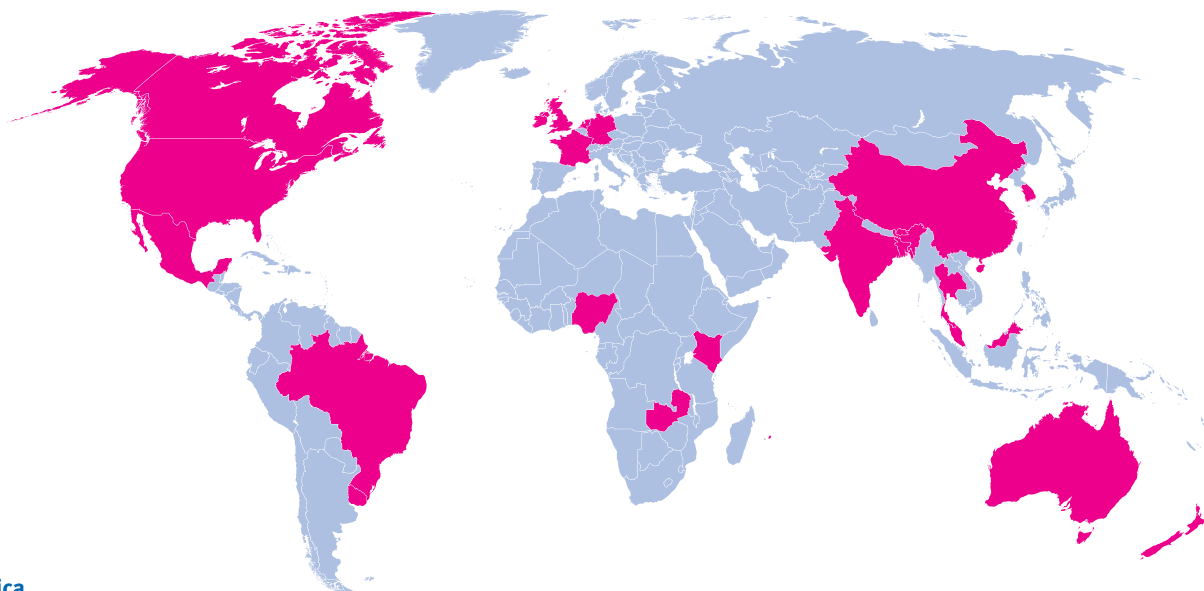
Gerard Hastings – University of Stirling and the Open University, United Kingdom

Ann McNeill – University of Nottingham, United Kingdom

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

23 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
Kenya
Malaysia
Mauritius
Mexico
Netherlands
New Zealand
Nigeria
South Korea
Thailand
United Kingdom
Uruguay
United States of America
Zambia



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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