State of Evidence Review

Institute for Global Tobacco Control • October 2013

Health Warning Labels on Tobacco Products

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Article 11 of the World Health Organization's (WHO) Framework Convention on Tobacco Control (FCTC) focuses on packaging and labeling of tobacco products. Article 11 requires that tobacco product packaging carry health warnings that describe the harmful effects of tobacco use, and that packages also provide other relevant information to inform people about the harmful effects of tobacco products.[1] It is recommended that health warning labels on tobacco products cover a minimum of 50% of the front of the pack. The following translational document summarizes what is currently known about tobacco product warning labels and their key components. This review also presents examples of warning label design and practices from various countries, and provides a list of key resources for developing and implementing health warning labels on tobacco products (see Appendices).

What are health warning labels on tobacco products?

Health warning labels describe the harmful effects of tobacco products using text and/or pictures. The messages in the labels are intended to describe the harmful physical and psychosocial effects of using tobacco products. In the past, text-only warning labels have appeared on cigarette packages; the evidence now shows that picture-based warnings with accompanying text are more effective.[2,3] Health warning labels on tobacco product packaging are a cost-effective way to disseminate information to the public on the dangers of smoking and benefits of quitting. Health warning messages appear most widely and consistently on manufactured cigarette packs.[3] Other types of tobacco products, such as cigars or smokeless tobacco, may have different warnings and regulations.

Why should health warning labels be used?

Warning labels serve two main purposes. First, the warnings provide health information on the risks of using tobacco products. Although it is widely known that tobacco products are harmful, many people are not aware of the full range of negative effects they can have on health.[4,5] Second, warning labels on tobacco products aim to affect product use. This includes reducing use or encouraging quitting among users, preventing non-users from initiating, and preventing former users from relapse.

How effective are health warning labels?

There is extensive evidence to show that health warning labels on smoked tobacco products work in the following ways.
- Increase health knowledge about the harms of tobacco[4,6]
- Prevent relapse in former smokers[7]
- Deter youth and adults from initiating use and experimentation[8-10]
- Deter smokers from having a cigarette when they are about to have one [11]
- Increase smokers' intentions and attempts to quit[12,13]
- Reduce appeal of the cigarette pack[14,15]
- Promote use of quit resources[16]

Where have health warning labels on tobacco products been implemented?

As of March 2013, 64 countries/jurisdictions required or were finalizing implementation of picture-based warning labels on cigarette packs.[17] A 2012 report on the international status of package health warnings showed that 135 countries/jurisdictions did not require picture-based warnings.[18] Appendices A and B at the end of this document provide examples of countries that have implemented warning labels.

What needs to be considered when designing, developing, and implementing health warning labels?

The following section will provide details about the various components of health warning labels on tobacco products, and current evidence of their adoption and effectiveness in reducing tobacco use. Key points are highlighted below, and addressed in more detail throughout the remainder of this section.

Key points on warning label design, content, and implementation		
Physical design components	**Message content**	**Implementation and delivery**
Picture-based messages are the most effective element of health warning labels on tobacco products	Messages that portray the risks of tobacco use and negative health impacts are meant to appeal to fear or emotion, and capture viewers' attention	Standardized or "plain" packaging currently exists only in Australia; standardized packaging makes warning labels more noticeable
Labels should cover at least 50% of the package surface, and text should be large and visible	Labels that include coping information such as quit resources are noticed by smokers	Frequent rotation of label pictures, content, and layout can prevent message fatigue or apathy
Labels are most noticeable on the front panel and upper portions of the pack	Coping information combined with fear-based or threatening messages enhances overall effectiveness of the warning	A set of messages using several approaches is more effective than a single, broad message
Large font and text that contrasts with the background color attracts more attention and is easier to read	Experts recommend pre-testing messages as a means of reaching specific audiences	Mass-media campaigns reinforce warning label messages

Article 11 specifies that warning labels and messages on tobacco products must be "large, clear, visible, and legible."[1] These characteristics are essential because with increased regulation of tobacco advertising, promotion, and sponsorship, tobacco companies have placed greater attention on product packaging as a marketing strategy. The pack itself now serves as a primary means of promoting tobacco products, and design elements of the pack such as shape and coloring may also be used to detract from health warning messages displayed on the package.[19]

Physical design elements

Picture-based warnings: Picture-based warnings feature an image and accompanying text containing information on the harms of tobacco use. The use of pictures greatly increases the effectiveness of health warnings on tobacco products,[3] and more countries are now incorporating pictures into their warnings. Pictures are effective because they catch and hold the viewer's attention.[20] A study of adolescent response to UK cigarette package warning labels found that the text-only warnings that appeared on the back of packages had less than 1% recall rate.[21] Use of pictures in health information is also important for reaching low-literacy individuals.[22] The current literature focuses primarily on the use of photographic picture warnings, as opposed to illustrations or cartoons. Although cartoons such as Joe Camel have been used by tobacco companies for the promotion of products, recent research on the proposed U.S. warnings showed that both youth and adults perceived labels that featured real people to be more effective than those using comic book style images.[23]

Size of the warning label: Article 11 requires that warning messages cover no less than 30 percent of the pack, but recommends at least 50 percent coverage. Larger warnings are easier to see and read, and research shows that greater coverage will incrementally increase the impact of the warning.[24,25] A 1999 study for the Canadian Cancer Society found that among four test warning labels of different size, the largest option (which covered more than 50% of the surface) was rated by subjects as most likely to discourage people from smoking.[26] Findings from a 2011 study indicated that U.S. consumers perceived larger warnings as more effective in communicating risk.[27] Countries including Uruguay and Australia have the largest size standards: 80 percent or more on both the front and back of the tobacco packaging. As of August, 2013, 46 countries that ratified the FCTC have implemented policies requiring that health warnings comprise at least 50 percent of the tobacco product packaging.

Location of the warning label on the pack: Early research on warning labels in New Zealand showed that people were more likely to recognize and remember warnings that are placed on the front of the package instead of the side.[28] Warnings located inside the pack lid were also perceived as effective. Although this particular study did not find a difference between viewer preferences for warnings on the top or bottom portion of the package, 2008 Guidelines on Article 11 state that they must appear at the uppermost parts of the pack.[29] This positioning of warning labels takes away space on the packaging that tobacco companies are known to highlight for brand promotion and advertising.[30]

Three examples of physical design approaches to warning labels on cigarette packs. All are picture-based, the label comprises at least 50% of either the front or back panel. Top: 2013 Brazil, back. Middle: 2012 Canada, front (credit: www.tobaccolabels.ca). Bottom: 2011 Thailand, front.

Color use in warning labels: The use of color increases the likelihood that an advertisement will be seen or read.[31] Text color that contrasts with the background, generally dark letters on light background, is also recommended.[32] This use of text color is known as a "contrast principle" in marketing psychology, and is important in print advertising for legibility and readability.[31] High-legibility combinations of color include black on yellow, green on white, blue on white, white on blue, and black on white. The use of an outline or border around the warning area, as opposed to "unboxed" warnings, was preferred by viewers in testing of earlier versions of warning labels in New Zealand.[28]

Text warning font: Health literacy experts recommend that text be adjacent to pictures in order to enhance understanding.[33] Large font size is helpful for readability of warning labels, and experts use size 12 fonts as a minimum standard. Although many current warning labels on tobacco products use all capitalized text, literacy experts recommend that longer headlines and body text be in lowercase type to ease readability. However, there is no evidence as to whether these same standards would be relevant to non-Roman alphabets.

Message content and style

The following section describes various approaches to developing and presenting message content in tobacco warning label messages, and discusses what is known about their effectiveness. A set of messages that incorporate several of these approaches will have a wider reach than a single message intended to reach an entire population.

Emotional appeals: Messages that appeal to negative emotions are a common approach to communicating health risks. These types of warnings appear on health warning labels on tobacco products as vivid pictures and captions that may be shocking, threatening, or unpleasant to viewers. There is reliable evidence that warning labels invoking negative emotions are effective for multiple audiences: gruesome picture warnings in the UK were found to be persuasive and credible for both adolescent non-smokers and experimental smokers.[21] A study of eye movement across warning labels found that threatening or fear arousing elements in picture warnings were salient among young adult non-smokers.[34] Pictures that feature the negative aesthetic results of smoking, for example mouth disease or skin aging, may help deter smoking among female youth.[3,35] Some emotional appeals may intend to depict a sense of sadness or suffering,[3] but the literature focuses primarily on fear-based appeals.

self-efficacy or motivational information must be integrated into threatening picture warnings to enhance effectiveness

Research suggests that smokers suppress or ignore gruesome picture warnings as a defensive response.[21,36] However, avoidance does not mean that smokers are unaffected by these warnings that invoke negative emotions; on the contrary, studies have shown that the increased presence of thoughts around the warning and its negative portrayal of tobacco use have an impact on smokers.[37,38] A series of studies conducted among U.S. and Canadian adult and young adult smokers in 2006 found that the use of gruesome pictures in warning messages increased negative affective responses, decreased pack attractiveness, increased intentions to quit, and increased perceptions of the label's ability to encourage others to quit.[6] The combination of pictures and text were also rated as more effective by viewers than text-only warnings; a subsequent study of warning label design impact on U.S. adult smokers and non-smokers had similar results.[27] Additional research has found that gruesome images in warning labels improve smokers' recall of warning content and health risks,[20] and increase quit intentions or attempts.[14,15] A single study conducted in 2013 found that presenting fear-arousing warning messages as questions rather than statements increased smokers' perceptions of smoking health risk and reduced defensive responses.[39]

Self-efficacy appeals: Additional elements such as self-efficacy or motivational information must be integrated into threatening picture warnings to enhance effectiveness among smokers.[40] A 2013 U.S.-based study found that inclusion of a hotline for quitting increased perceptions of picture-based warning label effectiveness among youth and adult smokers, while other evidence showed that smokers fixate longer on the portion of the warning that is focused on coping and quit information.[20,23] The use of self-efficacy as a counterpart to fear-inducing messages is also supported from a theoretical perspective in health behavior research.[38,41,42] In all of these studies, it is important to consider that the text was studied as part of a picture-based message, thus the results do not imply that text-only warnings should be used as an alternative. The picture is still the element that captures viewers' attention, accommodates low literacy audiences, and discourages non-smokers from initiating tobacco use.[3,20,22]

Gain/loss framing: Message content in health warning labels on tobacco products also use a technique known as gain and loss-framing. Gain-framed messages focus on the positive outcomes of the behavior, such as improved health (positive outcome) after quitting smoking (behavior); loss-framed messages focus on the negative consequences, such as the addictiveness of smoking.[43]

Left: Example of a gain-framed message on a 2012 Australian label; Right: example of a loss-framed message on a 2012 Canadian label (credits: www.tobaccolabels.ca).

Gain-framed messages often focus on encouraging smokers to quit, but we know that in general, positive-themed messages are less effective and less likely to be remembered by viewers.[3] A study of the impact of pack and warning design on U.S. smokers and non-smokers found that loss-framed messages were most effective at communicating health risk,[27] while a study of message framing among adolescents in Canada found that smokers and non-smokers were more likely to avoid smoking after viewing loss-framed messages.[43] Warnings that pertain to the negative effect of tobacco use on quality of life rather than mortality, such as impotence or premature aging, were also found to be effective among adolescents.[3] Tailoring the message to demographics such as age, gender, smoking status, and attitudes toward quitting may vary by country and culture; therefore use of several warnings with different message themes may reach a more diverse consumer base.[44]

Social value appeals: Tobacco warning labels can affect perceptions of social values and norms, and strongly influence a smoker's behavior and attitude toward quitting.[44] Social norms likely influence the impact of warnings,[3] and research suggests that health behavior is also strongly influenced by social norms and social approval.[44] The literature discusses the concept of "tobacco denormalization," or reducing the social acceptability of smoking: most smokers are aware that others disapprove of smoking and express distrust toward tobacco companies, and health warning labels have been shown to reinforce these perceptions.[45]

When developing messages that influence social norms, the viewer must find the message credible and be able to relate to it. For example, pictures that include the name of the individual portrayed or a personal narrative testimonial may make the message more relatable.[23] Other approaches to social value warning messages include depicting referent groups such as children, family, and friends. A study of Mexican adult and young adult smokers and non-smokers found that in general, testimonial narrative was perceived as less credible and relevant by viewers than a didactic, instructive text warning.[46] However, narrative testimonial was perceived as more effective among participants with lower educational status, thus the decision of which approach to use depends on the target population.

Left: 2012 Swiss/EU label portraying the negative effects of smoking on children, using a didactic message style (translation: "Protect children: don't make them breathe your smoke". Right: 2012 Canadian label that features a personal testimony (credits: www.tobaccolabels.ca)

Literacy level of warning messages: Literacy is an essential factor to consider when developing the content of health messages on tobacco products. If the literacy level of the written portion of the message is too high, the message will not have the desired effect. For example, warnings in the US have typically required a college-level reading comprehension,[47] which means the message may not reach children or adolescent viewers, or groups with low education. Literacy experts in the U.S. recommend that health information be written no higher than at a fifth grade level,[33] but this standard may not apply to other countries. It is therefore advisable to know the country or jurisdiction's literacy rates when developing the text portion of warning labels. If the literacy rates are unknown or unreliable, pre-testing may also help determine readability. Most importantly, greater size and emphasis on the picture portion of the label will reach more people regardless of audience literacy.

Implementation and delivery

Plain and standardized packaging: Plain packaging is defined as the removal of color, brand imagery, corporate logos, trademarks, and other surface elements in a tobacco package design.[48] This approach incorporates nearly all of the elements discussed in this review. Subsequent literature expands the concept of plain packaging to include standardization of the package shape, opening, and dimensions.[49] Research shows that plain and standardized packaging has several benefits, including enhancing the effectiveness of warning labels, reducing false perceptions of tobacco use, and reducing brand appeal.[48] The inclusion of picture-based warning labels as part of the plain package design may also prevent smoking among adolescents.[50] Evidence shows that the pack itself can serve as a means to impact brand appeal or attractiveness, consumer perceptions about the product quality, and can detract from health warnings.[48,49] Therefore, standardizing the shape, opening, and dimensions of the package must be considered because even with restrictions on the surface design, tobacco companies can manipulate the physical shape and size of a cigarette pack to their advantage. For example, a warning label may be distorted or difficult to read if it appears on a package that is narrow or "slim."

To date, Australia is the only country that has implemented plain and standardized packaging, though legislation was recently approved in Ireland.[51] Many other countries are considering plain or standardized packaging, including New Zealand, India, the United Kingdom, Norway, and Canada.

2013 Australian cigarette package, plain and standardized. Top: front panel. Bottom: back panel.

Rotation of warning labels: Countries and jurisdictions that are parties to the FCTC are required to rotate the health warnings that appear on tobacco product packaging. Research shows that repeated exposure to the same message over a long period eventually decreases its effectiveness and can cause viewers to feel apathetic toward the message itself. This effect of overexposure is also called "wear-out" or "message fatigue."[44] Appendix B shows various approaches to rotation plans from different countries.

The number of different labels used during a given period of time is referred to as a "set." An evidence-based toolkit on implementing health warning labels on tobacco products suggests that a set have between 8 and 12 individual warnings that appear concurrently.[30] When implementing rotation cycles, experts recommend at least every one to two years, and no more than every four years. The 2008 Guidelines to implementing Article 11 suggest alternating at least two sets of warnings and messages every 12 to 36 months.[29] The guidelines also suggest changing the layout and design of health warning labels as a less expensive approach.

Audience segmentation: Specific messages may be more salient to one group than another, or may resonate differently by country or culture. We also know that among smokers, the effectiveness of a warning message largely depends on the individual's intention or stage of readiness to quit.[52,53] The literature supports thorough pretesting of messages to help determine which strategies are most effective for a particular audience.[54] A guide to pretesting is also available through the Key Resources list (Appendix C). In addition to pretesting, careful planning and development of multiple warning labels will reach a wide base of consumers, while still allowing variety between warning messages to reach specific sub-groups. Just as the tobacco industry targets products to certain groups, health warning messages can be tailored for specific audiences. For example, messages focused on the negative aesthetic effects of smoking, such as rotting teeth and gums, have been shown to be effective among young people.[3]

repeated exposure to the same message over a long period eventually decreases its effectiveness

The health behavior and communication literature suggests looking for commonalities and using messages that focus on shared beliefs and behaviors to avoid the risk of stigmatization of a particular group.[55] It also suggests that race-based segmentation may be an inefficient use of resources in a campaign. Indeed, a study of picture-based health warning labels found that their impact did not significantly differ by race of the viewer.[56]

Mass media campaigns: Mass-media campaigns can be used to support, extend or reinforce health warning messages on tobacco products; this type of approach will reinforce tobacco control messages and non-smoking norms.[44] A 2011 study found that participants had higher awareness of smoking-related health effects that were mentioned in both pack warnings and on television than if health effects appeared only on the packs.[57] Exposure to mass media campaigns may also help recent quitters avoid relapse.[58]

Examples of health warning labels that target specific audiences. Left: Brazil 2013 warning label that may be targeted at men. Right: 2012 Ukraine warning label that may be targeted at young adult women.

Other Health Warnings on Tobacco Packaging

Constituents and emissions information: FCTC Article 11 states that in addition to health warning labels, information on the chemical constituents and emissions of the tobacco product must be included.[1] In addition, Article 11 Guidelines specify that "relevant qualitative statements" about the emissions of the product be displayed on the package.[29] Currently, most countries print the level of emissions on the side of packages in numerical form; however, the literature supports the use of non-numerical, descriptive labels to convey the information. Smokers and non-smokers may draw false inferences about the relative risk of cigarette brands based on emission numbers provided on the labels.[59] Accordingly, research shows that low numeracy (one's ability to comprehend, use, and attach meaning to numbers) impairs risk communication and perception.[60] Australia's current emission labels, which use descriptive statements instead of numbers, were rated easiest to understand when compared to numerical labels from the EU and Canada.[59] These findings are generally consistent with other research, showing that consumers interpret tar and nicotine numbers as indicators of risk, and believe that brands with lower yields are less harmful.[27,61,62]

Warning labels on other types of tobacco products: We know that knowledge about the harms of tobacco products other than cigarettes is lacking.[7] Many countries require warning labels on smokeless tobacco products,[63] but there is little known about their impact on perceptions and behavior. A 2011 review of health warning labels on tobacco products cited only two studies on the effectiveness of non-cigarette warnings:[3] one of the studies took place over 20 years ago, and found that small text warnings were unlikely to be effective among U.S. youth;[64] the second study, published in 2012, found that picture-based warnings on smokeless products affected Canadian young adults' perceptions and lowered intentions to use them.[65] Subsequent literature calls for further research and expansion of tobacco control laws in other non-Western countries where smokeless tobacco use is a large concern.[66,67] A 2009 toolkit for FCTC Article 11 implementation states that adaptations may be made for non-manufactured cigarettes.[30] Separate health warnings and display constituent information may be necessary for other products such as smokeless tobacco, but there is little evidence of best practices in designing or adapting labels for this type of packaging.

Left: Tobacco and lime smokeless product, Pakistan. Right: Betel nut, tobacco and lime smokeless product, India

Needs for further evidence

There is a lack of evidence on the following aspects of health warning labels on tobacco product packaging:

- The most effective approaches to message content (such as fear appeals, gain vs. loss-framing) for either reducing tobacco use, changing perceptions, increasing knowledge, or discouraging initiation
- The optimum rotation cycle and set size for preventing message fatigue
- The potential interaction between various design elements of warning labels, such as size and location
- The long-term behavioral outcomes after health warning label implementation, such as quit attempts and sustained quits over long periods of time
- The effect of new tobacco industry marketing tactics such as promotional inserts or "outserts" (attachments on the outside of the pack) on consumers, and how tobacco control efforts should respond to these tactics
- The effectiveness of descriptive statements compared to numerical information in conveying the levels of constituents and emissions in tobacco products
- The effectiveness of adapting existing health warning labels for cigarettes for other types of tobacco products such as smokeless tobacco or hookah, versus creating separate sets of warnings

Conclusion

The evidence on health warning labels on tobacco product packaging is extensive. To summarize, we know that warnings are effective when they use large pictures with accompanying text—the larger the label, the better. Periodically rotating labels in sets prevents message fatigue, though there is no standard on the optimum number in a set or rotation period. We have an overall understanding of the types of messages that are effective in warning labels, such as emotional appeals, but pre-testing is critical to ensure that sub-groups in a population are receiving these messages as intended. More research and policy are needed for warning labels on tobacco products other than cigarettes. Much of the evidence on longer-term impact of warning labels on smoking prevalence, quit attempts, and other smoking-related behaviors comes from research in Canada and Australia; this is because these countries were early adopters of picture-based warning labels on tobacco products. As more low and middle income countries implement similar policies, research findings in these areas will enrich the evidence on effective health warning labels.

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Appendices

Appendix A. Health warning labels about the dangers of tobacco - Highest achieving countries, 2012
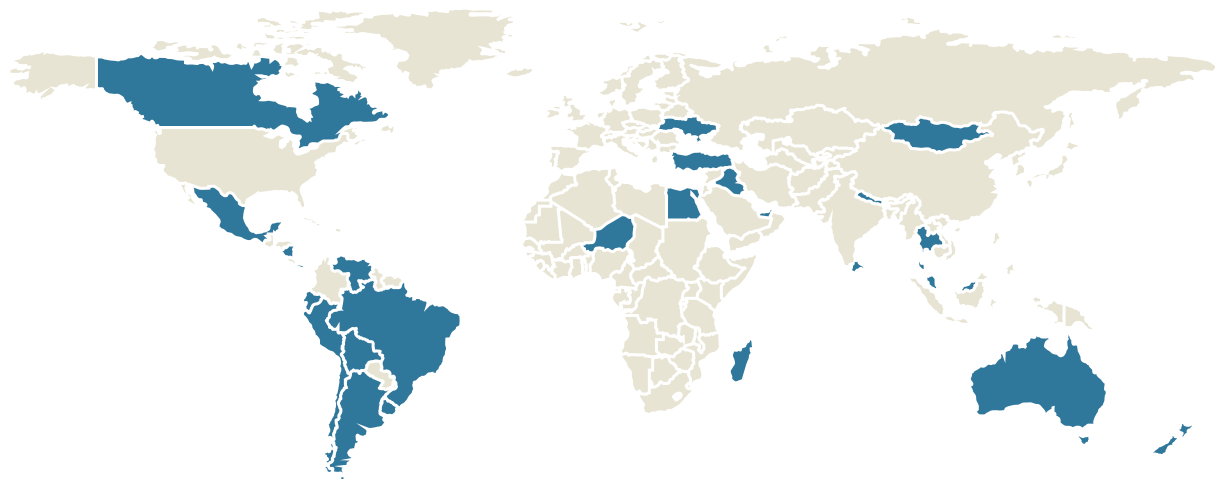
Highest achieving country: warning labels are sufficiently large, use pictures, and include all other appropriate characteristics per FCTC Article 11.

Countries with the highest levels of achievement: Argentina*, Australia, Boliva (Plurinational State of), Brazil, Brunei Darussalam, Canada*, Chile, Djibouti, Ecuador*, Egypt, El Salvador*, Iran (Islamic Republic of), Madagascar*, Malaysia, Mauritius, Mexico, Mongolia*, Nepal*, New Zealand, Niger*, Panama, Peru, Seychelles*, Singapore, Sri Lanka*, Thailand, Turkey*, Ukraine, Uruguay and Venezuela
*Country newly at the highest level since 31 December 2010

Source: World Health Organization. WHO Report on the Global Tobacco Epidemic, 2013: Enforcing bans on tobacco advertising, promotion and sponsorship. WHO Press, Geneva, Switzerland: 2013.

Appendix B. Profiled practices of warning labels on smoked tobacco products, by country

Country	Label size, type, and layout	Current rotation plan	Other information
Bangladesh	Text-based. 30% of the front and back, appearing at the top of the surface area.	Set of 6 warnings, rotated over 6 months.	No warning label requirements exist for smokeless tobacco products.
Brazil	Picture-based. 100% of either the front or back of the package, 100% of one of the package sides.	Set of 10, rotated every 5 months.	Similar require-ments exist for smokeless products. Descriptive labels on emissions and constituents appear on side panels.
China	Text-based. 30% of the pack, Chinese on the front and English on the back.	Set of 2, rotation period and cycle unknown.	Tobacco companies can design their own warning labels under specific government guide-lines.
Egypt	Picture-based. 50% of the front and back of packages.	Set of 4, rotated over 6 months.	Similar warning label requirements exist for smokeless tobacco products.
India	Picture-based. 40% of front. Text portion of the warning consists of "smoking kills" or "warning".	Set of 3, rotated over 2 years.	Similar require-ments exist for smokeless products, which have a set of 4 warnings over the same rotation period.

Country	Label size, type, and layout	Current rotation plan	Other information
Indonesia	Text-based. Approximately 19% of back. May be accompanied by pictures, but not required.	Set of 1, rotation not currently required.	No requirements exist for smokeless products.
Mexico	30% of the front, 100% of the back, and 100% of one side of the package. Picture-based on the front, text-based on the back and side.	Set of 4 warnings, rotated over 6 months.	Text warnings appear on the sides of smokeless products, with a similar rotation plan.
Pakistan	Picture-based. 40% of front, 40% of back-picture comprises 30%, text 10%. Must be placed on the top portion of surface.	Set of 1, rotated over 1 year.	No warning requirements exist for smokeless products.
Philippines	Text-based. 30% of front only.	Set of 4, rotated over 2 years.	Similar warning requirements exist for smokeless products. An Administrative Order for 60% coverage of the back of packages issued in 2010 has not yet taken effect.
Russia	Picture-based. 30% of front, 50% of back. Accompanying text on the front says "smoking kills".	Set of 13, rotated no more than once per year.	Smokeless products are required to have a text-based warning that covers 30% of the front.

Country	Label size, type, and layout	Current rotation plan	Other information
Thailand	55% of the front, 55% of the back of the package. Recently added warnings to cover 60% of both side panels. Pictures with text on both sides.	Set of 10 warnings; rotation period and cycle unknown.	Warnings exist for cigar packaging and smokeless products. Descriptive labels on emissions and constituents are required.
Turkey	65% of the front, 43% of the back of the package. Picture-based.	Set of 14 rotated over 14 months.	Text warnings are required for smokeless products, covering 30% of the front of the package.
Ukraine	50% of the front, 50% of the back of the package. Primarily text-based for main display areas, pictures accompany text in secondary display areas.	Set of 11 warnings, 5 year rotation period.	Similar warnings for smokeless products. The law counts the label border as part of the 50% warning area for all health warnings.
Vietnam	Picture-based (expected November 2013). 50% of front, 50% of back.	Set of 6, rotated over 2 years.	Requirements for warnings do not distinguish between smoked and smoke-less products; but details of the law only use smoked products as an example.

Sources:

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Appendix C. Key Resources
A list of selected print and web publications on the evidence, development, and implementation of effective health warning labels on tobacco products

Title	Description	Author(s) or Organization	Link
Tobacco Labelling and Packaging Toolkit – Guide to FCTC Article 11	A comprehensive guide that includes an evidence review, recommendations on designing, evaluating, and implementing health warning labels. (2009)	Hammond D	www.tobaccolabels.-ca/healt/re-sources/2009labelling-packaging-toolkitarticle-11guidepdf
Pre-testing and evaluating warning messages for tobacco products	A guide providing a basic protocol for developing and implementing health warning labels. (2011)	Hammond D, Reid J	www.tobaccolabels.-ca/healt/re-sources/2011pretest-ingevaluating-hwmguidepdf
Tobacco Labelling Resource Centre	A website with detailed information and images of warning labels and policy by country. (Updated 2013)	Hammond D	www.tobaccolabels.ca
Tobacco Control Laws	A website providing country labeling and packaging laws. (Updated 2013)	Campaign for Tobacco-Free Kids	www.tobaccocontrol-laws.org
Tobacco Warning Labels: Evidence of Effectiveness	A factsheet providing an overview of the evidence on health warning label effectiveness from a global perspective. (2013)	Campaign for Tobacco-Free Kids	www.tobaccofreek-ids.org/research/fact-sheets/pdf/0325.pdf

Title	Description	Author(s) or Organization	Link
Cigarette Package Health Warnings: International Status Report (3rd edition)	A general report on cigarette warning labels. Includes images, graphs, and rankings of different countries' implementation status. (2012)	Canadian Cancer Society	http://global.tobaccofreekids.org/files/pdfs/en/WL_status_report_en.pdf
Health warning messages on tobacco products: a review	A scholarly review of messages that appear on health warning labels from various countries. (2011)	Hammond D	http://tobaccocontrol.bmj.com/content/early/2011/05/23/tc.2010.037630.abstract
Enhancing the effectiveness of tobacco package warning labels: a social psychological perspective	A scholarly paper on the psychosocial theory or principle behind messages used in health warning labels. (2002)	Strahan EJ, White K, Fong GT, Fabrigar LR, Zanna MP, Cameron R	www.ncbi.nlm.nih.gov/pmc/articles/PMC1759023/pdf/v011p00183.pdf
The impact of cigarette pack shape, size and opening: evidence from tobacco company documents	A scholarly paper examining tobacco industry documents to show the importance of the package as a promotional medium for tobacco products.(2013)	Kotnowski K, Hammond D	www.ncbi.nlm.nih.gov/pubmed/23600674

Appendix D. Tobacco package warning labels from selected countries, by package panel
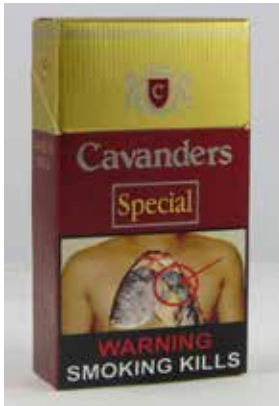

Bangladesh, front

Brazil, front

Brazil, back

China, front (photo credit www. tobaccolabels.ca)

India, front

Mexico, front

Mexico, back

Philippines, front

Russia, front

Russia, back

Turkey, front

Turkey, back

Ukraine, front

Ukraine, back