Standardised Packaging for Tobacco Products in New Zealand

EVIDENCE OF POLICY IMPACT FROM THE INTERNATIONAL TOBACCO CONTROL POLICY EVALUATION PROJECT

FEBRUARY 2020
In March 2018, New Zealand introduced legislation requiring standardised packaging for tobacco products as an important measure to help make the country a smoke-free nation by 2025. However, there has been no evaluation of the legislation reported to date.

This report summarizes evidence from the International Tobacco Control (ITC) Policy Evaluation Project on the effectiveness of standardised packaging in New Zealand, and is the first published evidence of the impact of this legislation. Since 2002, the ITC Project has conducted longitudinal cohort surveys in 29 countries to evaluate the impact of key tobacco control policies of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC). This report presents findings on the impact of standardised packaging along with enhanced pictorial health warnings in New Zealand based on data collected from smokers before and shortly after the legislation was implemented. Data from smokers in New Zealand is presented in context with data from smokers in up to 14 other ITC Project countries, including Australia, where standardised packaging was implemented in 2012. The report also considers the possible impact of standardised packaging on health inequities caused by smoking, by comparing the impact of standardised packaging on Māori (the indigenous population of New Zealand) and non-Māori smokers.

The findings suggest that standardised packaging in New Zealand has achieved key policy objectives to reduce the appeal of tobacco products, and increase the noticeability of pictorial health warnings on cigarette packs. After the law was implemented:

- 75% of smokers said they did not like the look of their cigarette pack, an increase from 50% before the law.
- 48% of smokers noticed health warnings on cigarette packs first vs. other aspects of the pack, doubling from 24% before the law.
- 58% of smokers noticed health warnings on cigarette packs often, compared to 45% before the law.

These results show the positive impact of standardised packaging, and add to the global evidence base on the effectiveness of this tobacco control policy measure, including previous ITC Project evidence from Australia.[1]

What is standardised packaging?

Standardised packaging, also known as plain packaging, refers to the removal of all branding (imagery and text) from tobacco packages, and the standardisation of all other packaging elements, such as colours, font, shape, and size. Standardised packaging aligns well with Article 11 and Article 13 Guidelines of the WHO FCTC which recommend that countries introduce comprehensive restrictions on tobacco advertising, promotion and sponsorship, and that packaging should include large health warnings and should not promote a tobacco product in any false or misleading manner. Standardised packaging restricts the tobacco industry's ability to use packaging elements to appeal to and mislead consumers, and represents a significant intervention to remove one of the last key channels for tobacco marketing and promotion.

There has been rapid global progress in standardised packaging. As of January 2020, 12 countries have fully implemented standardised packaging: Australia (2012); France and the United Kingdom (2017); New Zealand, Norway, and Ireland (2018); Uruguay, Saudi Arabia, and Thailand (2019); and Turkey, Israel, and Slovenia (Jan 2020). By January 2022, Canada, Belgium, Hungary, and Singapore will have fully implemented standardised packaging.[2]
Standardised packaging in New Zealand

In October 2010, the Māori Affairs Select Committee launched a landmark inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori. In their report to Parliament, the Committee recommended a suite of tobacco control measures to reduce smoking prevalence and tobacco availability, including that the tobacco industry be required to sell tobacco products exclusively in standardised packaging, with the goal of making New Zealand a smoke-free nation by 2025.[3] The Government adopted the Smokefree 2025 goal for New Zealand in March 2011.

Standardised packaging was introduced under the Smoke-free Environments (Tobacco Standardised Packaging) Amendment Act 2016,[4] and is one of the few legislative measures that have been implemented to help achieve the country’s Smokefree 2025 goal. The objectives of this measure, as set out in the legislation, were to:

(i) reduce the appeal of smoking and tobacco products, particularly for young people;
(ii) further reduce any social and cultural acceptance and approval of smoking and tobacco products;
(iii) make warning messages and images more noticeable and effective; and
(iv) reduce the likelihood of consumers acquiring false perceptions about the harmful effects of tobacco products.

Regulations introduced by the Act came into force on March 14, 2018, with a 12-week transitional period for tobacco retailers so that all tobacco products had to be sold in standardised packs by June 6, 2018. The regulations also required new, larger pictorial health warnings (PHWs) covering 75% of the front and 100% of the back of packs (an increase in size from 30% front and 90% back), and more prominent display of the Quitline number (see Figure 1). The New Zealand regulations were the first in the world to specify cigarette stick sizes in both length and diameter, thereby effectively banning slim cigarettes, which are well-known to be used by tobacco companies to appeal to women. The regulations also limited cigarette pack sizes to 20 or 25 cigarettes and restricted the size of loose tobacco packages to 30g or 50g.

Figure 1. Standardised packs with new health warnings in New Zealand

Figure 2 summarizes key policy milestones on tobacco product packaging and labelling in New Zealand from the introduction of text-only warnings in 1974 to the full implementation of the standardised packaging law in June 2018.

Figure 2. Brief timeline to standardised packaging in New Zealand [5,6]

1974: Text-only health warnings first introduced on tobacco product packaging
1987:

February 2008: Pictorial health warnings (30% front and 90% back) and display of Quitline number on cigarette packs

2008:

September 2016: Standardised packaging legislation adopted by Parliament

2016:

6 June 2018: Standardised packaging required at the retail level

14 March 2018: Standardised packaging implemented at manufacturer level, new larger health warnings (75% of front and 100% of back of packs), and more prominent display of Quitline number
Methods of ITC Project Standardised Packaging Impact Evaluation

The data in this report are from ITC Project surveys conducted by telephone (Computer Assisted Telephone Interview (CATI)) in New Zealand before and after the implementation of standardised packaging. The Wave 1 survey was conducted among 910 smokers (of whom 326 were Māori) from August 2016 to April 2017. The Wave 2 survey was conducted among 726 smokers (308 Māori) from June to December 2018.¹

This report presents comparisons of data from smokers in New Zealand with data from smokers in three other ITC countries (Australia, Canada, and the United States) where similar surveys were conducted over the same time period, and which vary in the status of their packaging laws (see Table 1). All results were adjusted for demographic variables (sex and age group), smoking status (daily vs. non-daily), and time-in-sample (the number of times a respondent has participated in the survey). ITC surveys use common measures across countries to evaluate the impact of standardised packaging (see Table 2).

Table 1: Status of packaging laws by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Status of standardised packaging legislation</th>
<th>Status of PHWs on cigarette packs at time of New Zealand 2016-17 and 2018 Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td>Full implementation in June 2018</td>
<td>2016-17: PHWs on 30% front/90% back 2018: PHWs on 75% front/100% back</td>
</tr>
<tr>
<td>Australia</td>
<td>Full implementation in December 2012</td>
<td>PHWs on 75% front/90% back</td>
</tr>
<tr>
<td>Canada</td>
<td>Full implementation in February 2020</td>
<td>PHWs on 75% front/75% back</td>
</tr>
<tr>
<td>United States</td>
<td>Has not yet been proposed</td>
<td>Text only on sides of packs</td>
</tr>
</tbody>
</table>

Table 2: ITC survey measures of standardised packaging policy impact

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Measures</th>
<th>Survey Question(s)</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appeal of Tobacco Products</td>
<td>Appeal of packs</td>
<td>(Among those who have a regular brand of cigarettes): To what extent, if at all, do you like the look of your cigarette pack or tobacco pouch?</td>
<td>Scale of 1 to 5, from “not at all” to “very much”</td>
</tr>
<tr>
<td></td>
<td>Brand Identity</td>
<td>Do you have a usual or preferred brand and variety of cigarettes?</td>
<td>Yes vs. no</td>
</tr>
<tr>
<td></td>
<td>Perceived quality of tobacco products</td>
<td>How would you describe the quality of your cigarettes/tobacco?</td>
<td>Scale of 1 to 4, from “very high quality” to “low quality”</td>
</tr>
<tr>
<td>Health Warning Impact</td>
<td>Salience of health warnings over branding elements</td>
<td>When you look at a cigarette pack, what do you usually notice first – the warning labels, or other aspects of the pack such as branding?</td>
<td>Warning labels/other aspects of the pack such as branding/neither</td>
</tr>
<tr>
<td></td>
<td>Frequency of noticing health warnings</td>
<td>In the last 30 days, how often, if at all, have you noticed the warning labels on cigarette packages?</td>
<td>Scale of 1 to 5, from “never” to “very often”</td>
</tr>
<tr>
<td></td>
<td>Awareness of the Quitline number on packs</td>
<td>On the outside of tobacco packets there is a 0800 telephone number. What organisation or service do you get if you call it?</td>
<td>Quitline or helpline or quitting support vs. other responses</td>
</tr>
<tr>
<td></td>
<td>Support for standardised packaging</td>
<td>Tobacco companies should be required to sell cigarettes in plain packages -- that is, in packs or pouches without any brand names or fancy designs. Do you...</td>
<td>Scale of 1 to 5, from “strongly agree” to “strongly disagree”</td>
</tr>
</tbody>
</table>

¹ All smokers were included in the Wave 2 analyses for New Zealand, regardless of whether or not they reported currently using a standardised pack/pouch at Wave 2 (n = 29).

ii. The 2018 results for New Zealand presented in the cross-country figures may vary slightly from the 2018 results in the longitudinal figures due to differences in adjustment methods.
Has Standardised Packaging Reduced the Appeal of Tobacco Products?

One of the anticipated impacts of standardised packaging is that it will make tobacco products less appealing to current or potential smokers, and also weaken the strength of brand identity. These outcomes were measured in the ITC surveys by assessing the degree to which smokers liked the look of their cigarette pack or tobacco pouch; whether they had a preferred brand and variety of cigarettes; and how they perceived the quality of their cigarettes or tobacco.

The ITC results show that standardised packaging was effective in reducing the appeal of cigarettes and tobacco products, and reducing the strength of brand identity among New Zealand smokers. These important findings in New Zealand are consistent with evidence from other countries.

Standardised packaging decreased the appeal of cigarette packages

Standardised packaging greatly reduced pack appeal. After the implementation of standardised packaging laws in Australia and New Zealand, there was a large increase in the percentage of smokers who reported not liking the look of their pack. The percentage of smokers in New Zealand who said they do not like the look of their pack “at all” increased significantly from 50% before the law to 75% after the law (see Figure 3). In contrast, the percentage of smokers who reported not liking the look of their pack in Canada and the United States (where standardised packaging was not in place) was much lower and decreased over the same period.

Pack appeal has also remained low in Australia after the implementation of standardised packaging in 2012, with no change in the percentage of smokers who said they do not like the look of their pack “at all” from 2013 to 2018 (73%). This suggests that the impact of standardised packaging on reducing pack appeal is sustained in the long term.

Figure 3. Percentage of smokers who don’t like the look of their pack “at all”, among those who have a regular brand of cigarettes (2011-12 to 2018), by ITC country and year

Note: results are aligned as close as possible to the years the survey was conducted in each country, with a couple of minor differences: 1) the survey years for the data point of 17% in the US were from 2013-15; 2) the New Zealand Wave 1 survey was done in 2016-17, but the corresponding data points for the other three countries were from 2011.

Standardised packaging reduced the appeal of cigarettes and tobacco products, and reduced the strength of brand identity among New Zealand smokers. These important findings in New Zealand are consistent with evidence from other countries.
Standardised packaging decreased smokers’ brand identity

Standardised packaging led to a decrease in the percentage of smokers who reported having a preferred brand and variety of cigarettes. While most smokers (over 80%) in New Zealand, Australia, Canada, and the United States reported having a preferred brand, the percentage of smokers with a preferred brand in 2018 was lowest among New Zealand smokers, and significantly decreased after standardised packaging was implemented (from 88% before the law to 82% after the law) (see Figure 4). This decrease in brand identification was greater in New Zealand compared to Australia after the implementation of their standardised packaging law (from 94% before the law to 93% after the law).

Standardised packaging decreased smokers’ perceived quality of cigarettes

Standardised packaging also led to a decrease in smokers’ perceptions of the quality of their cigarettes. The percentage of smokers in New Zealand who said their cigarettes/tobacco were of “low” quality increased after the implementation of standardised packaging (from 16% before the law to 22% after the law), and was the highest of the four countries in 2018 (see Figure 5).

The increase was greater in New Zealand than in Australia after that country’s implementation of standardised packaging in 2012 (from 5% to 7%). The perception among smokers that their cigarettes/tobacco were of low quality was also substantially higher in New Zealand than in Canada and the United States, which did not have standardised packs.
Has Standardised Packaging Increased the Impact of Health Warnings?

Standardised packaging aims to enhance the effectiveness of health warnings on tobacco packages by making these more salient. This was assessed in the ITC surveys by measuring the degree and frequency with which smokers noticed health warnings, and whether the proportion of smokers correctly identifying a Quitline number included on New Zealand packs increased after implementation of the new packaging legislation. ITC evidence from New Zealand and Australia shows that health warnings became more salient after the implementation of standardised packaging legislation in each country.

Standardised packaging increased the noticeability of health warnings vs. other pack elements

After standardised packaging was implemented in New Zealand along with a new set of larger pictorial health warnings, smokers were twice as likely to report that the first thing they noticed when looking at a cigarette pack was the warning labels (48% after the law, compared to 24% before the law) (see Figure 6). Among the four countries, the percentage of smokers who noticed warning labels first was highest in New Zealand in 2018. Similarly, after the introduction of standardised packaging with larger health warnings in Australia, there was an even greater increase in the percentage of smokers who reported noticing health warnings first before other pack attributes (from 29% to 62%). In contrast, the percentage of smokers who noticed health warnings first is lowest in the United States (8% in 2018), where warnings are text-only.

The broader ITC cross-country comparison of 11 high-income countries shows that after standardised packaging was introduced, New Zealand had the highest percentage of smokers (46%) who noticed the health warnings first (see Figure 7). The percentage of smokers who noticed health warnings first was also high in Australia (40%) and England (45%) — two other countries where standardised packaging was in place at the time of the last ITC survey.

The consistency of this effect across three countries demonstrates the strong impact of standardised packaging in drawing smokers’ attention to health warnings across different countries and cultures.
Standardised packaging increased the frequency of noticing health warnings

In addition to noticing health warnings before other aspects of the pack, smokers in New Zealand were also more likely to report noticing the health warnings on packs “often” or “very often” in the last month after implementation of the standardised packaging legislation (45% before the law vs. 58% after the law). The percentage of smokers who noticed health warnings “often/very often” was much higher in New Zealand than in the other three countries in 2018 – especially compared to the United States (58% vs. 21%), which still has text-only warnings (see Figure 8).

The increase in noticing health warnings was even greater in New Zealand than in Australia after the implementation of that country’s standardised packaging legislation in 2012 (from 45% before the law to 49% after the law).

Standardised packaging increased the noticeability of the Quitline number on packs

In addition to the new, larger health warnings and standardised packaging, the legislation in New Zealand also introduced a new design for the display of the national Quitline number, which became more prominent. At each survey wave, smokers in New Zealand were asked what organization or service they would reach if they called the 0800 telephone number displayed on the outside of packs. The percentage of smokers who correctly identified the Quitline number increased from 64% before the law to 68% after the law.
Did Smokers’ Support for Standardised Packaging Change in New Zealand?

Support for standardised packaging significantly increased among New Zealand smokers after implementation of standardised packaging. The percentage of smokers who “agreed” or “strongly agreed” that tobacco companies should be required to sell cigarettes in standardised packages increased from 30% before the law to 42% after the law, and was higher than the other three countries (Canada, Australia and the United States) in 2018 (see Figure 9).

The increase in support in New Zealand was similar to the increase in Australia after the implementation of their standardised packaging law in 2012 (from 24% before the law to 43% after the law). In contrast, support remains lowest among smokers in the United States – where there are no plans to introduce standardised packaging.

The broader ITC cross-country comparison of 15 high-income countries shows that New Zealand has the second-highest percentage of smokers who support standardised packaging. Among the countries that had already implemented standardised packaging legislation at the time of the survey, support was highest in New Zealand, where the law had most recently been introduced (45%), compared to England (39%) and Australia (32%) (see Figure 10).

Figure 9. Percentage of smokers who “agree” or “strongly agree” that tobacco companies should be required to sell cigarettes in plain/standardised packages (2010-11 to 2018), by ITC country and year

Figure 10. Percentage of smokers who “agree” or “strongly agree” that tobacco companies should be required to sell cigarettes in plain/standardised packages, by ITC country at latest survey wave
Impact of Standardised Packaging on Māori and Non-Māori Smokers

Current smoking prevalence rates in New Zealand have decreased steadily from 20% in 2006-07 to 14% in 2018-19. Smoking among Māori adults has also declined over this time period; however, smoking prevalence in this group is still substantially higher than the general population at 34% in 2018-19, down from 42% in 2006-07.[7] As a result, Māori have significantly higher rates of smoking-related diseases and mortality compared to non-Māori.[8] The Smokefree 2025 goal includes interim targets to reduce smoking among Māori, and equitable achievement of the Smokefree goal for all peoples is considered essential in New Zealand. It is therefore important to investigate the impact of the standardised packaging law on Māori smokers.

The ITC New Zealand data presented in this report shows that standardised packaging has reduced the appeal of tobacco products, increased the salience and effectiveness of health warnings, and increased support for standardised packaging among all smokers in New Zealand. There were few differences in policy impact between Māori and non-Māori smokers.

**Appeal of tobacco products:** After implementation, there were decreases in measures of appeal among both groups, with some evidence of minor differences in impact. For example, the percentage of smokers who reported having a preferred brand of cigarettes decreased among both groups after the law, but the decrease was only significant among Māori smokers (from 83% to 79%; vs. 90% to 82% among non-Māori). Both groups were also more likely to perceive their cigarettes to be low quality after the law, but the increase was only significant among non-Māori (from 14% to 21%; vs. 12% to 20% among Māori). However, there were no differences in liking the look of one’s pack, with a similar increase in the percentage of both Māori (from 56% to 75%) and non-Māori (from 48% to 77%) smokers who did not like the look of their pack after the law.

**Impact of health warnings:** While Māori were more likely to notice the health warnings on packs before the law than non-Māori (56% vs. 43%), there was no significant difference between the two groups after the law. Both groups were significantly more likely to notice health warnings “often/very often” in the last month after standardised packaging (increase from 56% to 67% among Māori; and from 43% to 59% among non-Māori). Similarly, both groups were significantly more likely to notice health warnings first before other aspects of the pack after standardised packaging (increase from 25% to 51% among Māori; and from 25% to 47% among non-Māori). The percentage of Māori and non-Māori smokers who correctly identified the Quitline number increased slightly after the law, but the increase was not significant for either group (from 59% to 64% among Māori; from 66% to 70% among non-Māori).

**Support for standardised packaging:** There were no significant differences in support for standardised packaging between the two groups. After implementation of standardised packaging, support for the policy increased significantly among both Māori (from 35% to 46%) and non-Māori (from 28% to 46%) smokers.

Overall, there were no significant differences between Māori and non-Māori smokers in the pre-post policy change on any of the measures, suggesting that standardised packaging had a similar impact on both groups.
Summary of Findings

- Evidence from ITC surveys in New Zealand shows the positive impact of standardised packaging within the first six months of implementation. After standardised packaging and enhanced health warnings were introduced in June 2018, the appeal of tobacco packs decreased, health warnings on packs became much more noticeable, and smokers’ support for standardised packs increased. There was also some evidence for a decrease in brand identification, a decrease in perceived quality of cigarettes, and an increase in noticing the Quitline number on packs.

- Standardised packaging was effective among both Māori and non-Māori smokers, with few differences in policy impact.

- These findings add to existing evidence from Australia and other countries demonstrating the effectiveness of standardised packaging. Results from ITC surveys show that the impact of standardised packaging on key measures of pack appeal, health warning impact, and support for the intervention appears to be just as great or greater in New Zealand than in Australia after the implementation of that country’s standardised packaging law in 2012.

- The sustained impact seen in Australia compared to other high-income countries such as Canada and United States (where standardised packaging was not implemented over the same period) suggests that standardised packaging will continue to be effective in New Zealand as well. Further studies are needed to evaluate the long-term impact of standardised packaging in New Zealand.

Conclusion

There is strong evidence from the ITC Project in New Zealand that demonstrates the effectiveness of standardised packaging in reducing the appeal of tobacco products and increasing the salience of the pictorial health warnings. These findings are in alignment with the objectives of the measure as set out in the New Zealand legislation. These results are also consistent with findings from other countries that have implemented this important measure, and should encourage more countries to implement standardised packaging. The global evidence base on the impact of this policy will continue to expand as standardised packaging laws are implemented in more countries, and as more studies evaluating the longer-term effectiveness of such laws become available. The ITC Project will continue to evaluate the impact of the 2018 standardised packaging law in New Zealand; it will evaluate the impact of Canada’s law after its full implementation in February 2020; and evaluations are also being planned in several other ITC countries where standardised packaging is under formal consideration.

REFERENCES


Acknowledgements:

This report was prepared through a collaboration between the ITC New Zealand team at the University of Otago: Richard Edwards, Maddie White, James Stanley, Janet Hoek, and Andrew Waa, and the ITC Project team at the University of Waterloo: Janet Chung-Hall, Genevieve Sansone, Pete Driezen, Gang Meng, Lorraine Craig, and Geoffrey T. Fong. Graphic design and layout was provided by Sonya Lyon of Sentrik Graphic Solutions Inc. Funding for graphic design was provided by a Canadian Institutes of Health Research Foundation Grant (FDN-148477) and a Senior Investigator Award from the Ontario Institute for Cancer Research to Geoffrey T. Fong.

Suggested citation:

This report is available at the following websites:
International Tobacco Control (ITC) Policy Evaluation Project: www.itcproject.org

University of Otago, Wellington ITC New Zealand Project:
https://www.otago.ac.nz/wellington/departments/publichealth/research/otago682211.html

For further information, please contact:
Professor Richard Edwards
Co-Director: ASPIRE 2025
Department of Public Health
University of Otago, Wellington
Richard.edwards@otago.ac.nz