



## Plain tobacco packaging: progress, challenges, learning and opportunities

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## **Plain tobacco packaging: Progress, challenges, learning and opportunities**

### **ABSTRACT**

The aim of this paper is to overview progress made with respect to the adoption of plain (or standardised) packaging, key challenges faced, evaluative evidence, and opportunities for extending this policy. It has been a decade since Australia became the first country to require tobacco products to be sold in plain packaging; following slow initial uptake, 16 countries have now fully implemented this policy. Since 2020, plain packaging laws have become more comprehensive in some countries, expanding coverage beyond traditional tobacco products to include heated tobacco, tobacco accessories (rolling papers) and other nicotine-containing products (e-cigarettes). Laws have also become more innovative: some now ban non-biodegradable filters, include provision for a periodic change of the pack colour, or require both plain packaging and health-promoting pack inserts. The tobacco industry has and will continue to use multi-jurisdictional strategies to oppose this policy. Evaluations suggest that plain packaging has improved health outcomes and has not burdened retailers, although research is limited to early policy adopters and important gaps in the literature remain. While the power of packaging as a sales tool has diminished in markets with plain packaging, tobacco companies have exploited loopholes to continue to promote their products and have increasingly focused on filter innovations. Opportunities exist for governments to strengthen plain packaging laws.

## INTRODUCTION

It has been a decade since Australia became the first country to require tobacco products to be sold in plain (or standardised) packaging, and we reflect on progress, key challenges, lessons learned, and future opportunities.

### **Progress: A slow burner**

The marketing literature, academic research, and tobacco industry internal documents and external communications highlight the promotional power of the packaging.<sup>1-3</sup> While packaging has been a cornerstone of tobacco marketing since the 19<sup>th</sup> century, governments were slow to appreciate its value. Warnings were first displayed on cigarette packs in the 1960s and 1970s, but these typically vague text messages in small print and relegated to the side of the pack likely benefited tobacco companies (allowing a defence against failing to warn of the potential harms) more than consumers.<sup>4,5</sup> By the 1980s and 1990s larger, rotating text warnings on the main display areas of cigarette packs were common and warning content had become causal (e.g. “Smoking kills”) rather than cautionary (e.g. “Government warning: Smoking may damage your health”), and some countries had banned specific misleading descriptors (e.g. “light” and “mild”).<sup>6</sup> In addition, the idea of ‘plain’ brown packs was mooted as a possible regulatory measure by the New Zealand Department of Health’s Toxic Substances Board.<sup>7</sup>

This century has seen a shift in the balance of power between governments and the tobacco industry for control of the pack. Pictorial warnings are the norm, and 16 countries, from all regions except Africa, have fully-implemented plain packaging: Australia (December 2012), France (January 2017), UK (May 2017), New Zealand (June 2018), Norway (July 2018), Ireland (September 2018), Thailand, Uruguay (December 2018), Saudi Arabia, Slovenia, Turkey, Israel (January 2020), Canada (February 2020), Singapore (July

2020), Belgium (January 2021), Netherlands (October 2021),<sup>8</sup> see Figure 1. If adoption follows a similar timeframe to that of pictorial warnings (introduced in >120 countries within 20 years of first implementation),<sup>9</sup> then in a decade plain packaging will be the global standard. Greater policy interest has gone hand-in-hand with greater academic interest.

**Figure 1 here**

### *Legislative similarities and differences*

We do not intend to overview legislation in countries with plain packaging but it is instructive to outline key similarities and differences as this could inform future policy development. The first five countries to introduce plain packaging require the pack exterior to use a drab brown colour (Pantone 448C) and the interior to use the same colour or white (UK, France, Norway) or only white (Australia, New Zealand). Brand and variant names have to appear in a standardised format, promotional pack inserts are banned, and cigarettes are required to have a white or imitation cork filter with white cigarette paper and cannot include markings other than a brand variant name or alphanumeric code.<sup>10</sup> Countries subsequently introducing plain packaging have the same requirements, with these exceptions: in Israel the colour of the pack interior has not been specified<sup>11</sup> and there are no requirements on the appearance of the cigarette stick; in Uruguay no markings are permitted on the cigarette stick; and in Singapore the letters ‘SDPC’ (Singapore Duty-Paid Cigarette) are also mandatory on each cigarette stick, a requirement introduced pre-plain packaging to help identify illicit cigarettes (see Figure 2).

**Figure 2 here**

The first five countries to introduce plain packaging differed in their transition period (ranging from 12 weeks to 12 months), products covered, pack dimensions, structure and size, and warning design.<sup>10</sup> These variations persist (see Figure 1). For instance, there are differences in the products required to be sold in plain packs. In all countries it is mandatory for cigarettes and rolling tobacco; while Turkey banned rolling tobacco post-plain packaging (July 2020), stores continue to sell both plain and fully-branded packs. Plain packaging also covers snus in Norway, waterpipe tobacco in Belgium, and other legally available tobacco products in Australia, New Zealand, Ireland, Uruguay, Saudi Arabia, Turkey, Canada, Singapore and the Netherlands (Figure 3). In Canada and Israel it includes heated tobacco products (HTPs); in Uruguay a ban on these products was overturned in March 2021, but the government has yet to decide whether they should be sold in plain packs. In Canada, Israel and Belgium rolling tobacco papers must also be sold in plain packs (although Belgium only requires plain packaging for rolling papers that feature a tobacco brand name), and in Israel packs of rolling papers are additionally required to display a warning (Figure 3). This increased regulation of rolling tobacco may be prescient given growth in sales of rolling tobacco<sup>12</sup> and ancillary products, which is predicted to continue this decade,<sup>13</sup> and because the panoply of rolling tobacco papers available can increase appeal and allow users to customise their smoking experience.<sup>14</sup>

### **Figure 3 here**

In Israel, the Netherlands (from January 2022), and the Canadian province of British Columbia, plain packaging is required for e-cigarettes. Approximately 18 months post-implementation non-compliance remains problematic for e-liquid in Israel. There may be several possible reasons for this: 1) Israel was the first country to require e-cigarette liquids to

come in plain packs; 2) it took the Ministry of Health longer to develop rules for the packaging of e-cigarette liquids than for other products because of technical issues associated with the shape and size of bottles; and 3) there is a very large number of manufacturers of e-cigarette liquids, none of whom previously had to comply with plain packaging laws in other countries (see Figure 4). While some countries embrace e-cigarettes as harm reduction tools, the packaging for e-cigarettes is often eye-catching and intended to create interest and thus fulfils the same promotional role as the packaging for tobacco products.<sup>15-17</sup> Fully-branded packaging has been found to increase the appeal of e-cigarettes among young people.<sup>18</sup> Plain packaging, in contrast, has been found to decrease interest in trial of e-cigarettes.<sup>18</sup>

Plain pack type restrictions have also been implemented for cannabis products in Canada and Uruguay, where non-medical cannabis has been legalised. In Canada, brand imagery and logos are restricted to a small space (no larger than the cannabis symbol required on packs), and packs can only display one ‘background’ colour selected by the manufacturer.<sup>19</sup> This type of packaging has been found to reduce appeal among younger consumers.<sup>20,21</sup> In Uruguay, cannabis can only be sold in blue and white packs which display warnings, information about the law, and recommendations for use (Figure 5). Although these restrictions are less comprehensive than they are for plain tobacco packaging, the requirement for standardised pack formats for cannabis products suggests that the appearance of plain packaging could vary by product category, depending on the public health impact.

**Figure 4 here**

**Figure 5 here**

**Challenges: Overcoming the inevitable**

The tobacco industry has vehemently opposed plain packaging,<sup>22,23</sup> using multi-jurisdictional strategies including lobbying, organised opposition and front groups, public relations and media campaigns, and litigation.<sup>8,24,25</sup> Each country will face its own obstacles, but strong political will, and the coalescing of civil society, advocates, public health and the medical profession can overcome these barriers.<sup>26,27</sup> Furthermore, legal decisions in national and regional courts, and by World Trade Organisation panels established to arbitrate on disputes under bilateral and international trade agreements, have favoured plain packaging. When combined with increasing supportive formative and evaluative evidence from diverse jurisdictions, countries considering implementing plain packaging should have confidence this policy will be effective and withstand legal challenges.<sup>27</sup>

Tobacco companies are capable of adapting swiftly to regulatory change.<sup>28,29</sup> The history of packaging is one of adaptation,<sup>30</sup> and in markets with plain packaging tobacco industry journals highlight opportunities for continued differentiation, including through pack size, flavours, distinctive blends, cigarette length, novel filters, unique filter end segments, and product innovations.<sup>31-34</sup> We discuss these responses in the following section, but unless governments develop comprehensive plain packaging laws that leave no gaps or opportunities for alternative interpretations, or introduce separate legislation that addresses product regulation, the industry will exploit these.<sup>11</sup>

### **Learning: The importance of evaluation**

Research has explored consumer, tobacco industry and retailer response to plain packaging in countries with this policy. Consumer research shows that plain packaging has increased warning salience and reduced the appeal packaging and smoking have, with some (less consistent) evidence that plain packaging has helped reduce misperceptions of harm.<sup>35</sup> As most research is from Australia, the UK and France, where plain packaging and large new



warnings were introduced simultaneously, it is important to understand the role of each with respect to changes observed. Two longitudinal surveys suggest a benefit of introducing both stronger pictorial warnings and plain packaging at the same time. Aleyan et al<sup>36</sup> compared how smokers in seven European countries responded to the inclusion of new, large pictorial warnings on packs, required in each of these countries as part of the Tobacco Products Directive,<sup>37</sup> with one of these countries (England) also requiring plain packaging. The decrease in appeal and increase in warning salience was greater in England than in the other six countries.<sup>38</sup> Moodie et al<sup>39</sup> instead explored the outcomes when two countries (Norway and the UK) with very similar warnings (text warnings on pack front, pictorials on pack reverse) introduced plain packaging, but only one of these countries (the UK) also introduced new, large pictorial warnings. Post-plain packaging, in the UK warning salience and effectiveness increased while in Norway it decreased or remained unchanged.<sup>39</sup> Longitudinal research in Canada, where large pictorial warnings on packs were unchanged post-plain packaging, also points to the importance of revising warnings and removing full branding simultaneously given that while appeal decreased there was no difference in warning salience.<sup>40</sup> In terms of behavioural changes, some studies suggest that plain packs may help deter youth from starting or continuing to smoke and increase cessation-related behaviours among smokers,<sup>38,41-43</sup> although further research exploring uptake and cessation, and research on relapse prevention, is needed.

For retailers, research suggests that disruption has been minimal,<sup>44</sup> compliance high,<sup>45,46</sup> and any delays in pack retrieval short-lived;<sup>47-49</sup> where retailers mentioned being slower to retrieve packs that customers requested, they explained that this was primarily due to confusion resulting from brand variant names being revised by tobacco companies.<sup>44</sup> The potential shift in tobacco sales from small stores to supermarkets that opponents of plain packaging predicted, as a result of slower service, was not observed.<sup>50</sup>

Tobacco companies stalled the introduction of plain packs in countries with long (12 months) sell-through periods,<sup>10,45,51</sup> increased prices,<sup>52-59</sup> and continued to promote their products.<sup>60-63</sup> Health Canada noted that while they could have given tobacco companies longer than six months to comply with plain packaging, doing so would be contrary to their goal of protecting citizens.<sup>64</sup> As tobacco companies in Australia, New Zealand and Singapore had introduced plain packaging by the end of even shorter sell-through periods (three months or fewer), then long sell-through periods are unwarranted. The above-inflation cost increases in tobacco products observed post-plain packaging, contrary to tobacco company claims that prices would fall, led consumers to down-trade to cheaper cigarette brands or rolling tobacco.<sup>54,55</sup> This highlights the importance of price but also the value of the ‘trade dress’, because with full-branding removed consumers are less discerning about which brand, among a sea of similarly packaged brands, they choose, or indeed which product.

Tobacco companies are adept at responding to marketing regulations, and in response to plain packaging they introduced new pack sizes (e.g. 30 and 40 packs are increasingly used in France, and offer a cheaper cost-per-cigarette), new pack formats (e.g. longer packs), and reportedly used scented tear-tape in Singapore post-plain packaging despite regulations prohibiting this practice.<sup>63</sup> They employed more descriptive brand names on packs post-plain packaging, such as ‘J-series Lucky Strike’ in Singapore, or revised variant names by including colour descriptors or evocative terms;<sup>51,60-63,65</sup> modified variant names can communicate product information and imagery previously imparted by pack design<sup>65</sup> and influence appeal and harm ratings.<sup>66-68</sup> Other pack changes included redesign of the interior, such as resealable or glossy inner foil.<sup>61,63</sup> However, the focus has been on cigarette design, and particularly the filter. Increased filter innovation, while a global trend, is key for tobacco companies in markets with plain packs given the power of the packaging has significantly diminished. In the run-up to plain packaging, and post-implementation, tobacco companies

introduced recessed filters, longer filters, firm filters, granular filters, and new capsule filters and flavours.<sup>51,60-63,69</sup> In Australia, for instance, post-plain packaging tobacco companies introduced several new brand variants with capsules<sup>62</sup> and in Singapore capsules with new flavours, such as melon and cucumber.<sup>63</sup> For countries that exempted cigars, cigarillos and pipe tobacco from plain packaging, tobacco companies have taken advantage of this.<sup>70</sup> For instance, a tobacco manufacturer in the UK marketed pipe tobacco as RYO, thus circumventing the regulations,<sup>51</sup> and in France cigarillos were introduced in packs featuring the same or similar branding to that previously used on cigarette packs (see Figure 6); as capsule cigarettes were banned in France at the same time as plain packaging the exemption of cigarillos allowed tobacco companies to also include capsules within these products.

**Figure 6 here**

### *Gaps in the literature*

Evidence has been crucial for informing plain packaging policies, encouraging policy adoption by other countries (particularly LMICs),<sup>71</sup> understanding the impacts, and defending litigation.<sup>72,73</sup> However, key gaps in the literature remain. Given the absence of published research in low-income and lower middle-income countries, formative studies here would be of value. Knowledge of how plain packaging affects warning salience, appeal, harm perceptions and behaviour is restricted to early policy adopters, with evaluations required in other countries, and particularly those in the Middle East, Asia and South America.<sup>35</sup> With cost-benefit analyses of plain packaging often calculated over a long period (e.g. 10 years post-implementation in the UK, 30 years post-implementation in Canada) longer-term research is important. As plain packaging is being applied to a much wider range of tobacco and nicotine products than just cigarettes (such as shisha, HTPs, e-cigarettes), there is a need

for research on these products.<sup>74</sup> Research exploring perceptions and use of tobacco and nicotine products not covered by plain packaging, where applicable, is also important. While a potential increase in illicit tobacco use as a result of plain packaging has been central to industry opposition to this policy, the impact on illicit tobacco use has received limited attention.<sup>75</sup> Although research suggests neither the availability nor use of illicit tobacco has changed,<sup>76-78</sup> research on illicit use outside of Australia is needed.

### **Opportunities: Strengthening plain packaging**

Plain packaging has weakened tobacco companies' ability to promote their products, however opportunities to strengthen and extend this policy exist. Colour is a crucial element of pack design that sets expectations about the product within and influences purchase behaviour.<sup>79</sup> While regulations differ between countries, the drab brown (Pantone 448C) plain pack colour is the standard. Yet, responses to this colour in different regions have not been tested and should not be assumed, given cross-cultural differences in the perceived meaning and significance of particular colours.<sup>79</sup> Further, desensitisation to plain pack colour, whatever colour is selected, may occur in the medium- to long-term, and should be monitored. Uruguay's legislation allows for plain pack colours to be changed after periods of no less than two years;<sup>80</sup> other countries should consider incorporating this flexibility within their legislation.

Pack size allows tobacco companies to differentiate their products and communicate value, and new pack sizes have appeared in markets with plain packaging.<sup>61,62</sup> By stipulating what pack sizes are permitted, e.g. cigarettes can only be sold in packs of 20 cigarettes in Turkey<sup>73</sup> or packs of 20 or 25 cigarettes in New Zealand,<sup>10</sup> tobacco companies cannot offer 'bonus' cigarettes to offset the loss of value caused by plain packaging. Jurisdictions vary in the on-pack warnings required (e.g., number of warnings in set, type [pictorial or text], pack

position, content, rotation period). Uruguay requires warnings on the front and back of plain packs to be different, with the warning on the pack front showing the potential impact of smoking on physical appearance and the warning on the pack reverse possible internal damage; the focus is on women given smoking prevalence in Uruguay has fallen less sharply among women. Thailand also requires different warnings on the front and back of packs, although this requirement preceded plain packaging. Research exploring the impact of this approach would be fruitful.

The importance of brand and variant names, the ‘poetry on the package’, is pronounced on plain packs, as they become key to differentiating products, enhancing appeal and influencing product perceptions.<sup>66</sup> Some governments have recognised and anticipated this problem. In Turkey, the initial plan for plain packaging would have required brand name to appear on the front of cigarette packs and variant name on the bottom of packs,<sup>73</sup> presumably to make the potentially misleading variant name less visible as it would no longer appear on one of the main display areas. New Zealand and Singapore regulations stipulate that brand and variant names must be no longer than 5 cm and 3.5 cm respectively<sup>63,81</sup> thus preventing the lengthy variant names observed in some markets;<sup>60</sup> for instance, ‘Silver-Flow Filter Demi’ in Israel and ‘Longer Lasting Superkings’ in the UK. Setting a maximum length fails to prevent enticing variant names however, or the inclusion of colour descriptors, which are banned on plain packs in Canada. Despite the logic of banning certain descriptors, alternatives intended to convey the same information are readily available,<sup>68</sup> with colour descriptors in Canada replaced, e.g. ‘Silver’ became ‘Select’. In Uruguay, the ban on multiple brand presentations introduced pre-plain packaging eliminates the problem of variant names by prohibiting variants within the same brand family and permitting only the display of the brand name on packs. However, even this forward-thinking approach does not reduce the potential appeal of brand names. The Turkish government’s National Action Plan, which

proposed plain packaging, also proposed replacing brand variant names with numbers; each brand variant would be assigned a number based on its position in the alphabet at the time of the legislation.<sup>82</sup> Customers could learn these numbers via product lists available in stores.<sup>82</sup> Although this proposal appears to have been dismissed or paused, it merits consideration, given how brand variant names help market brands. For example, they can sustain and build brand awareness, enable differentiation and thus appeal to different consumer segments, indicate product attributes, and build and maintain positive brand equity.<sup>83</sup> Given most countries have eliminated tobacco marketing and do not permit promotion of brand or variant names via marketing channels except packaging, disallowing brand variant names on plain packs would extend existing approaches and complete the circle.

Plain packaging regulations typically stipulate the appearance of the pack interior as well as the cigarette stick. In terms of the interior, in Israel health-promoting inserts will be required in plain packs; the requirement for inserts and plain packaging is part of the revised ‘Prohibition of advertising and restriction of marketing of tobacco and smoking products law’.<sup>84</sup> In Canada, inserts were required in cigarette and little cigar packs prior to plain packaging. While currently in development, inserts providing information on product harms and cessation support will be required for all tobacco and vaping products in Israel;<sup>85</sup> the inserts will differ depending on product type. Just as tobacco companies have used inserts to present brand and product messaging,<sup>86</sup> governments have the opportunity to use inserts to present health messaging that differs from that displayed on the pack exterior. For instance, an insert under development in Israel explains that sharing waterpipes can increase the risk of contracting coronavirus.

The cigarette has become a key marketing driver globally, and while there are restrictions on peripheral cigarette features (such as the cigarette and tipping paper) in all countries with plain packaging except Israel, this has not prevented filter innovation.

Uruguay's plain packaging laws require biodegradable filters. These will still release toxins to the environment if littered and may inadvertently present a marketing opportunity for tobacco companies,<sup>87</sup> although this is less of an issue if mandated and in a market like Uruguay where any mention of the filters being biodegradable on the pack or stick is not permitted. However, such steps fail to tackle the problem of filter innovation. Moving forward, governments could extend plain packaging by standardising the size, composition and appearance of filters and require cigarettes to be dissuasive (e.g. display a warning, feature an unappealing colour, or both).<sup>88-90</sup>

## **Conclusion**

Tobacco packs will remain an important promotional medium in countries that have not yet implemented plain packaging. Indeed, however tobacco companies use the packaging, and whatever innovations are introduced, the marketing power of the packaging is only going to increase.<sup>91</sup> Plain packaging will reduce these opportunities, constrain a crucial marketing platform and help ensure the appearance of tobacco products is more commensurate with the harms they pose.

**What this paper adds**

- Plain packaging is now required, in some countries, for not only traditional tobacco products but also heated tobacco and e-cigarettes, and rolling papers.
- Plain pack laws have become more innovative, such as banning non-biodegradable filters or permitting periodic change of the pack colour.
- Evaluation, critical to understanding the impacts of plain packaging, suggests that plain packaging is having a beneficial public health impact, and not creating a burden for retailers.
- Tobacco companies continue to promote their products in markets with plain packaging, particularly via filter innovation.
- There are opportunities to strengthen and extend plain packaging, such as banning brand variant name or allowing for health-promoting inserts and dissuasive cigarettes.

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Figure 1: Plain packs in Australia, France, UK, New Zealand and Norway (top row), Ireland, Uruguay, Israel, Turkey, Canada and Singapore



Figure 2: Cigarettes in countries with plain packaging. From left to right, Australia, France, UK, New Zealand, Norway, Ireland, Uruguay, Turkey, Israel, Canada and Singapore



Figure 3: Plain packs for rolling tobacco (Australia), shisha (Turkey), plug, cigars (Ireland) and cigar tubes (New Zealand) (top row), snus (Norway), heets (Canada), and rolling papers, ecigarettes (Israel)



Figure 4: Fully branded e-liquid packaging in Israel, 18 months post-plain packaging





Figure 5: Cannabis packaging in Uruguay



Figure 6: Cigarillo packs with cigarette branding in France

