



Tobacco Retail Displays Impact and Effects of Ban

2023

Research literature update for 2023 «Tobacco Retail Displays Impact and Effects of Ban», prepared by Tatiana Andreeva, MD, PhD.

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General characteristic of the problem

Tobacco displays at the point of sale (point-of-sales) are an important means for the tobacco industry to communicate with consumers. They became one of the most important forms of tobacco marketing still permitted in many countries. As a result, the tobacco industry has increasingly used tobacco product displays at point-of-sales to market its products.

Many countries have banned tobacco advertising, promotion, and sponsorship (TAPS) in traditional media channels. Some of these laws also include the prohibition of marketing at the point of sale. However, laws banning point-of-sales advertising do not always include language to ban displays of tobacco products at point-of-sales.

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As a result, the tobacco industry has increasingly used tobacco product displays at point-of-sales to market its products. Article 13 of the WHO Framework Convention on Tobacco Control (FCTC) and its Guidelines require a comprehensive ban on all TAPS, including point-of-sales tobacco product displays.

Tobacco product displays weaken the effectiveness of tobacco control laws that ban tobacco advertising, promotion, and sponsorship and expose the population to tobacco industry marketing tactics intended to increase the sale and consumption of tobacco products.

Arguments used to oppose display bans

Interviews with opponents of display bans in New Zealand revealed the following arguments

1. Fears of financial losses for retailers, particularly for small stores;
2. Claims that tobacco is a 'normal' product;
3. "Lack of evidence" about the effectiveness of display bans; and
4. Fears of increased theft and risks to staff. (Thomson et al., 2008)

Advertising function

Tobacco product displays at the point of sale are an important means for the tobacco industry to advertise its products.

- Tobacco companies rely on tobacco pack design as a critical form of marketing. The companies exploit all packaging elements, including the construction, outer film, tear tape, inner frame, pack inserts, onserts, branding information, and color scheme. (Henriksen, 2012).

- ▶ Elaborately designed product displays attract attention to packs by using a variety of materials (such as acrylic) eye-catching illumination (such as backlit lightening), and color arrangements. Prominent displays typically located behind the cash registers (referred to as “power walls”) are used to create an outstanding impression.
- ▶ Tobacco product displays normalize smoking and allow the tobacco industry to communicate with non-smokers, ex-smokers, and established smokers. (Brown et al., 2012).

The tobacco industry is threatened by the ban

Analysis of the tobacco industry documents in Australia confirms that bans on the display of tobacco products are likely to reduce tobacco sales. (Harper, 2006).

The producers influence retailers to increase tobacco visibility



Nearly 80% of participating retailers reported cigarette company control over the placement of marketing materials in their stores

- ▶ The tobacco industry uses contracts and monetary incentives with retailers to ensure the prime placement of their products at the point of sale. (Feighery et al., 2003; Bloom, 2001) Retailers noted that tobacco companies exert substantial control over their stores by requiring the placement of products in the most visible locations and of specific amounts and types of advertising in prime locations in the store. Retailers also described how tobacco companies reduce prices by offering them volume-based discounts, «buy two, get one free» specials, and «buying down» the price of an existing product. (Feighery et al., 2003) Interviews conducted in 468 stores in 15 U.S. states showed that cigarette companies engaged 65% of retailers in an incentive program. Nearly 80% of participating retailers reported cigarette company control over the placement of marketing materials in their stores. (Feighery et al., 2004).
- ▶ A study conducted in England found that most retailers were being visited by industry representatives who checked displays. Some retailers also reported incentives offered to them for displaying products. (Rooke et al., 2010).
- ▶ Even in a market where the open display of tobacco is prohibited, tobacco companies continue to incentivize retailers to sell and promote their brands and have developed new promotional strategies. As showed in a study conducted in Scotland after a ban on the open display of tobacco products in stores was introduced, tobacco producer representatives

incentivized positioning brands in specified spaces in the public-facing storage units (even though products were covered up), increasing sales, trialing new products and participating in specific promotions, such as verbally recommending specific brands to customers. For countries that have implemented tobacco display bans, or are considering doing so, one option to combat these practices would be to ban promotional communications between manufacturers and retailers. (Stead et al., 2018).

- ▶ A study conducted in South Korea found that displays in convenience stores are installed and managed in accordance with the contract between the tobacco companies and the convenience store headquarters. The headquarters receives an allowance from the tobacco company for maintaining and displaying their product and promotional materials. The headquarters then pays a monthly advertising allowance to each franchisee as an operating subsidy. (Hwang et al., 2018).
- ▶ A scoping review published in 2022 revealed that contracts incentivize tobacco retailers in exchange for substantial manufacturer control of tobacco product availability, placement, pricing, and promotion in the retail setting. Contracts allow tobacco companies to promote their products and undermine tobacco control efforts in the retail setting through discounted prices, promotions, and highly visible placement of marketing materials and products. (Reimold et al., 2022).

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Retail price marketing through tobacco display

Point-of-sales tobacco displays can undermine tax and price tobacco control measures.

- ▶ A descriptive study conducted in the UK based on pictures of point-of-sales displays found that the Most Popular Price Category substantially overestimated the prices at which most 20-cigarette packs were available, as most cigarettes were displayed with a price mark, implying a promotional price offer. Removal of point-of-sales displays will prevent this means of price marketing. (Spanopoulos et al., 2012)
- ▶ Price discounting is important because it keeps the purchase price low and can undermine the impact of tax increases. (Levy et al., 2022)
- ▶ Additionally, after the point-of-sale display of tobacco is banned, retailers inform the customers through tobacco product information displays ('price boards'). As seen in Australia, boards are being used to target

brands to consumers. Jurisdictions should also prohibit price board display when they ban tobacco product display; prices might instead be itemized in alphabetical order on a list only viewable upon customer request. (Wakefield et al., 2012).

Target groups: 1. Young non-smokers

Studies have consistently found strong associations between exposure to point-of-sales tobacco product displays with smoking initiation, susceptibility to smoking, and intentions to smoke among youth.

Minor-targeted displays of tobacco products

- ▶ Tobacco products are often placed near candy and children's items and at children's eye level, encouraging children to see them as harmless everyday items. (Barnoya et al., 2010; Quedley et al., 2008; Hosler & Kammer, 2012)
- ▶ A study in Scotland conducted in 2013 before legislation to remove point-of-sales displays was implemented in supermarkets showed that displays were highly visible within outlets and, in over half the stores, from the public footway outside. Tobacco products were displayed in proximity to products of interest to children (e.g. confectionery, in 70% of stores). (Stead et al., 2016)
- ▶ A study conducted in Poland found that among the outlets located in the proximity of educational institutions, more than 80% of point-of-sales surveyed displayed tobacco products; in 19%, these products were displayed near products of interest to minors. (Koczkodaj et al., 2021)
- ▶ In the study based on data from 42 low- and middle-income countries related to the monitoring of cigarette advertising and promotion at points-of-sale near schools and playgrounds, four strategies were detected across most of these countries: (1) display of cigarettes near snacks, sweets, and sugary drinks, (2) placement of cigarette advertisements near the eye-level of children, (3) advertisements and display of flavored cigarettes and (4) sale of single sticks of cigarettes. (Brown et al., 2022)

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1. *display of cigarettes near snacks, sweets, and sugary drinks*
2. *placement of cigarette advertisements near the eye-level of children*
3. *advertisements and display of flavored cigarettes*
4. *sale of single sticks of cigarettes*

The perceived ease of purchasing cigarettes

- ▶ By creating a sense of familiarity with tobacco, cigarette advertising and bold packaging displays in stores where children often visit may help to pre-dispose them to smoking. A total of 605 ninth-grade students were randomly allocated to view a photograph of a typical convenience store point-of-sale which had been digitally manipulated to show either cigarette advertising and pack displays, pack displays only, or no cigarettes. Students then completed a self-administered questionnaire.

Compared with those who viewed the no cigarettes, students either in the display-only condition or cigarette advertising condition perceived it would be easier to purchase tobacco from these stores. Those who saw the cigarette advertising perceived it would be less likely they would be asked for proof of age and tended to think a greater number of stores would sell cigarettes to them, compared with respondents who saw no tobacco products. (Wakefield et al., 2006)

The temptation to purchase cigarettes

- ▶ A study in Norway found that younger respondents were more likely than older people to say that tobacco product displays tempted them to buy cigarettes. (Scheffels & Lavik, 2012)

Cigarette brands remembering

- ▶ A study conducted in the United States estimated that requiring cigarette packs to be kept out of sight could reduce adolescents' exposure to cigarette brands by as much as 83%. (Henriksen et al., 2004)
- ▶ In a randomized trial where young people were allocated to view a photograph of a typical convenience store point-of-sale which had been digitally manipulated to show either cigarette advertising and pack displays, pack displays only, or no cigarettes, respondents in the display-only condition tended to recall displayed cigarette brands more often than respondents who saw no cigarettes. Cigarette advertising similarly influenced students and tended to weaken students' resolve not to smoke in the future. Retail tobacco advertising as well as cigarette pack displays may have adverse influences on youth, suggesting that tighter tobacco marketing restrictions are needed. (Wakefield et al., 2006)
- ▶ A study in Scotland found that higher cigarette brand awareness was significantly associated with regularly visiting small shops and noticing point-of-sales displays in small and large shops, even when students' smoking status, smoking in their social networks, leisure activities, and demographics were included as confounding variables. (van der Sluijs et al., 2016)

 **83%**

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Susceptibility to smoking in young people

Susceptibility to smoking is measured as the lack of being sure not to start smoking in one year and in five years.

- ▶ Studies have consistently found strong associations between exposure to point-of-sales tobacco

Noticing cigarette displays was associated with higher levels of susceptibility and greater attraction to displays was associated with higher susceptibility

product displays with susceptibility to smoking, and intentions to smoke among youth. This was shown in a cross-sectional in-home survey conducted in 2008 with young people (N = 1,401) aged 11–16 years in the UK. Noticing cigarette displays was associated with higher levels of susceptibility (odds ratio [OR] = 1.77, $p < .05$), and greater attraction to displays was associated with higher susceptibility (OR = 1.07, $p < .001$). (Mackintosh et al., 2012)

- ▶ This was also concluded in several systematic reviews (Paynter et al., 2009; Robertson et al., 2015) and meta-analyses (Robertson et al., 2016)
- ▶ Exposure to point-of-sale tobacco displays is associated with smoking susceptibility in Brazilian adolescents. (Hallal et al., 2018)
- ▶ A study in England found that exposure to and awareness of point-of-sales tobacco displays and brands in displays are associated with smoking susceptibility. (Spanopoulos et al., 2013)
- ▶ In a study with an experimental convenience store, hiding the tobacco power wall significantly reduced adolescents' susceptibility to future cigarette smoking compared to leaving it exposed. (Shadel et al., 2015)
- ▶ Having the tobacco power wall behind the cashier increased adolescents' susceptibility for smoking in the future by 14.3% (total effect) compared with when the power wall was hidden ($p = .01$), and 14% of this effect was mediated by participants' perceived smoking norms. Time spent in front of the cashier and perceived accessibility of cigarettes did not play a role in the association between study condition and susceptibility for smoking in the future. (Setodji et al., 2018)

*Having the tobacco power wall behind the cashier increased adolescents' susceptibility for smoking in the future **by 14.3%** (total effect) compared with when the power wall was hidden*

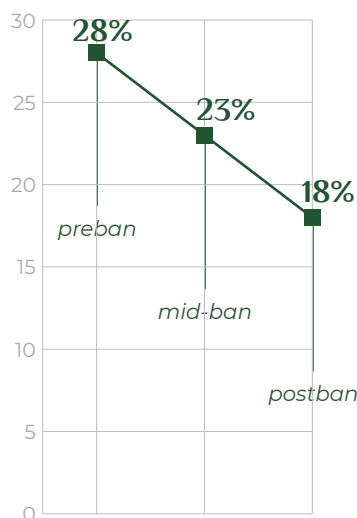
Experimentation and initiation of tobacco use by youth

Tobacco product displays at point-of-sales expose youth to pro-tobacco messages and create positive attitudes toward tobacco products and brands.

- ▶ A cohort study conducted in the United Kingdom found that noticing tobacco point-of-sale displays more often and recognizing a higher number of tobacco brands is associated with an increased risk of becoming susceptible to smoking among adolescents in the United Kingdom, and recognizing a higher number of brands is associated positively with an increased risk of smoking uptake. (Bogdanovica et al., 2015) The proportion of

children noticing tobacco point-of-sales displays in supermarkets decreased by about 13 percentage points to 45.7% (95% CI 42.7% to 48.7%) in 2013, after the ban. However, after adjusting for confounders, implementation of the first stage of the point-of-sales ban in 2012 did not result in significant changes in the relation between susceptibility to smoking and smoking status and exposure to and awareness of point-of-sales displays. (Bogdanovica et al., 2017)

A repeat cross-sectional survey of 11-16 years old before, during and after implementation of a ban on the open display of tobacco products at the point of sale in the UK found that smoking susceptibility decreased



- ▶ A repeat cross-sectional survey of 11-16 years old before, during and after implementation of a ban on the open display of tobacco products at the point of sale in the UK found that the mean number of brands recalled declined from 0.97 preban to 0.69 postban ($p < 0.001$). Smoking susceptibility decreased from 28% preban to 23% mid-ban and 18% postban (p for trend < 0.001). Postban, 90% of never-smokers supported the display ban and indicated that it made cigarettes seem unappealing (77%) and made smoking seem unacceptable (87%). (Ford et al., 2020)
- ▶ A study in England based on the data from the Smoking, Drinking and Drug Use survey, an annual survey of children aged 11-15 years for 2010-2014 and 2016 found reduced reported seeing cigarettes on display in the last year after the ban that was similar in small shops (84.1% to 79.3%) and supermarkets (62.6% to 57.3%). Although the ban was associated with a reduction in the proportion of regular child smokers reporting that they bought cigarettes in shops (57.0% in 2010 to 39.8% in 2016), there was no evidence of changes in perceived difficulty or being refused sale among those who still did. (Lavery et al., 2019)
- ▶ A cross-sectional study in New Zealand among 14-15-year-olds showed that greater exposure to point-of-sales tobacco displays increased the likelihood of being susceptible to smoking, experimenting with smoking, and current smoking. (Paynter et al., 2009tc)
- ▶ A study conducted in the Australian states of New South Wales (NSW) and Queensland based on the data from the Tobacco Promotion Impact Study, a repeated cross-sectional survey of youth (12-24 years) found that the recall of point-of-sales tobacco displays was significantly less likely for youth interviewed after the bans versus before (OR = 0.45, 95% CI = 0.39, 0.52, $p < .01$). They were also less likely to report tobacco brand awareness (OR = 0.76, 95% CI = 0.62, 0.92, $p < .01$), to over-estimate peer smoking (OR = 0.84, 95% CI = 0.74, 0.96, $p < .01$), or be current smokers (OR = 0.73, 95% CI = 0.55, 0.96, $p < .05$). Stratified analyses showed

A study conducted in the Australian states of New South Wales (NSW) and Queensland based on the data from the Tobacco Promotion Impact Study, a repeated cross-sectional survey of youth (12-24 years) found that the recall of point-of-sales tobacco displays was significantly less likely for youth interviewed after the bans versus before

that these differences were primarily apparent in the group of youth most likely to be affected by tobacco point-of-sales displays: those who visit tobacco retailers most frequently. After the bans, smokers were less likely to report that they think about smoking as a result of seeing point-of-sales tobacco displays (OR = 0.60, 95% CI = 0.37, 0.97, $p < .039$). These results suggest that removing tobacco displays from retail environments can positively contribute to the denormalization of smoking among youth. (Dunlop et al., 2015)

- ▶ A study in Mumbai, India, based on a cross-sectional survey of high school students and a survey of tobacco vendors, found that students' current tobacco use and current smokeless tobacco use were negatively associated with vendors compliance with point-of-sales laws. (Mistry et al., 2019)

Target groups: 2. Adult nonsmokers

Respondents who often noticed point-of-sales displays and did not perceive them as advertisements showed less support on banning them than those who did not notice them

- ▶ A cross-sectional study conducted in Hong Kong among adult never-smokers found that the younger ones were more likely to often notice point-of-sales displays (RR=0.80, 95% CI: 0.72-0.89, $p<0.01$). Finding point-of-sales displays attractive was associated with primary (RR=2.52, 95% CI: 1.51-4.22, $p<0.01$) and secondary education (RR=1.68, 95% CI: 1.16-2.44, $p=0.01$) versus tertiary education. Often noticing displays was associated with perceived attractiveness (RR=1.90, 95% CI: 1.32-2.75, $p<0.01$). The positive association between often noticing displays and being encouraged to smoke was marginally significant (RR=4.05, 95% CI: 0.98-16.85, $p=0.054$). Respondents who often noticed point-of-sales displays (RR=0.87, 95% CI: 0.77-0.98, $p=0.02$) and did not perceive them as advertisements (RR=0.70, 95% CI: 0.61-0.98, $p<0.01$) showed less support on banning them than those who did not notice them. (Cheung et al., 2018)

Target groups: 3. Smokers

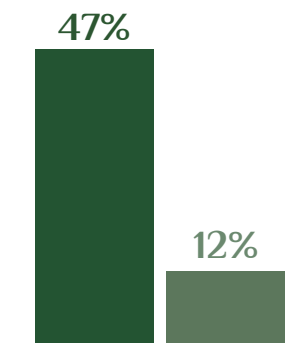
Spontaneous tobacco purchases

Spontaneous tobacco purchases provoked by the point-of-sales displays

30%

A study conducted in Western Australia observed a 30% reduction in smokers making spontaneous tobacco purchases after implementation of the tobacco display ban and between a fivefold and sixfold reduction in the proportion suggesting displays influenced their decision to purchase cigarettes

Point-of-sales displays influenced nearly four times as many unplanned purchases as planned purchases



- ▶ In an environment that permits point-of-sale displays, smokers were found to see tobacco displays in more than 40% of the 4-hour periods that they were outside the home. Exposure to such tobacco displays was associated with a higher probability of smoking, and with higher levels of smoking, even when subjects did not purchase cigarettes. (Burton et al., 2012)
- ▶ A four-country study found lower levels of impulse buying in Canada and Australia, where tobacco displays are banned, than in the US and UK, where tobacco displays were not banned at the time of the study. (Li et al., 2013)
- ▶ A study conducted in Western Australia observed a 30% reduction in smokers making spontaneous tobacco purchases after implementation of the tobacco display ban and between a fivefold and sixfold reduction in the proportion suggesting displays influenced their decision to purchase cigarettes. (Carter et al., 2015) Before the ban, unplanned cigarette purchases were made by 22% of participants. Point-of-sales displays influenced nearly four times as many unplanned purchases as planned purchases (47% vs 12%, $p < 0.01$). (Carter et al., 2009)
- ▶ When shopping for items other than cigarettes, 25.2% of smokers purchased cigarettes at least sometimes on impulse as a result of seeing the cigarette display. Thirty-eight percent of smokers who had tried to quit in the past 12 months and 33.9% of recent quitters experienced an urge to buy cigarettes as a result of seeing the retail cigarette display. (Wakefield et al., 2008)
- ▶ In a virtual convenience store experiment with adult smokers and recent quitters, compared with recent quitters in the status quo conditions, recent quitters in the display ban condition had lower urges to smoke; compared with current smokers in the status quo conditions, smokers in the display ban conditions were less likely to attempt to purchase cigarettes in the virtual store. (Nonnemaker et al., 2016)
- ▶ The enclosed display significantly lowered current smokers' ($B = -7.05$; 95% confidence interval [CI] = -13.20, -0.91; $P < .05$) and recent quitters' ($B = -6.00$, 95% CI = -11.00, -1.00; $P < .01$) urge to smoke

and current smokers' purchase attempts (adjusted odds ratio = 0.06; 95% CI = 0.03, 0.11; $P < .01$). The warning sign had no significant main effect on study outcomes or interaction with the enclosed display. (Kim et al., 2014)

In a virtual convenience store experiment with youth aged 13 to 17 who were either smokers or nonsmokers susceptible to smoking, compared with youth in the status quo condition, youth in the display ban condition were less aware that tobacco products were for sale (32.0% vs 85.2%)

- ▶ In a virtual convenience store experiment with youth aged 13 to 17 who were either smokers or nonsmokers susceptible to smoking, compared with youth in the status quo condition, youth in the display ban condition were less aware that tobacco products were for sale (32.0% vs 85.2%) and significantly less likely to try purchasing tobacco products in the virtual store (odds ratio = 0.30, 95% confidence interval = 0.13-0.67, $P < .001$) while advertising had no impact. (Kim et al., 2013)
- ▶ A telephone survey of smokers in Nebraska found that exposure to point-of-sales marketing for one's own brand of cigarette as well as any brand is associated with urges to buy and impulse purchases of cigarettes. (Siahpush et al., 2016)

Target groups: 4. Former smokers

Quitting and relapse

Point-of-sales tobacco product displays encourage impulse buying among people who are trying to quit.

Interviews with former smokers in New Zealand found that tobacco displays had high visibility, and elicited emotional and physical reactions that created ongoing temptation, stimulated impulse purchases, and caused them “physical and emotional cravings” that made quitting smoking more difficult

- ▶ Interviews with former smokers in New Zealand found that tobacco displays had high visibility, and elicited emotional and physical reactions that created ongoing temptation, stimulated impulse purchases, and caused them “physical and emotional cravings” that made quitting smoking more difficult. Participants strongly supported banning tobacco retail displays, primarily because they thought this would reduce youth initiation, promote greater consistency with smoke-free promotions and assist those attempting to quit. (Hoek et al., 2010)
- ▶ A prospective cohort study conducted in Victoria, Australia, found that smokers who had a medium or high level of sensitivity to point-of-sales displays were significantly less likely to have quit at follow-up compared to those with low point-of-sales display sensitivity. (Germain et al., 2010)
- ▶ In a prospective study of smokers in the United States, exposure to point-of-sales marketing at baseline was not associated with the probability of having made a quit attempt as reported at the six-month follow-up ($p = 0.129$). However, higher exposure to point-of-sales marketing was associated with a lower probability of quit success among smokers who reported to have attempted to quit smoking at six-month follow-up ($p = 0.006$). Exposure to point-of-sales tobacco marketing is associated with lower chances of successfully quitting smoking. Policies that reduce the amount of exposure to point-of-sales marketing might result in higher smoking cessation rates. (Siahpush et al., 2016c)
- ▶ A longitudinal study conducted in Texas, USA, concluded that exposure to product displays decreases the odds of cessation. (Mantey et al., 2019)
- ▶ A study across Canadian provinces found that point-of-sales bans are associated with increased smoking cessation overall and more quit attempts among women than men. Bans were more effective for women than men for bans of 0-24 months. Participants living in a province with a point-of-sales ban for at least 24 months had a higher chance of successful cessation (aRR=1.49; 95% CI: 1.08 to 2.05) compared with those in a province without a ban. (Usidame et al., 2022)

Policies that reduce the amount of exposure to point-of-sales marketing might result in higher smoking cessation rates

- ▶ A cohort study in Canada based on the International Tobacco Control policy evaluation project found that point-of-sales display bans were associated with lower odds of relapse among ex-smokers. (Fleischer et al., 2019)

Calendar of tobacco display bans

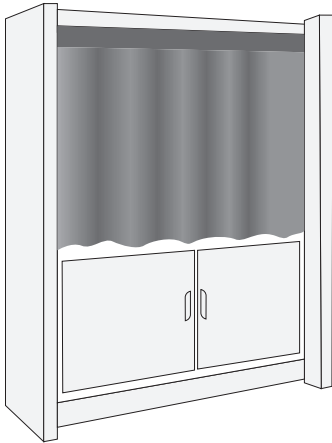
The below list of countries where point-of-sales tobacco display ban was introduced is based on the published research reports. If the ban was introduced in a certain country and no studies were conducted and reported, this country might be missing from the list.

- 2001, Iceland* ▶ Iceland became the first country to impose a ban on point-of-sale tobacco product displays in 2001.
- 2002, Canada* ▶ In Canada, since 2002, several provinces and territories have passed laws requiring the removal of tobacco displays and associated advertising. (Brown et al., 2012)
- 2005, Thailand* ▶ In September 2005, Thailand became the first Asian country to implement a complete ban on the display of cigarettes and other tobacco products at point-of-sale.
- 2009, Ireland* ▶ In Ireland, tobacco displays and other point-of-sale tobacco advertising were removed in July 2009.
- 2010, Norway* ▶ In Norway, the point-of-sale tobacco display ban was implemented 1 January 2010.
- ▶ The Australian states
 - 2010, New South Wales (NSW), Australia* • New South Wales (NSW) July 2010
 - 2011, Victoria, Australia* • Victoria 1 January 2011
 - 2011, Queensland, Australia* • Queensland November 2011
- 2012, New Zealand* ▶ New Zealand, July 2012.
- 2012, Finland* ▶ Finland implemented a point-of-sale display ban for tobacco products and their trademarks in 2012, and for electronic cigarettes in 2016.
- 2012, England* ▶ In England, point-of-sale displays in larger shops were prohibited in April 2012, with an exemption for smaller retailers until 2015.
- 2015, UK* ▶ From April 6, 2015, all small shops in the UK were required to cover up tobacco products at the point of sale to protect children from exposure.
- 2013 – 2015, Scotland* ▶ Scotland implemented a ban on the open display of tobacco products in supermarkets in April 2013 and small shops in April 2015.
- 2014, RF* ▶ Russian Federation banned the display of tobacco and the sale of cigarettes in kiosks, effective June 1, 2014.

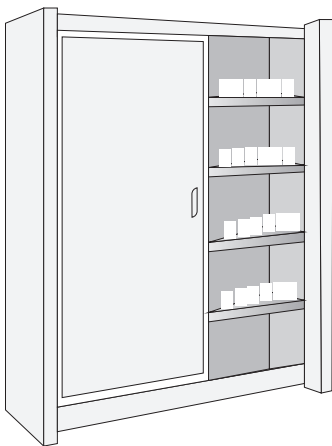
- 2016, Saudi Arabia* ▶ Since 2016, Saudi Arabia adopted a regulation which bans selling cigarettes at smaller retailers such as minimarkets and prohibits tobacco product displays at the point of sale. (AlJishi et al., 2022)
- 2017, Bogor city, Indonesia* ▶ In October 2017, Bogor city, Indonesia, started the ban on tobacco displays at point-of-sale, starting with modern cigarette retailers.

Effects of point-of-sales tobacco product display ban

Examples of possible solutions



Curtain covered display



Sliding doors

Benefits for Public Health

- ▶ A study based on SimSmoke simulation model found that comprehensive point-of-sales restrictions in the USA are projected to reduce smoking prevalence by approximately 16% [range=3%-31%] relative to the status quo by 2065, preventing about 630,000 smoking-attributable deaths [range=108,000-1,225,000], 215,000 low birth weight births [range=33,000-421,000], 140,000 preterm births [range=22,000-271,000], and 1900 infant deaths from SIDS [range=300-3800]. (Levy et al., 2015)
- ▶ Having a point-of-sales display ban is likely to reduce smoking prevalence and generate public health benefits. Having a point-of-sales display ban reduced overall adult daily smoking, male smoking, and female smoking by about 7%, 6%, and 9%, respectively. (He et al., 2018)

SES-related impact of point-of-sales tobacco displays

Several studies found that the deprived population might be impacted more severely by the tobacco product displays at the point of sale. On the other hand, point-of-sales cigarette marketing was found to cause smoking-induced deprivation, that is, not having enough money for household essentials such as food because of money spent on cigarettes.

- ▶ In a study conducted in Ontario before the display ban, it was found that point-of-sales intensity of tobacco promotion is heavier in neighborhoods with lower median household incomes. (Cohen et al., 2008)
- ▶ A study conducted in Scotland showed that eighty percent of pupils recalled seeing tobacco displays, with those from deprived areas more likely to recall displays in small shops. When confectioners, tobacconists, and newsagents (CTNs) and grocery/convenience stores (two of the outlet types most often visited by young people) were examined separately, average tobacco display unit sizes were significantly larger in those outlets in more deprived areas. (Stead et al., 2016)
- ▶ A study conducted in Bogor city, Indonesia, revealed that in areas with higher population density and

A study conducted in Bogor city, Indonesia, revealed that in areas with higher population density and poverty rates, point-of-sales tobacco products display ban had significantly lower compliance

poverty rates, point-of-sales tobacco products display ban had significantly lower compliance. (Priyono et al., 2020)

- ▶ In a study conducted in New Zealand, compliance with point-of-sales tobacco display ban was significantly worse in dairies (small local general stores) and convenience stores. Stores situated in areas in the top quartile for the proportion of children were much more likely to have high levels of noncompliance and to display tobacco products close to children's products. (Quedley et al., 2008)
- ▶ A telephone survey of 939 smokers conducted in Omaha, Nebraska, found evidence for an association between higher levels of point-of-sales cigarette marketing and a higher probability of smoking-induced deprivation. This association was partly mediated by cravings to smoke, urges to buy cigarettes, and unplanned purchases of cigarettes during a visit to a neighborhood store. (Siahpush et al., 2016b)
- ▶ A time series study based on monthly, cross-sectional household surveys of representative samples of the English adult population aged 18+ years from January 2009 to February 2015 showed that there was no immediate step level change in smoking after a tobacco display ban for shops with >280 m² floor area ('partial ban') in 2012 (-3.69% change, 95% CI -7.94 to 0.75, p=0.102) or in cigarette consumption (β -0.183, 95% CI -0.602 to 0.236). There was a significantly steeper decline in smoking post display ban (-0.46% change, 95% CI -0.72 to -0.20, p=0.001). This effect was demonstrated by respondents in manual occupations (-0.62% change, 95% CI -0.72 to -0.20, p=0.001), but not for those in non-manual occupations (-0.42, 95% CI -0.90 to 0.06, p=0.084). (Kuipers et al., 2017)

Comparison of various point-of-sales marketing strategies

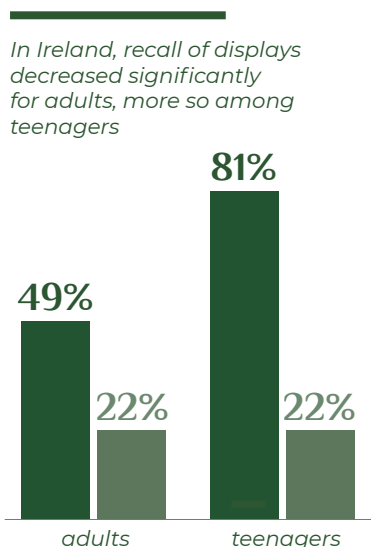
Several studies compared how tobacco pack displays, advertising, and other ways of promotion were associated with user behaviors.

- ▶ A telephone survey of smokers conducted in Omaha, Nebraska, found that cravings to smoke were stronger associated with recalled exposure to point-of-sales cigarette displays (p<0.001) and advertisements (p=0.002), but not promotions (p=0.06) (Siahpush et al., 2016a)

A telephone survey of smokers conducted in Omaha, Nebraska, found that cravings to smoke were stronger associated with recalled exposure to point-of-sales cigarette displays

Implemented bans on tobacco product displays are beneficial

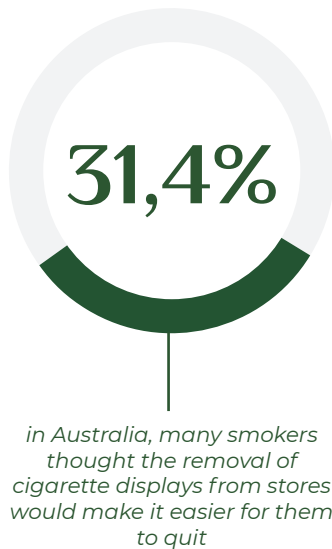
- ▶ In Ireland, recall of displays decreased significantly for adults (49% to 22%; $p < 0.001$), more so among teenagers (81% to 22%; $p < 0.001$). There were no significant short-term changes in prevalence among youths or adults. The proportion of youths believing more than a fifth of children their age smoked decreased from 62% to 46%, ($p < 0.001$). Post-legislation, 14% of adult smokers thought the law had made it easier to quit smoking and 38% of teenagers thought it would make it easier for children not to smoke. (McNeill et al., 2011)
- ▶ Before-and-after study conducted in Scotland which observed the attitudes and behaviors of young people aged 12-17 years, found that the implementation of the legislation was associated with a reduction in risk of both smoking susceptibility and smoking initiation in young people, as well as a reduction in the perceived accessibility of tobacco and in pro-smoking attitudes after both the partial and the comprehensive bans were introduced. (Haw et al., 2020)
- ▶ A repeated cross-sectional study conducted in New Zealand among students aged 14-15 years showed that the introduction of a point-of-sales display ban and concurrent measures was followed by significant reductions in initiation, experimental and regular smoking, attempted purchase of cigarettes, and reduced association between visiting tobacco-retailing stores and smoking behaviors. The findings suggest that point-of-sales display bans are important components of strategies to reduce smoking initiation among youth and young people. (Edwards et al., 2017)
- ▶ The study based on ESPAD data found that the implementation of point-of-sales display bans in Europe was associated with a stronger decrease in regular smoking among adolescents. This decrease does not appear to be driven by decreasing accessibility of tobacco but might be caused by further de-normalization of tobacco as a result of point-of-sales display bans. (Van Hurck et al., 2019)



Tobacco display bans are popular

The public supports bans on tobacco product displays.

- ▶ In Australia, many smokers (31.4%) thought the removal of cigarette displays from stores would make it easier for them to quit. (Wakefield et al., 2008)



- ▶ After the point-of-sales display ban in Ireland in 2011, support for the law increased among adults (58% Apr-Jun vs 66% Jul-Dec, $p < 0.001$). (McNeill et al., 2011)
- ▶ At the first post-ban survey wave over 90% of smokers in Thailand were aware of the display ban policy and supported it, and about three-quarters thought the ban was effective. (Li et al., 2015)
- ▶ A study in Canada found that smokers had high levels of support (between 55% and 83%) for the removal of displays and that smokers intending to quit were more likely to support bans on tobacco advertising and displays than those who were not intending to quit. (Brown et al., 2012)
- ▶ In Norway, the point-of-sales tobacco display ban was supported by a majority of the population, and by one out of three daily smokers. (Scheffels & Lavik, 2013)
- ▶ In New Zealand, a study conducted among Maori smokers found a high level of support (68%) for a ban on tobacco product displays. (Wilson et al., 2010)
- ▶ In the Netherlands, the support for a point-of-sales cigarette display ban increased from 28.9% in 2010 to 42.5% in 2015. (van Mourik et al., 2018)
- ▶ A study conducted in Western Australia found that four times as many smokers were supportive of a ban on point-of-sales tobacco displays than unsupportive (49% vs 12%), and 28% agreed that such a ban would make it easier to quit. (Carter et al., 2009)

Tobacco display bans economic impact

Tobacco producers often mention the negative economic impact of point-of-sales tobacco display bans, and especially the increase in the illegal tobacco market.

The overall conclusion of economic studies that compare tobacco-related costs and benefits tells that the direct costs and externalities to society of smoking far outweigh any benefits that might be acquired at least when considered from the perspective of socially desirable outcomes (i.e., in terms of a healthy population and a productive workforce). (Ekpu & Brown, 2015)

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Tobacco display bans and the illegal tobacco market

Several published papers (Irvine et al., 2014; Lee et al., 2020) plus several gray literature reports indeed mention both point-of-sales tobacco display bans and contraband tobacco or tobacco smuggling. However, none of these authors have revealed or estimated the impact of point-of-sales tobacco display bans on increased tobacco smuggling.

The paper that analyzed the impact of the point-of-sales tobacco display ban in Ireland (Quinn et al., 2011) cited two reports^{1 2}, that stated: “that sales have rapidly decreased and are being lost since the removal of point of sale promotional displays and second, that this decline can be attributed to the policy”. However, the authors (Quinn et al., 2011) conclude that the decline in sales is “a function of broader phenomena” including other tobacco control measures; and that illicit (smuggled, bootlegged, or counterfeit) tobacco can be among those factors, not vice versa.

Business is not harmed

Studies have shown that point-of-sales display bans do not impose a burden on stores and even bring benefits.

- An economic evaluation of tobacco sales before and after a ban on tobacco displays in Ireland showed no significant effect on store revenue one year after the ban was implemented. The removal of point-of-sale displays is aimed at reducing the pernicious effects of tobacco advertising on children and is therefore likely to have an impact on sales over a much more protracted time period. This should enable retailers to adapt over time, perhaps using such regulations as

¹ Basham P. Canada's ruinous tobacco display ban: economic and public health lessons. IEA Discussion Paper 29. London: Institute of Economic Affairs, 2010

² Lilico A. The Impacts of Restrictions on the Display of Tobacco Products. A Supplemental Report by Europe. Europe Economics, 2009.

Tobacco retailers in New Zealand stated that keeping tobacco products out of sight reduced theft, was not costly or inconvenient, and did not significantly affect store revenue

an opportunity to play a role in promoting healthier products in the local community. (Quinn et al., 2011)

- ▶ Tobacco retailers in New Zealand stated that keeping tobacco products out of sight reduced theft, was not costly or inconvenient, and did not significantly affect store revenue. (Hoek et al., 2012) Retailers who had removed tobacco displays did so primarily to reduce their security risk and found their stores had become less vulnerable to retail crime. They did not find removing displays costly or inconvenient, nor had this decision significantly reduced their revenue. Removing in-store tobacco displays may increase rather than decrease store safety. Retailers' experiences differed in many ways from tobacco companies' predictions, and suggest that industry arguments against display removal lack objective support and are self-serving.

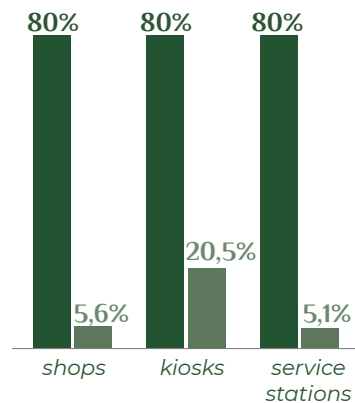
Tobacco retailers are compliant with the ban

- ▶ Compliance with point-of-sales tobacco product display bans has been consistently high in several countries, including Australia (Zacher et al., 2013), Ireland (McNeill et al., 2011), and Norway. (Scheffels & Lavik, 2013)
- ▶ In Norway, compliance was 97% for cigarettes and rolling tobacco and 98% for snus. (Scheffels & Lavik, 2013)
- ▶ Interviews with tobacco retailers conducted in New Zealand showed that most participants had few or no concerns about the removal of point-of-sale displays. (Jaime et al., 2014)
- ▶ After the Russian Federation banned tobacco displays in kiosks, approximately 7.4% (36/489) of venues were still displaying products, which the authors assessed as excellent compliance. (Kennedy et al., 2017)
- ▶ In Scotland, compliance with the legislation was high, with 98% of shops removing tobacco from permanent display and non-compliance was restricted almost entirely to minor contraventions. (Eadie et al., 2016)
- ▶ In Finland, after the ban implementation, the proportion of adolescents noticing tobacco displayed decreased from over 80% to 5.6% in shops, 20.5% in kiosks and 5.1% in service stations. (Kinnunen et al., 2019)
- ▶ In Bogor city, Indonesia, the compliance immediately following the ban was high (83%), which helped to reduce the visibility of tobacco displays around educational facilities. (Priyono et al., 2020)

*In Scotland, compliance with the legislation was high, with **98%** of shops removing tobacco from permanent display and non-compliance was restricted almost entirely to minor contraventions*

- ▶ In Saudi Arabia, the compliance of the tobacco product displays at the point of sales ban was about 84%. (AlJishi et al., 2022)

In Finland, after the ban implementation, the proportion of adolescents noticing tobacco displayed decreased



Counteractions of the tobacco industry

Counteractions of the tobacco industry might diminish the effects of the ban on the point-of-sales product displays.

- ▶ The study conducted in Scotland found that the implementation of the legislation might be followed by the increased density of retail outlets. (Haw et al., 2020) A growing socioeconomic disparity in the availability and visibility of tobacco was found after the ban's implementation. (Pearce et al., 2020)
- ▶ Policy recommendations include banning tobacco manufacturer contracts and retailer incentives, along with more transparent reporting of contract incentives given to retailers. (Reimold et al., 2022)
- ▶ In Thailand, noticing tobacco displays in stores was lowest (16.9%) at the first post-ban survey wave, but increased at later survey waves. The trend toward increased noticing is likely at least in part due to some increase in violations of the display bans and/or strategies to circumvent them. (Li et al., 2015)

Comments on lessons learned

- 1 The ban should be comprehensive, not in stages, with supermarkets first and small stores next.
- 2 Tobacco industry incentives for retailers should be banned, along with point-of-sales tobacco displays.
- 3 Younger people are more susceptible
- 4 Non-smokers are more susceptible
- 5 Lower SES get more dense visibility of tobacco products if the ban is not comprehensive
- 6 Most SES-related findings are seen if the bans are started from larger, modern or otherwise extraordinary point-of-sales
- 7 Cross-sectional studies have shown that exposure to point-of-sales cigarette marketing is associated with the use of cigarettes among youth, though longitudinal evidence of the same is sparse and mixed. In a longitudinal study conducted in Texas, USA, the recall of cigarette and smokeless product marketing and displays was not associated with tobacco use measures. (Pasch et al., 2018)
- 8 Ban of displays had a much stronger impact than point-of-sales ban of advertising (Kim et al., 2013).
- 9 Warning signs had no impact (Kim et al., 2014)

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