

# THE EVIDENCE FOR THE ENDGAME:

### A WHITE PAPER



White paper summarizing research on the endgame concept and endgame policies

University of California, San Francisco
School of Nursing
Department of Social and Behavioral Sciences

Patricia A. McDaniel, PhD Elizabeth A. Smith, PhD Ruth E. Malone, RN, PhD

## TABLE OF CONTENTS

Executive Summary	1
Statement of the Issue to be Resolved	<u>6</u>
Background	Z
Endgame-oriented Policies	<u>9</u>
Smokefree Places Retailer-based Interventions	<u>9</u> <u>10</u>
Cautions, Limitations, Gaps, and Conclusion	<u>25</u>
References	27

### **Executive Summary**

Despite dramatic reductions in tobacco use in California since 1988,1 tobacco use continues to be the leading cause of preventable death in California (40,000 people annually),2 with many more disabled by tobacco-caused diseases.3 Moreover, disparities in tobacco use exist and persist relating to age, gender, race, sexual orientation, socio-economic status, access to health insurance, and geography.4 Although there are variations according to the type of tobacco product used, in general, young adults, men, American Indian and Alaska Natives (Tribal Communities), and the lesbian, gay, bisexual, transgender, and questioning (LGBTQ) population have the highest tobacco use rates.4,5 In addition, those with lower levels of education and income use tobacco at higher rates than those with higher educational attainment and income, as do those who lack health insurance or live in rural parts of the state.4 As a result, tobacco-related health burdens are disproportionately borne by people of color, poor people, LGBTQ people, and other marginalized populations.6-9

The progress California has made is largely due to a strong state-funded program that has buoyed local communities to support aggressive policy change at the local and state levels over the last 30 years. Recently, the California Tobacco Prevention Program (CTPP) embraced a paradigm shift from tobacco "control" to tobacco "endgame" strategies with the goal of ending the tobacco epidemic by 2035. A tobacco endgame strategy means moving beyond a focus on tobacco control (and its assumptions that tobacco is here to stay and that regulating the time, place and manner of its use is the objective) toward

a focus on a future free of commercial tobacco.<sup>11</sup> We define the tobacco endgame as: Initiatives designed to change/eliminate permanently the structural, political and social dynamics that sustain the commercial tobacco epidemic, in order to end it within a specific time.<sup>12</sup>

## California's goal is to eliminate the commercial tobacco epidemic for all population groups by 2035.

The communities most harmed by tobaccorelated disparities must be the ones at the forefront of planning and implementation of endgame efforts. Achieving this goal will require attention to which products are used by different populations; ensuring the equitable distribution of benefits; inclusive community-led actions (particularly among members of populations most impacted by tobacco use and exposure); expansion of culturally competent and accessible cessation services; and a focus on not criminalizing tobacco use and people who use tobacco. This goal does not include limiting traditional tobacco use such as tobacco plants grown or harvested and used by American Indians and Alaska Natives for ceremonial or medicinal purposes.

Many California communities in the vanguard of endgame-oriented policies are focusing on **smokefree places** and retailer-based interventions.

Californians are by now accustomed to smokefree workplaces, including restaurants, bars, and other public indoor venues. Recent policy efforts have focused on **multi-unit housing**, designed to protect residents of adjoining units from secondhand smoke, and **outdoor areas** such as parks, playgrounds, and beaches. Such smokefree policies, by further setting public expectations about the scope of smokefree places and denormalizing



smoking, may serve as a springboard for public acceptance of stronger tobacco retail policies. Retailer-based interventions reduce the affordability or availability of tobacco products by raising prices, limiting the type or number of legal sellers, restricting to whom tobacco products may be sold, or prohibiting the sale of some or all tobacco products.

A first step for communities should be establishing a local **tobacco retail licensing** (TRL) system with a fee large enough to fund administration and enforcement activities.<sup>13</sup> As of October 2023, 226 California localities have adopted TRLs.<sup>14</sup> Evidence from California shows that they are associated with reductions in illegal sales to minors, lower smoking prevalence among youth, and a decline in the number of tobacco retailers.

Raising tobacco prices by establishing a minimum floor price (MFP) below which tobacco products cannot be sold, coupled with minimum pack size requirements and prohibiting the use of coupons or other discounts, is another retailer-based intervention adopted by several California jurisdictions. Research on their effectiveness is currently limited to predictive models that suggest that MFP laws will reduce tobacco use, particularly among low-income populations. Research on tobacco taxes, which shows that

tobacco tax increases are an effective means of reducing tobacco use prevalence on a population level by preventing tobacco initiation, promoting cessation, and reducing tobacco consumption, <sup>15</sup> also suggests that MFP laws will reduce tobacco use. Minimum floor price policies should be paired with free cessation services to reduce the economic burdens on lowincome people by giving them tools to quit using tobacco.

Some California cities and counties have restricted the number or types of retailers permitted to sell tobacco products in order to reduce youth access to tobacco products, exposure to tobacco advertising, tobacco retailer density, and tobacco use disparities; to increase tobacco search and purchase costs; and to denormalize the tobacco industry. Approaches include eliminating tobacco sales in pharmacies, establishing retailerfree buffer zones around schools or other youth-oriented places, only allowing tobacco sales in adults-only (or tobacco-only) stores, requiring a minimum distance between retailers, and limiting the number of licenses **issued** (based on geographic area or population). An approach that has not yet been tried in California is **eliminating** tobacco sales in other specific types of retail outlets (e.g., grocery and/or convenience stores). Research examining the potential or actual impact of such policies has largely focused on their impact on retailer density, with studies consistently predicting or determining that these policies reduce the number of tobacco retailers.

A retailer-based intervention that is beginning to receive some attention in California is the **birthdate-based sales restriction**, a policy that prohibits the sale of tobacco and vape products to

those born after a particular date (e.g., January 1, 2010). This would have the effect of annually increasing the age of legal purchase, while allowing sales to all current legal purchasers in perpetuity, gradually reducing tobacco uptake and use, and eventually phasing out tobacco sales entirely. To date, no California localities have implemented this policy.



An emerging endgame-oriented approach among California localities is to **prohibit** the sale of some or all tobacco **products** in order to reduce tobacco initiation, increase quit attempts, and reduce tobacco use disparities. At least 83 localities have adopted policies banning the sale of all flavored tobacco **products**, most before the state-wide ban, which contains some exemptions, was put in place.<sup>17</sup> Two cities have gone further, prohibiting the sale of all **tobacco products** within their borders. Evidence of the effectiveness of these emerging policies is limited but promising. For example, research examining flavored tobacco use among residents of California jurisdictions with comprehensive, partial, or no flavored tobacco product restrictions found that only comprehensive restrictions were associated with a lower likelihood of flavored tobacco product use.18



Although Californians have not been asked to give their opinion on all the endgameoriented policies discussed here, there are high levels of public support for several of them, including what might be considered the boldest action, eliminating the sale of some or all tobacco products. In 2022, 59.6% of California adults (aged 18-64) agreed or strongly agreed that the sale of cigarettes should be gradually banned; in 2021, 36.0% agreed or strongly agreed that their sale should be immediately banned.19 California's endgame efforts must also include a commitment to evaluation and data collection to track disparities and unintended consequences, and to ensure that the state is meeting its disparities reduction goals.

## International endgame discussions and goals

There is a growing global discussion about ending (rather than merely controlling) the tobacco epidemic; California is by no means alone in setting an endgame target and working on innovative policies to achieve it. Many countries have asserted what are characterized as tobacco endgame goals. These generally are stated as a smoking prevalence below 5% or more vaguely as the country being "smokefree" or "tobacco free" by a specific date 5 to 15 years in the future (see **Table 1**). While California has already nearly achieved the 5% smoking prevalence goal, with smoking at 6.1% as of 2022,20 rates among specific populations remain higher, and the total tobacco use rate is 10.9%, 20 so work remains. California's experience also suggests that the goals other countries have set, while significant, will require additional policy innovations to ensure that commercial tobacco use becomes minimal and the tobacco industry is permanently disempowered.

Table 1. Tobacco endgame goals, by country

Country	Goal	Target date
New Zealand <sup>21</sup>	<5% daily smoking for all population groups	2025
England <sup>22</sup>	"smokefree"	2030
Ireland <sup>23</sup>	<5% smoking prevalence	2025
Canada <sup>24</sup>	<5% smoking prevalence	2035
Australia <sup>25</sup>	<5% smoking prevalence	2030
Sweden <sup>26</sup>	<5% smoking prevalence	2025
Finland <sup>27</sup>	<5% smoking prevalence	2030
riniand <sup>27</sup>	2% smoking prevalence	2040
Bangladesh <sup>28</sup>	"tobacco free"	2040
Scotland <sup>29</sup>	<5% smoking prevalence	2034
France <sup>30</sup>	<5% smoking prevalence	2032
Netherlands <sup>31</sup>	"smokefree generation" (no children smoking)	2040
Slovenia <sup>32</sup>	<5% smoking prevalence	2040
Belgium <sup>33</sup>	<5% smoking prevalence	2040

#### Statement of the Issue to be Resolved

Despite dramatic reductions in tobacco use in California since 1988,¹ tobacco use continues to be the leading cause of preventable death in California (40,000 people annually),² with many more disabled by tobacco-caused diseases.³ In addition to primary tobacco use, secondhand smoke causes disease and death in non-users.³⁴ Non-cigarette forms of tobacco use, while less deadly, also negatively impact health.³⁵-³7

Moreover, in California, disparities in tobacco use exist and persist related to age, gender, race, sexual orientation, socio-economic status, access to health insurance, and geography.4 Although there are variations according to the type of tobacco product used, in general, young adults, men, American Indian and Alaska Natives (Tribal Communities), and the lesbian, gay, bisexual, transgender, and questioning (LGBTQ) population have the highest tobacco use rates.4,5 In addition, those with lower levels of education and income use tobacco at higher rates than those with higher educational attainment and income, as do those who lack health insurance or live in rural parts of the state.4 As a result, tobacco-related health burdens are disproportionately borne by people of color, poor people, LGBTQ people, and other disadvantaged populations.6-8

Tobacco use has major negative impacts on family life and work productivity and negative economic effects on society as a whole through health care costs, environmental clean-up, absenteeism, and other factors.<sup>38</sup> In 2009, the healthcare costs of smoking in California were estimated to be \$9.8 billion, with an additional \$1.4 billion in lost productivity

from illness, and \$6.8 billion in lost productivity from premature mortality.<sup>2</sup> Tobacco products are both widely available and heavily promoted across the state, contributing to the disconnect often noted by members of the public between the public health emphasis on the products' deadliness and their ubiquitous availability.<sup>39</sup>

The progress California has made is largely due to a strong state-funded program that has buoyed local communities to support aggressive policy change at the local and state levels over the last 30 years. Clean indoor air laws covering workplaces, restaurants, bars, parks, playgrounds, beaches, and most recently, multi-unit housing, have denormalized smoking by restricting where it can take place and normalized clean air. Tobacco taxes, including funds dedicated to tobacco control, have increased the price of tobacco use and strengthened tobacco control efforts. Some local restrictions on the types or locations of stores that can obtain licenses to sell tobacco have reduced the number and density of retailers, and restrictions on sales of flavored tobacco in numerous localities have reduced availability of the products most tobacco users start with and many find harder to guit. The state and localities also support tobacco cessation (e.g., through the statewide helpline, Kick It California) and prevention activities.

### **Background**

Given California's successes in achieving the second-lowest smoking prevalence among U.S. states, the California Tobacco Control Program (CTCP) has embraced a paradigm shift from tobacco "control" to tobacco "endgame" strategies with the goal of ending the commercial tobacco epidemic by 2035.10 A tobacco endgame strategy means moving beyond a focus on tobacco control (and its assumptions that tobacco is here to stay and that regulating the time, place and manner of its use is the objective) toward a focus on a future free of commercial tobacco. 11 No single definition of an endgame has yet emerged, but most literature suggests these assumptions: it will involve changing the status quo; it will require addressing the addictive nature of tobacco use; and it must explicitly address the most deadly combustible forms of tobacco products through additional measures, which may include phasing out tobacco sales.<sup>39-42</sup> We define the tobacco endgame as follows: Initiatives designed to change/eliminate permanently the structural, political and social dynamics that sustain the commercial tobacco epidemic, in order to end it within a specific time. 12

California is uniquely positioned to achieve a tobacco endgame, due to the effectiveness of its state tobacco control program in changing public views of tobacco and of the tobacco industry, 43 public support for stronger policy measures, 44 and dedicated resources. The state's system of encouraging coalition and policy development at the local level means that multiple new policies are being tried, and further innovation is likely. Different localities may develop varying policy approaches, and their

experimentation is part of an important policy development practice.



California's goal is to eliminate the commercial tobacco epidemic for all population groups by 2035. Since some communities of color and LGBTQ communities still have higher than average rates of tobacco product use, these communities must be involved in leading the planning and implementation of endgame efforts. Achieving this goal will require attention to which products are used by different populations, including smokeless and other alternative tobacco and nicotine products; strategies that address the social determinants of health that undergird tobacco use and resulting health disparities; ensuring the equitable distribution of benefits; community buyin; expansion of culturally competent cessation services; and a focus on not criminalizing tobacco use and users. This goal does not include limiting traditional tobacco use such as tobacco plants grown or harvested and used by American Indians and Alaska Natives for ceremonial or medicinal purposes.<sup>45</sup>

#### TOBACCO SALES AND SOVEREIGN TRIBES

Tribal Communities are both part of the state (geographically) and sovereign (i.e., largely not subject to state laws) and many of them are engaged in tobacco sales.



Tribal Communities thus have potential to be a unique and important factor in the success or failure of the state's tobacco endgame.

Tobacco use and sales by Tribal Communities present two kinds of issues for endgame policymaking. First, from an equity standpoint, these populations have very high tobacco use prevalence rates. This prevalence stems from a history of genocidal practices against Tribal Communities, and from tobacco industry exploitation of Tribal Communities' resulting vulnerability.<sup>46</sup> The tobacco industry has also exploited Native American culture and imagery to market its products.<sup>47</sup>

Many Tribal Communities have traditions that call for the ceremonial or ritual use of tobacco; however, these practices were suppressed, resulting in the use of commercial tobacco instead. Suggestions for addressing this issue include

developing programs and relationships that respect traditional tobacco use and empower the return to those practices, clarifying the differences between commercial cigarettes and traditional tobacco plants. It will also be important to support smokefree and other tobacco control policy development on Tribal lands, guided by Tribal health leaders.<sup>48</sup>

The second, related problem is tax-free sales on lands, to both Tribal and non-tribal people. Because Tribal lands are sovereign, any laws or ordinances passed by localities or the state that limit or end tobacco sales would not apply to stores on Tribal lands. Similarly, Native American tobacco sellers currently are not subject to measures that raise taxes or establish minimum prices. Technically, Tribal tobacco sellers are supposed to collect applicable taxes for sales to non-tribal customers; however, there are no means to enforce this. Tribal sellers are not obligated to collect taxes on sales to Tribal customers.<sup>49</sup>

This situation means that even if the state as a whole were to prohibit sales of particular tobacco products, those products could remain for sale from stores on Tribal lands. One solution to this problem would be to reach cooperative agreements or compacts with the various tribes regarding sales to non-tribal customers and other issues of importance to the tribes. Some appeal might also be made to tribal governments regarding their ability to affect the health of their own people as well as other communities, particularly other communities that have suffered inordinately from tobacco industry predation.

### **Endgame-oriented Policies**

Many California communities in the vanguard of endgame-oriented policies are focusing on smokefree places and retailer-based interventions.

Comprehensive smokefree policies,

by further setting public expectations about the scope of smokefree places and denormalizing smoking, may serve as a springboard for public acceptance of stronger tobacco retail policies.

#### **SMOKEFREE PLACES**

**Purpose:** To denormalize smoking, reduce tobacco use, and reduce/minimize exposure to secondhand tobacco smoke. <sup>50-56</sup> Because these policies may disproportionately impact low-income people, including people of color and LGBTQ people, they should be paired with cessation services. Communities considering these policies should also contemplate unintended consequences, such as risk of housing insecurity and homelessness.

## **Proposed policy:** Establish smokefree outdoor places (e.g., beaches and parks).

#### Adoption in California:

Examples include Alpine and Santa Cruz Counties, Mammoth Lakes (Mono County), Fortuna (Humboldt County), Clear Lake (Lake County), Mt. Shasta (Siskiyou County), Turlock (Stanislaus County), and Santa Monica (Los Angeles County). 57,58

#### Evidence of potential or actual impact:

 New York City: After New York City's parks and beaches became smokefree in 2011, residents were significantly less likely to notice people smoking in local parks and beaches, compared to residents of the state as a whole.<sup>59</sup>

 Vancouver, Canada: Twelve months after the introduction of smokefree parks and beaches in 2010, observed smoking at these venues declined, with a significantly greater reduction at parks compared to beaches.<sup>60</sup>

#### **Proposed policy:** Establish smokefree multi-unit housing.

#### Adoption in California:

Examples include Belmont (San Mateo County), Cotati (Sonoma County), Crescent City (Del Norte County), Pasadena (Los Angeles County), and Richmond (Contra Costa County).<sup>61</sup>

#### Evidence of potential or actual impact:

 Self-reports of smoking behavior and secondhand smoke exposure: Several studies show that residents living in affordable multi-unit housing report smoking less and quitting smoking at higher rates after their buildings went smokefree. <sup>56,62,63</sup> People who don't smoke also report a significant reduction in indoor exposure to secondhand smoke, and no change in exposure to outdoor secondhand smoke. <sup>63</sup>

 Environmental monitoring of secondhand smoke exposure: Three studies show declines in secondhand smoke levels in common areas of newly smokefree public housing one month,<sup>64</sup> one year,<sup>65</sup> and two to three years after implementation.<sup>66</sup> Another study showed a modest reduction in secondhand smoke levels in hallways, but no change in secondhand smoke levels in stairwells and inside nonsmoking apartments one year after a federal ban on smoking in public housing went into effect.<sup>67</sup> Smokefree multi-unit housing policies are dependent on engagement from property managers and tenants for enforcement, which can be a weakness.

#### RETAILER-BASED INTERVENTIONS



Retailer-based interventions focus on altering the affordability or availability of tobacco products at the point of sale by raising prices, limiting the number or type of legal sellers, or restricting the types of products that may be sold or to whom they may be sold. A first step for

communities should be establishing a local tobacco retail licensing system with a fee large enough to fund administration and enforcement activities.13 The state of California requires tobacco retailers to obtain a license and pay an annual fee, and licensed retailers are subject to state and federal laws concerning tobacco sales; however, these laws are difficult to enforce at the local level.<sup>13</sup> A local licensing system enables jurisdictions to identify and collect data on retailers and enforce existing local policies; it also enables future retailer-based enforcement. TRLs also form the basis for future, stronger policies, such as prohibiting sales of flavored products or requiring pharmacies to be tobacco-free.

#### TOBACCO RETAIL LICENSING (TRL)

**Purpose:** To help enforce existing retailer laws, reduce retailer density and reduce youth smoking prevalence. 13,68

Proposed policy: Require tobacco retailers to pay an annual fee to obtain and maintain a local license and to face penalties, including the loss of the license, for failure to comply with local, state, and national tobacco laws.

#### Adoption in California:

241 local jurisdictions (as of June 30, 2020) including Firebaugh (Fresno County), Fremont (Alameda County), Calexico (Imperial County), Oroville (Butte County), Sebastopol (Sonoma County), and Los Angeles and Mendocino Counties.<sup>14</sup>

#### Evidence of potential or actual impact:

- California: After 26 communities introduced strong TRL systems, retail sales to minors declined in all but one community; in 11 communities, there was a more than 30% drop in illegal sales to minors.<sup>68</sup>
- Kern County: In 2006, Kern County adopted a TRL ordinance for unincorporated areas of the county; over a period of 10 years, 8 cities within the county also adopted it. One novel component was requiring retailers with a history of failing compliance checks to pay a higher permit fee. Between 2016 and 2018, the proportion of county tobacco retailers who violated the TRL fell from 12 to 4 percent.<sup>69</sup>
- Santa Clara County: After the introduction of a TRL system with a \$425 annual fee, 31% of retailers who formerly sold tobacco chose to discontinue sales rather than pay the fee.<sup>70</sup>

- Southern California: High school students living in jurisdictions with strong TRL systems, including an adequate fee to cover compliance checks, were less likely than those living in jurisdictions with no TRL system or with an underfunded system to have ever smoked or to have smoked in the past 30 days. One and a half years later, when students were legally able to purchase tobacco, those living in jurisdictions with stronger TRL systems were less likely to report cigarette or e-cigarette initiation.<sup>71</sup>
- Australia: Raising the yearly fee for a tobacco license from \$A12.90 to \$A200 resulted in a 31% decline in licensees.<sup>72</sup>

**Pros and cons:** Educating retailers about licensing requirements can serve to facilitate communication with them about helping them prepare for continued declines in tobacco use, perhaps reducing opposition. It may seem counterintuitive to push for a TRL if the intention is to eventually end sales. In addition to creating a path to remove products currently for sale, however, licensure also enables control over sales of future newly marketed tobacco and nicotine products, mitigating the problems that stem from static laws attempting to regulate a moving product target. TRLs can also be difficult to enforce, requiring funding and buy-in from the relevant agency, often the local police department.

#### RAISING TOBACCO PRODUCT PRICES

Purpose: To reduce tobacco use.15

**Proposed policy:** Establish a minimum floor price below which tobacco products cannot be sold.

#### Adoption in California:

Examples include Sonoma County and the cities of Fremont, Berkeley, and Oakland (Alameda County).<sup>73-76</sup>

#### Evidence of potential or actual impact:

- California: Models predicting the short-term effects in California of six different minimum floor price options show that, for all options, smoking prevalence and cigarette consumption decrease, particularly among those living in low-income households. The highest modeled floor price (\$9.50 per pack) reduced smoking prevalence by 4.6% among those in low-income households, versus 4.0% among people in higher-income households.<sup>77</sup>
- Oakland, California: A simulation of a minimum floor price law ranging from \$8.00 to \$13.00 per pack of cigarettes projected that smoking prevalence would decline by 0.3% to 0.8% (868 to 2,716 fewer people who smoke), with the greatest reductions among those aged 12-24, of non-Hispanic Black or other race/ethnicity, and living below the federal poverty level.<sup>78</sup>
- US: Models suggest minimum floor price is more effective than traditional tax policies in reducing income-based smoking disparities, producing larger reductions in consumption among low income people who smoke.<sup>79</sup>
- US: a large body of work shows that tobacco tax increases are an effective means of reducing the prevalence of

tobacco use on a population level by preventing smoking initiation, promoting cessation, and reducing tobacco consumption.<sup>15</sup>

**Pros and cons:** Minimum floor price laws are most effective when they complement (rather than replace) high tobacco taxes.80 To help keep effective tobacco prices high, they must be combined with minimum pack size requirements for tobacco products (e.g., cigars and little cigars) and a ban on manufacturer coupons or other trade discounts. Because minimum floor price laws generate revenue for retailers and manufacturers, not governments, they may face less industry opposition.<sup>78</sup> If vaping products are to be included, jurisdictions must establish a "pack equivalent" standard for such products, as no shared standard has been adopted. Minimum prices of vaping products, which are taxed on an ad valorem basis (a percentage of the price) would create increased tax revenues. In jurisdictions with high poverty rates, minimum floor price laws may be a difficult ask for elected officials, requiring creativity in message development. Marin County tobacco control advocates are considering an approach that supports tobacco retailers making the transition away from selling tobacco, proposing that the additional revenue generated by a minimum price law is retained by or returned to retailers to use in preparing for a time-established end to tobacco sales.

#### LIMITING THE NUMBER OR TYPES OF RETAILERS PERMITTED TO SELL TOBACCO

**Purpose:** To reduce youth access to tobacco products, 81-84 exposure to tobacco advertising (associated with youth smoking prevalence),85-87 and tobacco retailer density (associated with smoking prevalence);88-94 to increase tobacco search and purchase costs;<sup>95</sup> and to denormalize the tobacco industry.<sup>42</sup> Retailer limitations can apply to some products (e.g., flavored tobacco products, combustibles) or to all tobacco products. Many California communities are still highly segregated, so policymakers should consider how retailer density policies will specifically impact communities of color; however, because there is frequently higher density of tobacco outlets in low-income communities of color, these policies may reduce tobacco use disparities.96-105

#### Proposed policy: Ban tobacco sales in pharmacies.

#### Adoption in California:

Examples include Cloverdale (Sonoma County), East Palo Alto (San Mateo County), Hermosa Beach (Los Angeles County), Hollister (San Benito County), and San Francisco, where it was successfully defended against a tobacco industry legal challenge.106,107

#### Evidence of potential or actual impact:

- California: Cities with a pharmacy sales ban experienced a nearly 1.5 times greater decrease in tobacco retailer density than cities without a ban. 108
- US: Discontinuance of tobacco sales at the drugstore chain CVS was associated with a decline in cigarette

- pack purchases, 109 a reduction in the number of cigarettes smoked per day among non-daily smokers, 110 and with increases in quit attempts in areas with high CVS density.111
- New York City: Following the implementation of New York City's 2017 tobacco-free pharmacy law, tobacco retailer density declined by an average of 6.8% throughout the city. However, density reduction was less pronounced (or entirely absent) in neighborhoods with more marginalized populations, including neighborhoods with higher proportions of racial and ethnic minorities, low income residents, and uninsured residents.112

#### Proposed policy: Ban tobacco sales in other types of retail outlets (e.g., grocery and/or convenience stores).

#### Adoption in California:

No California localities have adopted this policy.

#### Evidence of potential or actual impact:

Modeling suggests that eliminating tobacco sales in convenience stores would reduce tobacco retailer density in urban and suburban areas to a greater degree than eliminating tobacco sales in pharmacies; however, the greatest impact would be on wealthier suburban neighborhoods.95

13

## **Proposed policy:** Create retailer-free buffer zones around schools or other youth-oriented places.

#### Adoption in California:

Examples include Benicia (Solano County), Mendota (Fresno County), Riverbank (Stanislaus County), and Cupertino (Santa Clara County).<sup>113-116</sup>

#### Evidence of potential or actual impact:

- Philadelphia: School buffer zones (500 feet) (with existing retailers grandfathered in) reduced the average number of retailers near schools by 22% after three years.<sup>117</sup>
- North Carolina: School buffer zones (1000 feet) would reduce tobacco retailer density by 18% statewide.<sup>118</sup>

- Missouri and New York: School buffer zones (1000 feet) would reduce tobacco retailer density and enhance equity, by reducing or eliminating income- and race-based disparities in density.<sup>119</sup>
- Texas (4 largest metropolitan areas):
   School buffer zones (1000 ft) would reduce the number of tobacco retailers near schools by 16.2%, and the number of tobacco ads youth were exposed to near schools by 19.4%, with an even greater reduction in e-cigarette advertising (27.7% near middle schools).

## **Proposed policy:** Restrict some or all tobacco sales to adults-only (or tobacco-only) stores.

#### Adoption in California:

South San Francisco (San Mateo County) (flavored tobacco products only);<sup>113,121</sup> Oakland (Alameda County) (flavored tobacco products only, from 2017-2020);<sup>122</sup> Walnut Creek (Contra Costa County) (flavored hookah tobacco only).

#### Evidence of potential or actual impact:

- Oakland, CA: One year after Oakland restricted sales of flavored tobacco products to adult-only retailers, high school youth vaping declined from 11.2% to 8.0% and high school youth smoking declined from 4.4% to 2.4%.<sup>123</sup>
- Evidence from several East Coast cities that have restricted the sale of flavored

- tobacco products (excluding menthol) to adult- or tobacco-only establishments shows that such restrictions reduce the likelihood of teens ever trying a flavored tobacco product or ever using any tobacco product,<sup>124</sup> and reduce current use of any tobacco product (including e-cigarettes)<sup>125-127</sup>
- Modeling studies show that substantial tobacco outlet reduction dramatically reduces tobacco availability and smoking cues<sup>128</sup> as well as smoking prevalence;<sup>129</sup> however, depending upon how the reduction is carried out, it may not eliminate health disparities due to higher tobacco retailer density in disadvantaged neighborhoods.<sup>128</sup>

#### Proposed policy: Require minimum distance between tobacco retailers.

#### Adoption in California:

Examples include Auburn (Placer County), Hermosa Beach (Los Angeles County), Los Gatos (Santa Clara County), Sacramento, and Santa Maria (Santa Barbara County).<sup>113,130-134</sup>

#### Evidence of potential or actual impact:

 North Carolina: Minimum retailer distance policy (500 feet) reduces tobacco retailer density by 22% statewide.<sup>118</sup> Texas (4 largest metropolitan areas):
 Minimum retailer distance policy (500 feet) for tobacco retailers located near schools would result in a 21.5% reduction in the number of retailers, and a 17.9% reduction in total tobacco advertising near schools, with an even greater reduction in e-cigarette advertising (33.3% near middle schools).

## **Proposed policy:** Limit the number of licenses issued (based on geographic area or population).

#### Adoption in California:

Examples include Alameda, Huntington Park (Los Angeles County), San Francisco, Oroville (Butte County), and Yolo County. 135-138

#### Evidence of potential or actual impact:

- San Francisco: Nearly six years after the city's cap of 45 licenses per supervisorial district was implemented, the number of tobacco licenses fell by 30%, with greater declines in the districts that initially had more retailers.<sup>139</sup>
- Philadelphia: Three years after implementing multiple retailer license restrictions, including a cap of 1 retailer per 1000 daytime residents and a 500 foot buffer zone around schools, the number of tobacco retailers declined by 20%, with low-income neighborhoods benefiting slightly more.<sup>117</sup>
- New York City: Four years after the city capped the number of tobacco retail licenses at 50% of those issued in 2017 (with no new licenses issued in a district until the total falls below the cap through attrition), tobacco retailer density declined by 30%, with greater declines in districts with higher proportions of Black residents and lower levels of income.<sup>140</sup>

 Ohio: Simulation models comparing various licensing strategies showed that a cap of 0.7 tobacco retailers per 1000 residents had the largest single impact on density, removing 29.6% of retailers, and reducing income- and geography-based disparities in retailer density (urban vs. suburban and urban vs. rural).<sup>141</sup>

**Pros and cons:** Retailers may object to many of these proposals; however, it is worth noting that support for tobacco control policies tends to increase over time, not only among the general public, 142-144 but also among affected businesses. For example, when California first passed its 1998 smokefree bar law, only 17.3% of bar owners or staff working in stand-alone bars preferred to work in a smokefree environment; four years later, that figure rose to 50.9%. 145

The successful adoption of these policies in many California localities suggests that they are politically feasible. A ban on sales of tobacco in pharmacies is particularly popular with the public; 146 however, lower-income neighborhoods, and neighborhoods with high concentrations of African American and Hispanic residents are likely

15

to benefit least from this policy, since pharmacies typically make up a smaller proportion of tobacco retailers in these neighborhoods. 112,147 Without additional enforcement measures, restricting sales of some or all tobacco products to tobacco-only stores may not achieve significant reductions in youth smoking as in California tobacco-only and vape shops have been found to have the worst records of illegal sales to minors. 148 In addition, compared to rural areas, urban areas are likely to see a smaller reduction in the number of tobacco retailers. 149

A set of retailer reduction policies may be required to have the greatest impact on tobacco use disparities. Modeling suggests, for example, that a 1500-foot buffer zone around schools and retailers, combined with a ban on tobacco sales in convenience stores and a 50% cap on retailers will achieve the greatest reductions in retailer density and largest increases in costs to obtain and purchase tobacco.



Capping the number of licenses and restricting their transfer may slowly reduce retailer numbers as existing retailers retire or otherwise leave the business. Policies that establish restrictions on retailers based on location (e.g., buffer zones, minimum distances between retailers) may require jurisdictions to invest in Geographic Information Systems software and training for enforcement. Restrictions based on location also run the risk of appearing selective or unfair, since two retailers in close proximity may be treated differently. Any policy with exemptions or exceptions should be written carefully, to prevent retailers from attempting to use these as loopholes (e.g., curtaining off a section of a convenience store to be "adults only"). "Adults only" policies may also incentivize retailers to exclusively sell tobacco products, entrenching their opposition to further endgame policies, such as ending sales. In general, policies without exemptions are easier to understand, justify, enforce, and defend legally.

## RESTRICTING TO WHOM TOBACCO PRODUCTS MAY BE SOLD: BIRTHDATE-BASED SALES RESTRICTIONS (BSR)

**Purpose:** Prohibiting the sale of nicotine products to anyone born after a particular date (e.g., January 1, 2010) would have the effect of continously raising the age at which individuals can be sold tobacco, while allowing sales to all current legal purchasers in perpetuity, gradually phasing out the legal sale of tobacco products and gradually reducing tobacco uptake and use.<sup>221</sup>

#### Adoption in California:

No cities in California have adopted a BSR policy as of June 2024. Under the Federal Family Smoking Prevention and Tobacco Control Act, states may raise the legal age for legal sales above the national age minimum of 21. However, whether localities in California may raise the age for legal sales is more ambiguous. Although the STAKE Act expressly permits such action, the California penal code prohibits local ordinances "inconsistent with" the Tobacco 21 law. A previous case involving a local licensing law stricter than the state law found that the local law was not "inconsistent with" the state law, suggesting that courts may find similarly that a BSR ordinance is consistent with Tobacco 21. Proponents have also argued that BSR is not an age restriction, but a birthdate restriction.<sup>151</sup> However, as with any new policy, it is possible that a locality that enacted such an ordinance might have to defend it from litigation.

#### Evidence of potential or actual impact:

 The city of Brookline, MA passed a BSR policy in 2021 (with anyone born on or after January 1, 2000 prohibited from purchasing tobacco or vaping products).<sup>152</sup> Once the law was upheld by the Massachusetts Supreme Judicial Court, several other cities passed similar laws, including Wakefield, Stoneham, Melrose, and Winchester. Other cities in Massachusetts have announced intentions to do so. No evaluation results have yet been reported. The statute has survived legal challenges.<sup>153</sup>

**Pros and cons:** The main advantage to BSR as a policy is that, because it does not affect current legal tobacco users and focuses on younger generations, it may be easier to establish than a sales ban. It also "draws a line in the sand" by making it clear that at some point in the future, it will no longer be legal to sell tobacco products to anyone. However, although a BSR policy could be part of a comprehensive tobacco endgame strategy,154 modeling studies suggest that on its own, it would take many years to have a significant impact. For example, one New Zealand-based study estimated that on its own, BSR would not reach its highest impact until the year 2070. 129 Another study, based in the Solomon Islands, estimated that a BSR policy would take at least 20 years to achieve its greatest impact on health-adjusted lifeyears. 155 A Singapore-based study found that BSR would take nearly 40 years to achieve an endgame goal. 156 Jurisdictions contemplating whether to pursue a BSR policy should consider enforcement context, equity impact, and the very long term trajectory of BSR. Ideally, such a policy would be enacted as part of a package of measures.<sup>221</sup>

## BANNING THE SALE OF SOME OR ALL TYPES OF TOBACCO PRODUCTS

**Purpose:** To reduce tobacco initiation, increase quit attempts, and reduce tobacco use disparities; <sup>157-160</sup> to reduce tobacco product waste and its associated environmental harms (leachate from cigarette butts can harm or kill both vertebrates and invertebrates, <sup>161</sup> and e-cigarettes frequently contain elements known to be hazardous, such as nicotine, benzene, toluene, and toxic metals) <sup>161,162</sup> and to lower costs associated with clean-up (including costs related to beach and waterway cleanup, street sweeping, installation of storm water capture devices, storm drain cleaning and maintenance, manual cleanup of litter, and public anti-littering campaigns). <sup>161,163</sup>

Proposed policy: Prohibit the retail sale of flavored tobacco products at the local level (to close loopholes that exist in the recently-enacted state law, and allow for more robust enforcement).



#### Adoption in California:

Examples include Carpinteria (Santa Barbara County), Delano (Kern County), Imperial Beach (San Diego County), Paradise (Butte County), San Francisco, Watsonville (Santa Cruz County), and Mendocino and Mono Counties.<sup>17,116</sup>

#### Evidence of potential or actual impact:

 San Francisco: After enforcement of the city's comprehensive tobacco flavor ban began in 2019, weekly flavored tobacco sales declined by 96% and total tobacco sales declined by 25%.<sup>164</sup> A survey of a convenience sample of young adult San Francisco residents who reported using tobacco products before the ban found a lower

- prevalence of both flavored tobacco product use and any tobacco product use after the ban, and nearly 21% of those who exclusively used flavored e-cigarettes before the ban quit.<sup>165</sup>
- California localities: Residents of jurisdictions with comprehensive flavored tobacco product restrictions were 30% less likely to use any flavored tobacco compared to residents of jurisdictions with no restrictions, while residents of jurisdictions with partial restrictions were equally likely to use flavored tobacco products as residents of jurisdictions with no restrictions.<sup>18</sup>
- San Francisco Bay Area: A comparison of 7 Bay Area jurisdictions with partial or comprehensive flavored tobacco restrictions with Bay Area jurisdictions with no restrictions found no change in current or ever e-cigarette use among high school students exposed to restrictions one year after the policies went into effect. However, while almost daily use of e-cigarettes increased pre- to post-policy, this increase was statistically significant only among students not exposed to flavored tobacco restrictions. However,

#### Proposed policy: Prohibit the retail sale of tobacco products.

#### Adoption in California:

Beverly Hills (Los Angeles County) (tobacco products and electronic cigarettes, with exemptions for cigar lounges and hotel concierge sales to guests)<sup>167</sup> and Manhattan Beach (Los Angeles County) (all tobacco products and electronic smoking devices),<sup>168</sup> both effective January 2021.

#### Evidence of potential or actual impact:

 Although no evaluations have yet been published of the impact of the policies on tobacco use behaviors, two studies have explored Beverly Hills and Manhattan Beach retailers' perceptions of the new laws. One study, conducted in January 2021, reported on awareness of, compliance with and support for the new laws at the they went into effect. Among participating retailers (n=16), all were aware of the laws and most found compliance easy; however, most opposed them.<sup>169</sup> A second study, conducted 22 months post-implementation, found that managers at most large chain stores had no complaints about the tobacco sales bans, while small retailers were more dissatisfied, primarily due to perceived revenue losses. Small retailers also objected to the limited geographic area covered by the laws, and to exemptions for certain businesses in Beverly Hills.<sup>170</sup>

**Pros and cons:** Flavor bans may set the stage for phasing out all tobacco sales, by normalizing the idea of ending sales of whole classes of tobacco products, and by foregrounding the inconsistency of removing from sale only a portion of these products while leaving the most deadly on the market. Ending sales represents the most concrete way to end the perception that cigarettes are an ordinary consumer product, and that the tobacco industry



is a normal industry.<sup>42</sup> Although a ban on the sale of combustible tobacco products is likely to face industry opposition, it is currently unclear what form this opposition will take, as tobacco manufacturers have not yet taken action against Beverly Hills or Manhattan Beach's ordinances. Legal challenges are always possible, but the 2009 Family Tobacco Control and Prevention Act specifically permits states and localities to adopt sales restrictions, including bans on sales of products altogether, and analysis of applicable laws suggests that local ordinances are likely to be upheld. The history of tobacco control suggests that each locality taking this step may enable others to do likewise.<sup>171</sup>

In implementing flavor bans, local governments will need to consider how to define flavored products (through both obvious (e.g., "mint") and implied or concept (e.g., "arctic") descriptors. A more comprehensive flavor ban (e.g., one that encompasses all combustible tobacco products and e-cigarettes) will also reduce the likelihood of product substitution. Localities may wish to consider increasing availability of cessation programs and tools as an accompaniment to flavor or total sales bans.

No jurisdictions have adopted endgameoriented policies with the explicit rationale of reducing harms from tobacco product waste. Cigarette butts are not biodegradable, and take up to 14 years to decompose, 161 presenting a persistent aesthetic problem as well. There have been some explorations of the potential for recycling cigarette butts;<sup>174,175</sup> however, even if this is technically possible, the problem of collection remains. Research done by the tobacco industry suggests that people who smoke are highly unlikely to retain their butts until they can be disposed of properly, making efficient or cost-effective recycling schemes unlikely.<sup>176</sup> In one study, policy proposals designed to reduce tobacco product litter or waste (e.g., a litter fee on cigarettes and a ban on sales of filtered cigarettes) received more support from people who understood that filters are neither biodegradable nor effective at preventing harm to those who smoke.<sup>177</sup> Educational campaigns on these themes might improve policy acceptance. Educational campaigns regarding the unsightliness of tobacco product waste might also target tobacco retailers, who may appreciate less cigarette butt litter outside their stores, as was the case for one Manhattan Beach retailer after tobacco sales ended there. 170



### **Public opinion**

Although Californians have not been asked to give their opinion on all the endgame-oriented policies discussed here, there are high levels of public support among youth and adults for several of them, including what might be considered the boldest, banning the sale of some or all tobacco products.

The California Adult Tobacco Survey shows strong support for smokefree environments. In 2022, 64.2% of adults (aged 18-64) agreed that smoking in all public places should be banned, and 66.3% agreed that all apartment rental units should be smokefree, vape-free, and marijuana smokefree.<sup>20</sup>

Support is also high for prohibiting tobacco sales in particular locations. In 2021, 61.8% of California adults agreed that pharmacies should not sell tobacco products. 19,20 Among high school students, support for a pharmacy sales ban for particular tobacco products (e.g., cigarettes, little cigars, hookah, and e-cigarettes) ranged from 58.6% (e-cigarettes, not including JUUL) to 68.4% (cigarettes). 178 In 2022, 76.7% of California adults agreed that tobacco retailers should not be allowed near schools. 20

Among adults, there is majority support for a ban on the use of tobacco product coupons or discounts: in 2022, 61.4% of California adults agreed that tobacco products should not be sold at a discount and 60.3% agreed or strongly agreed that coupons, rebates, buy 1 get 1 free, 2 for 1, or any other special promotions for tobacco purchases should be banned.<sup>20</sup>

A majority of Californians support ending the sale of certain types of tobacco products. The 2022 Adult Tobacco Survey found that 64.2% supported a ban on the sale of single-use tobacco products, while 62.4% supported a ban on the sale of filtered cigarettes.<sup>20</sup> Over 59% agreed that the sale of flavored tobacco products should not be allowed, while a somewhat smaller percentage (55.9%) agreed that "the sale of menthol cigarettes should not be allowed."<sup>19</sup>



Californians express surprisingly high levels of support for gradual and, in some cases, immediate bans on the sale of tobacco products, given that there has never been a campaign to advocate for this step.

In 2018, 73.4% of California high school students agreed or strongly agreed that the sale of cigarettes should be gradually banned, and 57.0% agreed or strongly agreed that their sale should be immediately banned. There was also majority support for gradual and immediate sales bans on other tobacco products, including cigars, cigarillos, and little cigars; however, the majority of students rejected an immediate ban on the sale of e-cigarettes, preferring a gradual ban instead.<sup>178</sup> In 2022,

21

youth overwhelmingly agreed that tobacco product waste is harmful to the environment (96.3%) and to animals (97.7%).<sup>20</sup> Among adults aged 18-64, in 2023, 59.8% agreed or strongly agreed that the sale of cigarettes should be gradually banned, while 60.5% agreed that the sale of nicotine products (excluding nicotine replacement therapy) should not

be allowed (with no time frame specified for their removal).<sup>179</sup> In 2022, adults in California supported reducing the number of stores that sell tobacco (64.3%), and, in 2021, specifically prohibiting the sale of tobacco in pharmacies (61.8%).<sup>20</sup> In 2021, 36.0% of California adults agreed that cigarette sales should be immediately banned.<sup>20</sup>

## INTERNATIONAL PUBLIC OPINION ON TOBACCO ENDGAME POLICIES

Californians are not alone in their support for endgame policies. Research has examined public opinion regarding a variety of endgame policies in Australia, Brazil, Canada, Denmark, Germany, Hong Kong, Ireland, the Netherlands, New Zealand, Pakistan, and the UK (**Table 2**). Most of this public opinion research focuses on attitudes towards ending sales of cigarettes (or tobacco more broadly). Although we tend to think of this approach as a relatively recent policy innovation, research has assessed public opinion on this issue since at least 2003 (**Table 2**). Because question wording typically varies, we cannot make straightforward comparisons between countries; for example, a study of New South Wales, Australia residents in 2004 asked if they supported "complete tobacco prohibition within ten years,"180 while a 2016 study of New Zealanders asked if they supported a "law that bans cigarettes and

other smoked tobacco within 10 years if the government provides assistance such as clinics to help smokers quit?"<sup>181</sup> The phrasing of questions in some studies may blur the distinction between banning sales and banning use, which makes it more difficult to interpret results. Nonetheless, studies conducted from 2017 onward show majority support for a tobacco sales ban, with support typically higher among never, former, and non-smokers.

Studies conducted in Hong Kong, Ireland, the Netherlands, New Zealand, Singapore, Tasmania, and the UK have also assessed public support for a "Tobacco-Free Generation" BSR policy. Comparing across countries, there is less consistency in support than is the case with a tobacco sales ban (since 2017), with support ranging from 34.5% in England, Scotland and Wales, to 56.0% in Ireland and 77.8% in New Zealand (**Table 3**).

Table 2. Support for a tobacco sales bana by country or region

Country/region	Time frame	Percent supporting tobacco sales ban					
		Smokers <sup>b</sup>	Former smokers	Never smokers	Non smokers	All	
Ontario, Canada (ages 18 and up) (2003) <sup>182</sup>	Not specified	12.0		24.0			
New South Wales, Australia (ages 18 and up) (2004) <sup>180</sup>	< 10 years	37.2			59.0		
<b>New Zealand</b> (ages 18 and up) (2007-2009) <sup>183</sup>	10 years	46.0					
<b>New Zealand</b> (2008) <sup>184</sup>	< 10 years	26.2	52.0	60.1			
<b>US</b> (ages 18 and up) (2009/2010) <sup>185</sup>	Current	19.0					
<b>England</b> (2008) <sup>186</sup>	< 10 years	32.5	40.5	49.4			
<b>Europe</b> (18 countries, ages 15 and up) (2010) <sup>187</sup>	Not specified	25.6	29.4	41.2		34.9	
<b>Victoria, Australia</b> (ages 18 and up) (2010) <sup>188</sup>	5-10 years	42.2				52.8	
<b>New Zealand</b> (ages 15 and up) (2010) <sup>189</sup>	10 years					66.0	
<b>Bhutan</b> (ages 18 and up) (2011) <sup>190</sup>	Current	88.0				94.0	
<b>US</b> (ages 18 and up) (2011) <sup>191</sup>	< 10 years	32.7			53.1		
New Zealand (adolescents) (2012) <sup>192,193</sup>	10 years	13.0	50.0	65.0		57.0	
<b>New Zealand</b> (ages 15 and up) (2012) <sup>194</sup>	10 years	18.0			58.0	50.0	
<b>New Zealand</b> (ages 15 and up) (2012) <sup>195</sup>	10 years	34.0	53.0	63.0		72.0	
<b>Hong Kong</b> (ages 18 and up) (2013) <sup>196</sup>	< 10 years	45.4	59.4	68.0			
<b>New Zealand</b> (adolescents) (2014) <sup>197</sup>	Not specified	12.0				56.0	
<b>European Union</b> (ages 15-24) (2014) <sup>198</sup>	Not specified					16.0	
<b>Germany</b> (ages 14 and up) (2016) <sup>199</sup>	10 years	10.0				22.9	
<b>Netherlands</b> (ages 15-16) (2016) <sup>200</sup>	Not specified	12.3				34.1	
Queensland, Australia (university students) (2017) <sup>201</sup>	10 years					51.6	
<b>New Zealand</b> (university students) (2018) <sup>201</sup>	10 years					53.3	
<b>European Union</b> (6 countries, ages 18 and up) (2018) <sup>202</sup>	10 years	40.4 <sup>d</sup>					

continued on next page

Table 2. Support for a tobacco sales bana by country or region (continued)

Country/region	Time frame	Percent supporting tobacco sales ban				
		Smokers <sup>b</sup>	Former smokers	Never smokers	Non smokers	All
<b>New Zealand</b> (2016-2018) (ages 18 and up) <sup>181</sup>	10 years	44.9	60.3			
Victoria, Australia (ages 18 and up) (2019) <sup>203</sup>	Not specified	31.7	53.2	58.8		
<b>Australia</b> (ages 18 and up) (2019) <sup>204</sup>	Not specified	32.9	62.3	67.2		61.6
<b>Pakistan</b> (ages 15 and up) (2019-2020) <sup>205</sup>	10 years	82.1				
<b>South Korea</b> (2020) (ages 19 and up) <sup>206</sup>	10 years	35.6				61.3
<b>US</b> (ages 18 and up) (2021) <sup>207</sup>	Not specified	25.2			74.8	57.3
<b>US</b> (2021) <sup>208</sup>	Not specified	36.3	54.4	67.6		
<b>Ireland</b> (ages 15 and up) (2022) <sup>209</sup>	Not specified	66.4			85.5	82.8

<sup>&</sup>lt;sup>a</sup>Question wording is not consistent across all studies

Table 3. Support for BSR policy by country or region

	Percent support for tobacco free generation policy					
Country/region	Smokers*	Former smokers	Never smokers	Non smokers**	All	
<b>Singapore</b> (ages 18-65) (2007) <sup>210</sup>	60.0			72.7	70.4	
Tasmania, Australia (ages 12 and up) (2014) <sup>211</sup>	71.0	72.0	73.0		73.0	
<b>Hong Kong</b> (ages 15 and up) (2015) <sup>212</sup>					51.8	
<b>Netherlands</b> (ages 15-16) (2016) <sup>200</sup>	18.5				30.3	
<b>New Zealand</b> (2016-2018) (ages 18 and up) <sup>181</sup>	76.9	80.7			77.8	
England, Scotland and Wales (ages 18 and up) (2021) <sup>213</sup>					34.5	
Ireland (ages 15 and up) (2022) <sup>209</sup>	43.0			59.9	56.0	

<sup>\*</sup>Description of smoking status (smoker, non-smoker, etc.) as employed in the studies.

Description of smoking status (smoker, nonsmoker, etc.) as employed in the studies, unless noted

<sup>&#</sup>x27;The category "nonsmoker" could include former smokers, as distinct from "never smokers."

<sup>&</sup>lt;sup>d</sup>Includes both smokers and recent quitters

<sup>\*\*</sup>The category "non smoker" could include former smokers, as distinct from "never smokers."

## Cautions, Limitations, Gaps, and Conclusion

As is often the case with new policy approaches, the evidence base to support endgame-oriented policies is not comprehensive, and, until such policies are implemented and assessed, questions will remain about some aspects of their impact and effectiveness. One area where more research is needed concerns planning for the economic transitions involved in achieving an endgame, including the impact on small retailers, state tax revenue, and state healthcare expenditures.

There are additional policy approaches to the tobacco endgame not discussed here because they are not legally available to either the state or to localities, including requiring cigarettes to have lower (nonaddictive) levels of nicotine (a power reserved to the federal government). Should that policy be adopted, it would significantly change the policy landscape for localities as well. However, some have argued that while the FDA has jurisdiction over setting tobacco product standards for constituents, prohibiting sales of higher nicotine, highly addictive tobacco products would be permissible as a sales regulation.<sup>222</sup>

No policy is perfect or perfectly implemented, so those planning endgame measures must recognize and accept that some level of tobacco product sales and use will persist even after the endgame goal is achieved, through individual and illicit market activities. However, in the context of declining rates of tobacco use and a gradually shrinking promotional space for tobacco products, it is highly unlikely that future levels of tobacco use will be comparable to current levels, meaning that the market for illicit products will also shrink. As endgame

measures roll out, continuous monitoring of communities will help identify unforeseen consequences that require attention. These efforts should include an intentional focus on assessing policy impacts on communities where little data currently exists, including transgender Californians, and disaggregated Latinx and API communities. They should also include tracking data on categories such as flavored tobacco use and density/type of tobacco retailers in communities with larger percentages of people of color and LGBTQ communities.



The retailer-focused endgame-oriented policies outlined here do not encompass or encourage laws criminalizing youth purchase, use, and possession (PUP). In 2016, the state shifted its focus away from criminalizing youth behavior; however, not all localities have followed suit. PUP laws are unlikely to prevent or reduce youth smoking, and shift attention away from retailers' and the tobacco industry's role in supporting and promoting youth smoking.<sup>214,215</sup> Moreover, such laws have a disproportionate impact on vulnerable youth.

25



Youth from low-income communities are more likely to live in neighborhoods with a higher density of tobacco retailers<sup>216,217</sup> and to live in households with people who smoke,<sup>218</sup> putting them at higher risk of smoking; thus, they are more likely to be impacted by PUP laws. They are also more likely to struggle with any economic penalties incurred by violations of the law.<sup>219</sup> African American and Hispanic youth are also at greater risk than their white peers who smoke of being cited for violating PUP laws,<sup>220</sup> thereby increasing their risk of dangerous encounters with law enforcement. To avoid further punishing youth who are addicted to deadly products, PUP laws should not be pursued, and those in place should be repealed or altered to focus on retailer enforcement.

Even after the endgame and the elimination of the sale of all tobacco products, there will still be some Californians who use tobacco. Ensuring that the endgame does not re-create the same disparities that we see today requires deploying endgame strategies in community-specific ways, to change cultural norms appropriately, provide community-relevant education, address social determinants of health, and make available culturally-tailored cessation services.

The emerging and dynamic vision of the tobacco endgame in California is focused on continuing to shrink the social spaces in which tobacco is normalized, consumed, marketed and sold through a range of policies. Communities engaged in endgame planning have opportunities to build on the successes of the past to shape a tobacco-free future. As it has been for more than thirty years, California is poised to be a global leader in ending the tobacco epidemic.

#### References

- 1. California Department of Public Health, California Tobacco Control Program. *Celebrating the Past, Present, and Future of Tobacco Control in California*. Sacramento, CA: California Department of Public Health; 2020.
- 2. Max W, Sung HY, Shi Y, Stark B. The cost of smoking in California. *Nicotine Tob Res*. 2016;18(5):1222-1229.
- 3. Campaign for Tobacco-Free Kids. The toll of tobacco in California. 2022; <a href="https://www.tobaccofreekids.org/problem/toll-us/california">https://www.tobaccofreekids.org/problem/toll-us/california</a>. Accessed October 30, 2022.
- 4. *California Health Interview Survey*, 2017-2018. Los Angeles, CA: UCLA Center for Health Policy Research; 2020.
- 5. Centers for Disease Control and Prevention. State Tobacco Activities Tracking and Evaluation (STATE) System. 2019; <a href="https://nccd.cdc.gov/STATESystem/rdPage.aspx?rdReport=OSH\_STATE.Highlights&rdRequestForwarding=Form">https://nccd.cdc.gov/STATESystem/rdPage.aspx?rdReport=OSH\_STATE.Highlights&rdRequestForwarding=Form</a>. Accessed October 30, 2019.
- 6. Centers for Disease Control and Prevention. Cigarette smoking and tobacco use among people of low socioeconomic status. 2019; <a href="https://www.cdc.gov/tobacco/disparities/low-ses/index.htm">https://www.cdc.gov/tobacco/disparities/low-ses/index.htm</a>. Accessed February 12, 2021.
- 7. Max W, Sung HY, Tucker LY, Stark B. The disproportionate cost of smoking for African Americans in California. Am J Public Health. 2010;100(1):152-158.
- 8. Max WB, Stark BB, Sung HY, Offen NB. Deaths from smoking and from HIV/AIDS among gay and bisexual men in California, 2005-2050. *Tob Control*. 2020;29(3):305-311.
- 9. Henley SJ, Thomas CC, Sharapova SR, et al. Vital signs: disparities in tobacco-related cancer incidence and mortality United States, 2004-2013. *MMWR Morb Mortal Wkly Rep.* 2016;65(44):1212-1218.
- 10. California Department of Public Health, California Tobacco Control Program. 2017-2021 Local lead agency comprehensive tobacco control plan guidelines. 2017; <a href="https://otis.catcp.org/utilities/tcforFileFetch.cfm?docID=1104">https://otis.catcp.org/utilities/tcforFileFetch.cfm?docID=1104</a>. Accessed January 28, 2020.
- 11. Smith EA. Questions for a tobacco-free future. *Tob Control*. 2013;22 Suppl 1:i1-2.
- 12. McDaniel PA, Smith EA, Malone RE. The tobacco endgame: a qualitative review and synthesis. *Tob Control*. 2016;25(5):594-604.
- 13. ChangeLab Solutions. Tobacco retailer licensing: an effective tool for public health. June 2018; <a href="http://www.changelabsolutions.org/sites/default/files/TobaccoRetailerLicensing-AnEffectiveToolforPublicHealth\_FINAL\_20180630\_0.pdf">http://www.changelabsolutions.org/sites/default/files/TobaccoRetailerLicensing-AnEffectiveToolforPublicHealth\_FINAL\_20180630\_0.pdf</a>. Accessed June 10, 2020.
- 14. California Department of Public Health, California Tobacco Control Program. *Policy Evaluation Tracking System*. Otober 2023.
- 15. Chaloupka FJ, Yurekli A, Fong GT. Tobacco taxes as a tobacco control strategy. *Tob Control*. 2012;21(2):172-180.
- 16. Berrick AJ. The tobacco-free generation proposal. *Tob Control*. 2013;22 Suppl 1(Suppl 1):i22-26.
- 17. Americans for Nonsmokers' Rights Foundation. Municipalities prohibiting the sale of flavored tobacco products. October 2023; <a href="https://no-smoke.org/wp-content/uploads/pdf/flavored-tobacco-product-sales.pdf">https://no-smoke.org/wp-content/uploads/pdf/flavored-tobacco-product-sales.pdf</a>. Accessed Deember 6, 2023.
- 18. Timberlake DS, Aviles J, Payan DD. Variation in adults' use of flavored tobacco products by sales restrictions in California jurisdictions. *Int J Drug Policy*. 2023;116:104041.
- 19. California Department of Public Health, California Tobacco Prevention Program. Data user query system. 2022; <a href="https://www.tcspartners.org/Campaigns/DataToolsAndResources/DataQuerySystem.cfm">https://www.tcspartners.org/Campaigns/DataToolsAndResources/DataQuerySystem.cfm</a>. Accessed November 20, 2023.

- 20. California Department of Public Health, California Tobacco Control Program. California Tobacco Facts and Figures 2022. 2023; <a href="https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/CDPH%20Document%20Library/ResearchandEvaluation/FactsandFigures/CaliforniaTobaccoFactsAndFigures2022.pdf">https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/CDPH%20Document%20Library/ResearchandEvaluation/FactsandFigures/CaliforniaTobaccoFactsAndFigures2022.pdf</a>. Accessed 12 February, 2024.
- 21. New Zealand Ministry of Health. Smokefree Aotearoa 2025 action plan. 2021; <a href="https://www.health.govt.nz/system/files/documents/publications/hp7801 smoke free action plan v15">https://www.health.govt.nz/system/files/documents/publications/hp7801 smoke free action plan v15</a> web.pdf. Accessed 7 February, 2024.
- 22. United Kingdom Government. Advancing our health: prevention in the 2020s. . 2019; <a href="https://assets.publishing.service.gov.uk/media/5d35e81140f0b604e42729d9/advancing-our-health-prevention-in-the-2020s-accessible.pdf">https://assets.publishing.service.gov.uk/media/5d35e81140f0b604e42729d9/advancing-our-health-prevention-in-the-2020s-accessible.pdf</a>. Accessed 7 February, 2024.
- 23. Government of Ireland Department of Health. Tobacco free Ireland action plan. 2022; <a href="https://assets.gov.ie/15942/ebab88a03d8f42bca3498db35f900125.pdf">https://assets.gov.ie/15942/ebab88a03d8f42bca3498db35f900125.pdf</a>. Accessed 7 February, 2024.
- 24. Government of Canada. Canada's tobacco strategy. 2020; <a href="https://www.canada.ca/en/health-canada/services/publications/healthy-living/canada-tobacco-strategy.html">https://www.canada.ca/en/health-canada/services/publications/healthy-living/canada-tobacco-strategy.html</a>. Accessed 7 February, 2024.
- 25. Australian Department of Health. National preventive health strategy 2021-2030. 2020; <a href="https://www.health.gov.au/resources/publications/national-preventive-health-strategy-2021-2030">https://www.health.gov.au/resources/publications/national-preventive-health-strategy-2021-2030</a>. Accessed 7 February, 2024.
- 26. Government Offices of Sweden. En samlad strategi för alkohol-, narkotika-, dopnings- och tobakspolitiken 2016 2020. 2016; <a href="https://www.regeringen.se/contentassets/0cb3c9b3b28b49678a7205a3672b3e85/en-samlad-strategi-for-alkohol-narkotika--dopnings--och-tobakspolitiken-20162020-skr.-2015\_16-86.pdf">https://www.regeringen.se/contentassets/0cb3c9b3b28b49678a7205a3672b3e85/en-samlad-strategi-for-alkohol-narkotika--dopnings--och-tobakspolitiken-20162020-skr.-2015\_16-86.pdf</a>. Accessed 7 February, 2024.
- 27. Ministry of Social Affairs and Health. Finland tobacco and nicotine policy. 2023; <a href="https://stm.fi/en/tobacco-nicotine-control">https://stm.fi/en/tobacco-nicotine-control</a>. Accessed 7 February, 2024.
- 28. Government of the People's Republic of Bangladesh. Sustainable development goals: Bangladesh progress report 2020. 2020; <a href="https://www.bd.undp.org/content/bangladesh/en/home/library/democratic\_governance/bangladesh-sustainable-development-goals--sdgs--progress-report-.html">https://www.bd.undp.org/content/bangladesh/en/home/library/democratic\_governance/bangladesh-sustainable-development-goals--sdgs--progress-report-.html</a>. Accessed 7 February, 2024.
- 29. The Scottish Government. Creating a tobacco-free generation: A tobacco control strategy for Scotland. 2013; <a href="https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2013/03/tobacco-control-strategy-creating-tobacco-free-generation/documents/creating-tobacco-free-generation-tobacco-control-strategy-scotland/creating-tobacco-free-generation-tobacco-control-strategy-scotland/govscot%3Adocument/00417331.pdf. Accessed 7 February, 2024.
- 30. French Republic. Programme national de lutte contre le tabac 2018-2022. 2017; <a href="https://solidarites-sante.gouv.fr/IMG/pdf/180702-pnlt\_def.pdf">https://solidarites-sante.gouv.fr/IMG/pdf/180702-pnlt\_def.pdf</a>. Accessed 7 February, 2024.
- 31. Government of the Netherlands. The National Prevention Agreement 2019; <a href="https://www.government.nl/binaries/government/documenten/reports/2019/06/30/the-national-prevention-agreement/The+national+prevention+agreement.pdf">https://www.government.nl/binaries/government/documenten/reports/2019/06/30/the-national-prevention-agreement/The+national+prevention+agreement.pdf</a>. Accessed 7 February, 2024.
- 32. Ministrstvo za zdravje RS. Strategija za zmanjševanje posledic rabe tobaka za slovenijo brez tobaka. Za Slovenijo Brez Tobaka 2022–2030. 2022; <a href="https://www.gov.si/assets/ministrstva/MZ/DOKUMENTI/DJZ-Preventiva-in-skrb-za-zdravje/kajenje/Strategija za zmanjsevanje rabe tobaka e-publikacija.pdf">https://www.gov.si/assets/ministrstva/MZ/DOKUMENTI/DJZ-Preventiva-in-skrb-za-zdravje/kajenje/Strategija za zmanjsevanje rabe tobaka e-publikacija.pdf</a>. Accessed 7 February, 2024.
- 33. Santé publique Sécurité de la Chaîne alimentaire et Environnement. Stratégie interfédérale 2022-2028 pour une génération sans tabac. 2022; <a href="https://organesdeconcertation.sante.">https://organesdeconcertation.sante.</a> belgique.be/sites/default/files/documents/2022 12 14 strategie interfederale tabac et annexe final fr.pdf. Accessed 7 February, 2024.

- 34. Centers for Disease Control and Prevention. Health effects of secondhand smoke. 2020; <a href="https://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/secondhand\_smoke/health\_effects/index.htm">https://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/secondhand\_smoke/health\_effects/index.htm</a>. Accessed January 28, 2020.
- 35. Rostron BL, Chang JT, Anic GM, Tanwar M, Chang CM, Corey CG. Smokeless tobacco use and circulatory disease risk: a systematic review and meta-analysis. *Open Heart*. 2018;5(2):e000846.
- 36. Buchanan ND, Grimmer JA, Tanwar V, Schwieterman N, Mohler PJ, Wold LE. Cardiovascular risk of electronic cigarettes: a review of preclinical and clinical studies. *Cardiovasc Res*. 2020;116(1):40-50.
- 37. Centers for Disease Control and Prevention. Cigars. 2020; <a href="https://www.cdc.gov/tobacco/datastatistics/fact-sheets/tobacco-industry/cigars/index.htm">https://www.cdc.gov/tobacco/datastatistics/fact-sheets/tobacco-industry/cigars/index.htm</a>. Accessed January 28, 2020.
- 38. Action on Smoking and Health. The economics of tobacco. 2017; <a href="https://ash.org.uk/">https://ash.org.uk/</a> <a href="mailto:information-and-resources/fact-sheets/the-economics-of-tobacco/">information-and-resources/fact-sheets/the-economics-of-tobacco/</a>. Accessed February 22, 2021.
- 39. Malone RE. Tobacco endgames: What they are and are not, issues for tobacco control strategic planning, and a possible US scenario. *Tob Control*. 2013;22(Suppl. 1):i42-i44.
- 40. Proctor RN. Why ban the sale of cigarettes? The case for abolition. *Tob Control*. 2013;22(Suppl. 1):i27-i30.
- 41. Daynard RA. Doing the unthinkable (and saving millions of lives). *Tob Control*. 2009;18(1):2-3.
- 42. Smith EA, Malone RE. An argument for phasing out sales of cigarettes. *Tob Control*. 2020;29(6):703-708.
- 43. Malone RE, Grundy Q, Bero LA. Tobacco industry denormalisation as a tobacco control intervention: a review. *Tob Control*. 2012;21(2):162-170.
- 44. Vuong T, Zhang X, Roeseler A. California Tobacco Facts and Figures. 2019; <a href="https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/CDPH%20Document%20Library/ResearchandEvaluation/FactsandFigures/CATobaccoFactsandFigures2019.pdf">https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/CDPH%20Document%20Library/ResearchandEvaluation/FactsandFigures/CATobaccoFactsandFigures2019.pdf</a>. Accessed July 24, 2019.
- 45. Boudreau G, Hernandez C, Hoffer D, et al. Why the world will never be tobacco-free: reframing "tobacco control" into a traditional tobacco movement. *Am J Public Health*. 2016;106(7):1188-1195.
- 46. Lempert LK, Glantz SA. Tobacco industry promotional strategies targeting American Indians/ Alaska Natives and exploiting tribal sovereignty. *Nicotine Tob Res.* 2020;21(7):940-948.
- 47. D'Silva J, O'Gara E, Villaluz NT. Tobacco industry misappropriation of American Indian culture and traditional tobacco. *Tob Control*. 2018;27(e1):e57-e64.
- 48. Scott S, D'Silva J, Hernandez C, Villaluz NT, Martinez J, Matter C. The tribal tobacco education and policy initiative: Findings from a collaborative, participatory evaluation. *Health Promot Pract*. 2017;18(4):545-553.
- 49. DeLong H, Chriqui J, Leider J, Chaloupka FJ. Common state mechanisms regulating tribal tobacco taxation and sales, the USA, 2015. *Tob Control*. 2016;25(Suppl 1):i32-i37.
- 50. Cho BY, Lin HC, Seo DC. Effectiveness of Indiana's statewide smoke-free indoor air law in reducing prevalence of adult cigarette smoking. *J Prim Prev.* 2020;41(2):87-103.
- 51. Azagba S, Shan L, Latham K. County smoke-free laws and cigarette smoking among U.S. adults, 1995-2015. *Am J Prev Med*. 2020;58(1):97-106.
- 52. Mills AL, Messer K, Gilpin EA, Pierce JP. The effect of smoke-free homes on adult smoking behavior: a review. *Nicotine Tob Res.* 2009;11(10):1131-1141.

- 53. Song AV, Dutra LM, Neilands TB, Glantz SA. Association of smoke-free laws with lower percentages of new and current smokers among adolescents and young adults: an 11-year longitudinal study. *JAMA Pediatr.* 2015;169(9):e152285.
- 54. Parks MJ, Kingsbury JH, Boyle RG, Evered S. Household implementation of smoke-free rules in homes and cars: a focus on adolescent smoking behavior and secondhand smoke exposure. *Am J Health Promot*. 2019;33(1):70-78.
- 55. Berg CJ, Haardorfer R, Windle M, Solomon M, Kegler MC. Smoke-free policies in multiunit housing: smoking behavior and reactions to messaging strategies in support or in opposition. *Prev Chronic Dis.* 2015;12:E98.
- 56. Pizacani BA, Maher JE, Rohde K, Drach L, Stark MJ. Implementation of a smoke-free policy in subsidized multiunit housing: effects on smoking cessation and secondhand smoke exposure. *Nicotine Tob Res.* 2012;14(9):1027-1034.
- 57. Americans for Nonsmokers' Rights Foundation. Municipalities with smokefree beach laws. 2017; <a href="https://no-smoke.org/wp-content/uploads/pdf/SmokefreeBeaches.pdf">https://no-smoke.org/wp-content/uploads/pdf/SmokefreeBeaches.pdf</a>. Accessed October 15, 2020.
- 58. Americans for Nonsmokers' Rights Foundation. Municipalities with smokefree park laws. 2017; <a href="https://no-smoke.org/wp-content/uploads/pdf/SmokefreeParks.pdf">https://no-smoke.org/wp-content/uploads/pdf/SmokefreeParks.pdf</a>. Accessed October 15, 2020.
- 59. Johns M, Farley SM, Rajulu DT, Kansagra SM, Juster HR. Smoke-free parks and beaches: an interrupted time-series study of behavioural impact in New York City. *Tob Control*. 2015;24(5):497-500.
- 60. Okoli C, Johnson A, Pederson A, Adkins S, Rice W. Changes in smoking behaviours following a smokefree legislation in parks and on beaches: an observational study. *BMJ Open.* 2013;3(6).
- 61. Americans for Nonsmokers' Rights Foundation. U.S. laws for 100% smokefree multi-unit housing. 2020; <a href="https://no-smoke.org/wp-content/uploads/pdf/smokefreemuh.pdf">https://no-smoke.org/wp-content/uploads/pdf/smokefreemuh.pdf</a>. Accessed October 16, 2020.
- 62. Kaufman P, Kang J, Kennedy RD, Beck P, Ferrence R. Impact of smoke-free housing policy lease exemptions on compliance, enforcement and smoking behavior: A qualitative study. *Prev Med Rep.* 2018;10:29-36.
- 63. Kingsbury JH, Reckinger D. Clearing the air: smoke-free housing policies, smoking, and secondhand smoke exposure among affordable housing residents in Minnesota, 2014-2015. *Prev Chronic Dis.* 2016;13:E111.
- 64. Plunk AD, Rees VW, Jeng A, Wray JA, Grucza RA. Increases in secondhand smoke after going smoke free: an assessment of the impact of a mandated smoke-free housing policy. *Nicotine Tob Res.* 2020; 22(12):2254-2256.
- 65. MacNaughton P, Adamkiewicz G, Arku RE, Vallarino J, Levy DE. The impact of a smoke-free policy on environmental tobacco smoke exposure in public housing developments. *Sci Total Environ*. 2016;557-558:676-680.
- 66. Klassen AC, Lee NL, Pankiewicz A, et al. Secondhand smoke exposure and smoke-free policy in Philadelphia public housing. *Tob Regul Sci.* 2017;3(2):192-203.
- 67. Thorpe LE, Anastasiou E, Wyka K, et al. Evaluation of secondhand smoke exposure in New York City public housing after implementation of the 2018 federal smoke-free housing policy. *JAMA Netw Open.* 2020;3(11):e2024385.
- 68. Tobacco Control Legal Consortium. License to kill? Tobacco retailer licensing as an effective enforcement tool. April 2010; <a href="https://www.publichealthlawcenter.org/sites/default/files/resources/tclc-syn-retailer-2010.pdf">https://www.publichealthlawcenter.org/sites/default/files/resources/tclc-syn-retailer-2010.pdf</a>. Accessed June 10, 2020.

- 69. American Lung Association, Public Health Law Center. Kern County's tobacco retailer licensing program: a case study. 2020; <a href="https://www.publichealthlawcenter.org/sites/default/files/resources/Kern-County-Case-Study.pdf">https://www.publichealthlawcenter.org/sites/default/files/resources/Kern-County-Case-Study.pdf</a>. Accessed June 24, 2020.
- 70. Coxe N, Webber W, Burkhart J, et al. Use of tobacco retail permitting to reduce youth access and exposure to tobacco in Santa Clara County, California. *Prev Med.* 2014;67 Suppl 1:S46-50.
- 71. Astor RL, Urman R, Barrington-Trimis JL, et al. Tobacco retail licensing and youth product use. *Pediatrics*. 2019;143(2).
- 72. Bowden JA, Dono J, John DL, Miller CL. What happens when the price of a tobacco retailer licence increases? *Tob Control*. 2014;23(2):178-180.
- 73. Sonoma County. Code of Ordinances: Chapter 32A Licensure of Tobacco Retailers. 2019; <a href="https://library.municode.com/ca/sonoma\_county/codes/code\_of\_ordinances?nodeId=CH32ALITORE">https://library.municode.com/ca/sonoma\_county/codes/code\_of\_ordinances?nodeId=CH32ALITORE</a>. Accessed October 30, 2019.
- 74. UNC Gillings School of Global Public Health. Minimum price floor laws. 2019; <a href="http://changelabsolutions.org/sites/default/files/MFPL">http://changelabsolutions.org/sites/default/files/MFPL</a> UNC FactSheet FINAL 20190130.pdf. Accessed October 28, 2019.
- 75. Orenstein N. Berkeley bans the sale of flavored tobacco and vape pods. August 6 2019; https://www.berkeleyside.com/2019/08/06/berkeley-bans-the-sale-of-flavored-tobacco-and-e-cigarettes. Accessed 2019, November 20.
- 76. City of Fremont. Draft ordinance. 2019; <a href="https://aa4656c9-2c5b-4ca6-b0a6-e6fbe296dcb1">https://aa4656c9-2c5b-4ca6-b0a6-e6fbe296dcb1</a>. <a href="mailto:filesusr.com/ugd/623082\_92a13985d99e49b983d0be80e3308152.pdf">filesusr.com/ugd/623082\_92a13985d99e49b983d0be80e3308152.pdf</a>. Accessed November 20, 2019.
- 77. Golden SD, Kim K, Kong AY, Tao VQ, Carr D, Musburger P. Simulating the impact of a cigarette minimum floor price law on adult smoking prevalence in California. *Nicotine Tob Res.* 2020.
- 78. Boettiger DC, White JS. Effects of a minimum floor price law on cigarette use in Oakland, California: A static microsimulation model. *Prev Med*. 2021;145:106444.
- 79. Golden SD, Farrelly MC, Luke DA, Ribisl KM. Comparing projected impacts of cigarette floor price and excise tax policies on socioeconomic disparities in smoking. *Tob Control*. 2016;25(Suppl 1):i60-i66.
- 80. Tobacco Control Legal Consortium. Cigarette minimum price laws. 2011; <a href="https://www.publichealthlawcenter.org/sites/default/files/resources/tclc-guide-cigminimumpricelaws-2011.pdf">https://www.publichealthlawcenter.org/sites/default/files/resources/tclc-guide-cigminimumpricelaws-2011.pdf</a>. Accessed January 28, 2020.
- 81. Leatherdale ST, Strath JM. Tobacco retailer density surrounding schools and cigarette access behaviors among underage smoking students. *Ann Behav Med.* 2007;33(1):105-111.
- 82. Henriksen L, Schleicher NC, Barker DC, Liu Y, Chaloupka FJ. Prices for tobacco and nontobacco products in pharmacies versus other stores: results from retail marketing surveillance in California and in the United States. *Am J Public Health*. 2016;106(10):1858-1864.
- 83. Committee on the Public Health Implications of Raising the Minimum Age for Purchasing Tobacco Products, Board of Population Health and Public Health Practice, Institute of Medicine. 5, Restrictions on Youth Access to Tobacco Products, in Implications of Raising the Minimum Age of Legal Access to Tobacco Products. 2015 Jul 23; <a href="https://www.ncbi.nlm.nih.gov/books/NBK310404/">https://www.ncbi.nlm.nih.gov/books/NBK310404/</a>. Accessed October 22, 2019.
- 84. Lee JGL, Schleicher NC, Leas EC, Henriksen L. US Food and Drug Administration inspection of tobacco sales to minors at top pharmacies, 2012-2017. *JAMA Pediatr.* 2018;172(11):1089-1090.
- 85. Henriksen L, Schleicher NC, Feighery EC, Fortmann SP. A longitudinal study of exposure to retail cigarette advertising and smoking initiation. *Pediatrics*. 2010;126(2):232-238.

- 86. Robertson L, McGee R, Marsh L, Hoek J. A systematic review on the impact of point-of-sale tobacco promotion on smoking. *Nicotine Tob Res.* 2015;17(1):2-17.
- 87. Van Hurck MM, Nuyts PAW, Monshouwer K, Kunst AE, Kuipers MAG. Impact of removing point-of-sale tobacco displays on smoking behaviour among adolescents in Europe: a quasi-experimental study. *Tob Control.* 2019;28(4):401-408.
- 88. Henriksen L, Flora JA, Feighery EC, Fortmann SP. Effects on youth of exposure to retail tobacco advertising. *Journal of Applied Social Psychology*. 2002;32(9):1771-1789.
- 89. Henriksen L, Feighery EC, Wang Y, Fortmann SP. Association of retail tobacco marketing with adolescent smoking. *Am J Public Health*. 2004;94(12):2081-2083.
- 90. Lovato CY, Hsu HC, Sabiston CM, Hadd V, Nykiforuk CI. Tobacco point-of-purchase marketing in school neighbourhoods and school smoking prevalence: a descriptive study. *Can J Public Health*. 2007;98(4):265-270.
- 91. Slater SJ, Chaloupka FJ, Wakefield M, Johnston LD, O'Malley PM. The impact of retail cigarette marketing practices on youth smoking uptake. *Arch Pediatr Adolesc Med.* 2007;161(5):440-445.
- 92. Wakefield M, Germain D, Henriksen L. The effect of retail cigarette pack displays on impulse purchase. *Addiction*. 2008;103(2):322-328.
- 93. Burton S, Clark L, Jackson K. The association between seeing retail displays of tobacco and tobacco smoking and purchase: findings from a diary-style survey. *Addiction*. 2012;107(1):169-175.
- 94. Lee JGL, Kong AY, Sewell KB, et al. Associations of tobacco retailer density and proximity with adult tobacco use behaviours and health outcomes: a meta-analysis. *Tob Control*. 2022;31(e2):e189-e200.
- 95. Luke DA, Hammond RA, Combs T, et al. Tobacco Town: Computational modeling of policy options to reduce tobacco retailer density. *Am J Public Health*. 2017;107(5):740-746.
- 96. Hyland A, Travers MJ, Cummings KM, Bauer J, Alford T, Wieczorek WF. Tobacco outlet density and demographics in Erie County, New York. *Am J Public Health*. 2003;93(7):1075-1076.
- 97. Loomis BR, Kim AE, Goetz JL, Juster HR. Density of tobacco retailers and its association with sociodemographic characteristics of communities across New York. *Public Health*. 2013;127(4):333-338.
- 98. Marsh L, Doscher C, Robertson LA. Characteristics of tobacco retailers in New Zealand. *Health Place*. 2013;23:165-170.
- 99. Reid RJ, Morton CM, Garcia-Reid P, Peterson NA, Yu D. Examining tobacco outlet concentration in New Jersey: does income and ethnicity matter? *J Ethn Subst Abuse*. 2013;12(3):197-209.
- 100. Rodriguez D, Carlos HA, Adachi-Mejia AM, Berke EM, Sargent JD. Predictors of tobacco outlet density nationwide: a geographic analysis. *Tob Control*. 2013;22(5):349-355.
- 101. Schneider JE, Reid RJ, Peterson NA, Lowe JB, Hughey J. Tobacco outlet density and demographics at the tract level of analysis in Iowa: implications for environmentally based prevention initiatives. *Prev Sci.* 2005;6(4):319-325.
- 102. Yu D, Peterson NA, Sheffer MA, Reid RJ, Schnieder JE. Tobacco outlet density and demographics: Analysing the relationships with a spatial regression approach. *Public Health*. 2010;124(7):412-416.
- 103. Fakunle DO, Milam AJ, Furr-Holden CD, Butler J, 3rd, Thorpe RJ, Jr., LaVeist TA. The inequitable distribution of tobacco outlet density: the role of income in two Black Mid-Atlantic geopolitical areas. *Public Health*. 2016;136:35-40.
- 104. Fakunle D, Morton CM, Peterson NA. The importance of income in the link between tobacco outlet density and demographics at the tract level of analysis in New Jersey. *J Ethn Subst Abuse*. 2010;9(4):249-259.

- 105. Hillier A, Chilton M, Zhao QW, Szymkowiak D, Coffman R, Mallya G. Concentration of tobacco advertisements at SNAP and WIC stores, Philadelphia, Pennsylvania, 2012. Prev Chronic Dis. 2015;12:E15.
- 106. Americans for Nonsmokers' Rights Foundation. Municipalities with tobacco-free pharmacy laws. 2023; https://no-smoke.org/wp-content/uploads/pdf/pharmacies.pdf. Accessed November 20, 2023.
- 107. Counter Tobacco. Lawsuit threatening San Francisco pharmacy ban dismissed. 2023; https:// countertobacco.org/lawsuit-threatening-san-francisco-pharmacy-ban-dismissed/. Accessed March 26, 2024.
- 108. Jin Y, Lu B, Klein EG, Berman M, Foraker RE, Ferketich AK. Tobacco-free pharmacy laws and trends in tobacco retailer density in California and Massachusetts. Am J Public Health. 2016;106(4):679-685.
- 109. Polinski JM, Howell B, Gagnon MA, Kymes SM, Brennan TA, Shrank WH. Impact of CVS pharmacy's discontinuance of tobacco sales on cigarette purchasing (2012-2014). Am J Public Health. 2017;107(4):556-562.
- 110. Phillips AZ, Ahern JA, Kerr WC, Rodriguez HP. Cigarettes smoked among daily and non-daily smokers following CVS Health's tobacco-free pharmacy policy. Tob Control. 2022;31(1):25-31.
- 111. Ali FRM, Neff L, Wang X, et al. Tobacco-Free Pharmacies and U.S. Adult smoking behavior: Evidence from CVS Health's removal of tobacco sales. Am J Prev Med. 2020;58(1):41-49.
- 112. Giovenco DP, Spillane TE, Mauro CM, Hernandez D. Evaluating the impact and equity of a tobacco-free pharmacy law on retailer density in New York City neighbourhoods. Tob Control. 2019;28(5):548-554.
- 113. Center for Tobacco Policy and Organizing. Matrix of local ordinances restricting tobacco retailers near schools. 2016; <a href="https://center4tobaccopolicy.org/wp-content/uploads/2016/10/">https://center4tobaccopolicy.org/wp-content/uploads/2016/10/</a> Matrix-of-Ordinances-Restricting-Retailers-Near-Schools-Sept-2016.pdf. Accessed November 5, 2019.
- 114. Vallejo Times-Herald. Benicia adopts new tobacco ordinance. February 18 2020; https://www. timesheraldonline.com/2020/02/17/benicia-adopts-new-tobacco-ordinance/. Accessed May 27, 2020.
- 115. City of Cupertino. Tobacco policies. 2020; <a href="https://www.cupertino.org/our-city/city-news/">https://www.cupertino.org/our-city/city-news/</a> smoking-policies. Accessed May 27, 2020.
- 116. American Lung Association in California. State of Tobacco Control 2020 California Local Grades. 2020; https://www.lung.org/getmedia/929a93c8-2c09-4dea-b9da-4edfe1fb84df/2020sotc-california-full.pdf. Accessed February 19, 2021.
- 117. Lawman HG, Henry KA, Scheeres A, Hillengas A, Coffman R, Strasser AA. Tobacco retail licensing and density 3 years after license regulations in Philadelphia, Pennsylvania (2012-2019). Am J Public Health. 2020;110(4):547-553.
- 118. Myers AE, Hall MG, Isgett LF, Ribisl KM. A comparison of three policy approaches for tobacco retailer reduction. Prev Med. 2015;74:67-73.
- 119. Ribisl KM, Luke DA, Bohannon DL, Sorg AA, Moreland-Russell S. Reducing disparities in tobacco retailer density by banning tobacco product sales near schools. Nicotine Tob Res. 2017;19(2):239-244.
- 120. Obinwa U, Pasch KE, Jetelina KK, et al. A Simulation of the potential impact of restricting tobacco retail outlets around middle and high schools on tobacco advertisements. Tob Control. 2022; 31:81-87
- 121. City of South San Francisco. Ordinance #1588-2019. 2019; https://www.ssf.net/home/ showdocument?id=17662. Accessed May 27, 2020.

33

- 122. Campaign for Tobacco Free Kids. Oakland votes to end sale of all flavored tobacco, eliminating loophole tobacco industry exploited. 2020; <a href="https://www.tobaccofreekids.org/press-releases/2020">https://www.tobaccofreekids.org/press-releases/2020</a> 05 12 oakland. Accessed November 27, 2023.
- 123. Liu J, Hartman L, Tan ASL, Winickoff JP. Youth tobacco use before and after flavoured tobacco sales restrictions in Oakland, California and San Francisco, California. *Tob Control*. 2023;32(e1):e118-e120.
- 124. Farley SM, Johns M. New York City flavoured tobacco product sales ban evaluation. *Tob Control.* 2017;26(1):78-84.
- 125. Pearlman DN, Arnold JA, Guardino GA, Welsh EB. Advancing tobacco control through point of sale policies, Providence, Rhode Island. *Prev Chronic Dis.* 2019;16:E129.
- 126. Kingsley M, Song G, Robertson J, Henley P, Ursprung WWS. Impact of flavoured tobacco restriction policies on flavoured product availability in Massachusetts. *Tob Control*. 2019.
- 127. Hawkins SS, Kruzik C, O'Brien M, Levine Coley R. Flavoured tobacco product restrictions in Massachusetts associated with reductions in adolescent cigarette and e-cigarette use. *Tob Control*. 2021.
- 128. Marsh L, Doscher C, Cameron C, Robertson L, Petrovic-van der Deen FS. How would the tobacco retail landscape change if tobacco was only sold through liquor stores, petrol stations or pharmacies? *Aust N Z J Public Health*. 2020.
- 129. van der Deen FS, Wilson N, Cleghorn CL, et al. Impact of five tobacco endgame strategies on future smoking prevalence, population health and health system costs: two modelling studies to inform the tobacco endgame. *Tob Control*. 2018;27(3):278-286.
- 130. Newell T. Auburn's new tobacco laws begin Jan. 1. December 26 2019; <a href="https://goldcountrymedia.com/news/151645/auburns-new-tobacco-laws-begin-jan-1/">https://goldcountrymedia.com/news/151645/auburns-new-tobacco-laws-begin-jan-1/</a>. Accessed February 19, 2021.
- 131. City of Hermosa Beach. Chapter 5.78. Tobacco retailers Revised 7/19 Revised 5/20. 2020; <a href="https://www.codepublishing.com/CA/HermosaBeach/html/HermosaBeach05/HermosaBeach0578.html">https://www.codepublishing.com/CA/HermosaBeach/html/HermosaBeach05/HermosaBeach0578.html</a>. Accessed February 19, 2021.
- 132. Town of Los Gatos. Sec 18.60.020 Permits for retailers of tobacco products. 2020; <a href="https://library.municode.com/ca/los\_gatos/codes/code\_of\_ordinances?nodeId=CO\_CH180FMIPR\_ARTVISMRE\_S18.60.020PERETOPR.">https://library.municode.com/ca/los\_gatos/codes/code\_of\_ordinances?nodeId=CO\_CH180FMIPR\_ARTVISMRE\_S18.60.020PERETOPR.</a> Accessed May 27, 2020.
- 133. City of Sacramento. Tobacco retail license ordinance. 2019; <a href="https://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Code-Compliance/Business/Tobacco-FAQ-Final.pdf?la=en">https://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Code-Compliance/Business/Tobacco-FAQ-Final.pdf?la=en</a>. Accessed May 27, 2020.
- 134. City of Santa Maria. Tobacco retailer license -- frequently asked questions 2019; <a href="https://www.cityofsantamaria.org/home/showdocument?id=27086">https://www.cityofsantamaria.org/home/showdocument?id=27086</a>. Accessed May 27, 2020.
- 135. Huntington Park. Huntington Park municipal code. 2011; <a href="http://qcode.us/codes/">http://qcode.us/codes/</a> <a href="http://qcode.us/codes/">huntingtonpark/view.php?topic=4-19-4\_19\_03&frames=on</a>. Accessed October 30, 2019.
- 136. Bright Research Group. Reducing tobacco retail density in San Francisco: a case study. January 2016; <a href="https://sanfranciscotobaccofreeproject.org/wp-content/uploads/Retail-Density-Case-Study-1.27.16-FINAL-to-TFP.pdf">https://sanfranciscotobaccofreeproject.org/wp-content/uploads/Retail-Density-Case-Study-1.27.16-FINAL-to-TFP.pdf</a>. Accessed May 27, 2020.
- 137. Yolo County Board of Supervisors. Board of Supervisor's meeting: amendments to the county's tobacco retail licensing ordinance. October 25 2016; <a href="http://yolocountyca.swagit.com/play/10252016-1817/#81">http://yolocountyca.swagit.com/play/10252016-1817/#81</a>. Accessed November 20, 2019.
- 138. ChangeLab Solutions. Tobacco retailer density: place-based strategies to advance health and equity. 2019; <a href="https://www.changelabsolutions.org/sites/default/files/CLS-BG214-Tobacco">https://www.changelabsolutions.org/sites/default/files/CLS-BG214-Tobacco</a> Retail Density-Factsheet FINAL 20190131.pdf. Accessed January 14, 2020.

- 139. Public Health Law Center. San Francisco's tobacco retail density regulation: an e-cigarette policy case study. 2022; <a href="https://www.publichealthlawcenter.org/sites/default/files/resources/ecigarette-policy-case-san-francisco.pdf">https://www.publichealthlawcenter.org/sites/default/files/resources/ecigarette-policy-case-san-francisco.pdf</a>. Accessed April 14, 2023.
- 140. Giovenco DP, Morrison CN, Mehranbod CA, et al. Impact and equity of New York City's tobacco retail reduction initiative. *Am J Prev Med*. 2024; 66:235-242.
- 141. Craigmile PF, Onnen N, Schwartz E, Glasser A, Roberts ME. Evaluating how licensing-law strategies will impact disparities in tobacco retailer density: a simulation in Ohio. *Tob Control*. 2021;30(e2):e96-e103.
- 142. Tang H, Cowling DW, Lloyd JC, et al. Changes of attitudes and patronage behaviors in response to a smoke-free bar law. *Am J Public Health*. 2003;93(4):611-617.
- 143. Fong GT, Hyland A, Borland R, et al. Reductions in tobacco smoke pollution and increases in support for smoke-free public places following the implementation of comprehensive smoke-free workplace legislation in the Republic of Ireland: findings from the ITC Ireland/UK Survey. *Tob Control.* 2006;15 Suppl 3:iii51-58.
- 144. Thrasher JF, Perez-Hernandez R, Swayampakala K, Arillo-Santillan E, Bottai M. Policy support, norms, and secondhand smoke exposure before and after implementation of a comprehensive smoke-free law in Mexico city. *Am J Public Health*. 2010;100(9):1789-1798.
- 145. Tang H, Cowling DW, Stevens CM, Lloyd JC. Changes of knowledge, attitudes, beliefs, and preference of bar owner and staff in response to a smoke-free bar law. *Tob Control*. 2004;13(1):87-89.
- 146. Wang TW, Agaku IT, Marynak KL, King BA. Attitudes toward prohibiting tobacco sales in pharmacy stores among U.S. adults. *Am J Prev Med*. 2016;51(6):1038-1043.
- 147. Tucker-Seeley RD, Bezold CP, James P, Miller M, Wallington SF Retail pharmacy policy to end the sale of tobacco products: what is the impact on disparity in neighborhood density of tobacco outlets? *Cancer Epidemiol Biomarkers Prev.* 2016;25(9):1305-1310.
- 148. Roeseler A, Vuong TD, Henriksen L, Zhang X. Assessment of underage sales violations in tobacco stores and vape shops. *JAMA Pediatr.* 2019; 173:795-797.
- 149. Schillo BA, Benson AF, Czaplicki L, et al. Modelling retailer-based exemptions in flavoured tobacco sales restrictions: national estimates on the impact of product availability. *BMJ Open*. 2020;10(11):e040490.
- 150. Combs TB, McKay VR, Ornstein J, et al. Modelling the impact of menthol sales restrictions and retailer density reduction policies: insights from Tobacco Town Minnesota. *Tob Control*. 2020;29(5):502-509.
- 151. Public Health Law Center. The nicotine-free generation approach: A policy option overview. 2023; <a href="https://www.publichealthlawcenter.org/sites/default/files/resources/Nicotine-Free-Generation.pdf?utm\_source=Public+Health+Law+Center&utm\_campaign=84a6ab6d8d-EMAIL\_CAMPAIGN\_2017\_12\_13\_COPY\_02&utm\_medium=email&utm\_term=0\_59c1ffe67d-84a6ab6d8d-284454693. Accessed 15 November, 2023.
- 152. Rimer S. Can Brookline's New Anti-Smoking Law Create a Tobacco-Free Generation? 2022; https://www.bu.edu/articles/2022/anti-smoking-law-brookline/. Accessed 8 November, 2023.
- 153. Le Blanc S. Court upholds Brookline bylaw banning anyone born in 21st century from buying tobacco products. March 12 2024; <a href="https://www.wbur.org/news/2024/03/12/brookline-tobacco-ordinance-upheld">https://www.wbur.org/news/2024/03/12/brookline-tobacco-ordinance-upheld</a>. Accessed March 26, 2024.
- 154. van der Eijk Y. Development of an integrated tobacco endgame strategy. *Tob Control*. 2015;24(4):336-340.
- 155. Singh A, Petrović-van der Deen FS, Carvalho N, Lopez AD, Blakely T. Impact of tax and tobacco-free generation on health-adjusted life years in the Solomon Islands: a multistate life table simulation. *Tob Control*. 2020;29(4):388-397.

- 156. Zeng Z, Cook AR, van der Eijk Y. What measures are needed to achieve a tobacco endgame target? A Singapore-based simulation study. *Tob Control*. 2023, Jun 6:tc-2022-057856.
- 157. Ambrose BK, Day HR, Rostron B, et al. Flavored tobacco product use among US youth aged 12-17 Years, 2013-2014. *JAMA*. 2015;314(17):1871-1873.
- 158. Villanti AC, Mowery PD, Delnevo CD, Niaura RS, Abrams DB, Giovino GA. Changes in the prevalence and correlates of menthol cigarette use in the USA, 2004-2014. *Tob Control*. 2016;25(Suppl 2):ii14-ii20.
- 159. Villanti AC, Collins LK, Niaura RS, Gagosian SY, Abrams DB. Menthol cigarettes and the public health standard: a systematic review. *BMC Public Health*. 2017;17(1):983.
- 160. Soulakova JN, Danczak RR. Impact of menthol smoking on nicotine dependence for diverse racial/ethnic groups of daily smokers. *Healthcare (Basel)*. 2017;5(1):2.
- 161. Green DS, Tongue ADW, Boots B. The ecological impacts of discarded cigarette butts. *Trends Ecol Evol.* 2022;37(2):183-192.
- 162. Lerner CA, Sundar IK, Watson RM, et al. Environmental health hazards of e-cigarettes and their components: Oxidants and copper in e-cigarette aerosols. *Environ Pollut*. 2015;198:100-107.
- 163. Schneider JE, Scheibling CM, Peterson NA, Granados PS, Fulton L, Novotny TE. Online simulation model to estimate the total costs of tobacco product waste in large U.S. cities. Int J Environ Res Public Health. 2020;17(13).
- 164. Gammon DG, Rogers T, Gaber J, et al. Implementation of a comprehensive flavoured tobacco product sales restriction and retail tobacco sales. *Tob Control*. 2021 Jun 4:tobaccocontrol-2021-056494.
- 165. Yang Y, Lindblom EN, Salloum RG, Ward KD. The impact of a comprehensive tobacco product flavor ban in San Francisco among young adults. *Addict Behav Rep.* 2020;11:100273.
- 166. Dove MS, Gee K, Tong EK. Flavored Tobacco sales restrictions and teen e-cigarette use: quasi-experimental evidence from California. *Nicotine Tob Res.* 2023;25(1):127-134.
- 167. City of Beverly Hills. Ordinance No. 19-0- 2783. June 4 2019; <a href="https://www.beverlyhills.org/cbhfiles/storage/files/12788426161892006199/19-O-2783.PDF">https://www.beverlyhills.org/cbhfiles/storage/files/12788426161892006199/19-O-2783.PDF</a>. Accessed August 3, 2020.
- 168. City of Manhattan Beach. Ordinance No. 20-0007. February 18 2020; <a href="https://www.citymb.info/home/showdocument?id=41659">https://www.citymb.info/home/showdocument?id=41659</a>. Accessed August 4, 2020.
- 169. Welwean RA, Stupplebeen DA, Vuong TD, Andersen-Rodgers E, Zhang X. Perspectives of licensed tobacco retailers on tobacco sales bans in Manhattan Beach and Beverly Hills, California. *Tob Control*. 2021;31(e2):e213-e214.
- 170. McDaniel PA, Smith EA, Malone RE. Retailer experiences with tobacco sales bans: lessons from two early adopter jurisdictions. *Tob Control*. 2023 Jun 5:tc-2023-057944.
- 171. McDaniel PA, Malone RE. Tobacco industry and public health responses to state and local efforts to end tobacco sales from 1969-2020. *PLoS One*. 2020;15(5):e0233417.
- 172. Public Health Law Center. Regulating flavored tobacco products. 2019; <a href="https://www.publichealthlawcenter.org/sites/default/files/resources/Regulating-Flavored-Tobacco-Products-2019-2.pdf">https://www.publichealthlawcenter.org/sites/default/files/resources/Regulating-Flavored-Tobacco-Products-2019-2.pdf</a>. Accessed January 15, 2020.
- 173. Chaiton M, Papadhima I, Schwartz R, et al. Product substitution after a real world menthol ban: a cohort study. *Tob Regul Sci.* 2020;6(3):205-212.
- 174. Moroz I, Scapolio LGB, Cesarino I, Leão AL, Bonanomi G. Toxicity of cigarette butts and possible recycling solutions-a literature review. *Environ Sci Pollut Res Int.* 2021;28(9):10450-10473.

- 175. Torkashvand J, Farzadkia M. A systematic review on cigarette butt management as a hazardous waste and prevalent litter: control and recycling. *Environ Sci Pollut Res Int*. 2019;26(12):11618-11630.
- 176. Smith EA, Novotny TE. Whose butt is it? tobacco industry research about smokers and cigarette butt waste. *Tob Control*. 2011;20 Suppl 1(Suppl\_1):i2-9.
- 177. Patel M, Cuccia AF, Folger S, Benson AF, Vallone D, Novotny TE. Support for cigarette filter waste policies among US adults. *Tob Control*. 2023;32(1):118-120.
- 178. Sonnenberg J, Bostic C, Halpern-Felsher B. Support for Aggressive Tobacco Control Interventions Among California Adolescents and Young Adults. *J Adolesc Health*. 2019;66(4):506-509.
- 179. California Department of Public Health, California Tobacco Prevention Program. Key Findings from the 2023 Online California Adult Tobacco Survey. January 2024; <a href="https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/CDPH%20Document%20Library/ResearchandEvaluation/Reports/KeyFindingsOnlineCATS2023.pdf">https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/CDPH%20Document%20Library/ResearchandEvaluation/Reports/KeyFindingsOnlineCATS2023.pdf</a>. Accessed April 1, 2024.
- 180. Walsh RA, Paul CL, Tzelepis F, Stojanovski E, Tang A. Is government action out-of-step with public opinion on tobacco control? Results of a New South Wales population survey. *Aust N Z J Public Health*. 2008;32(5):482-488.
- 181. Edwards R, Johnson E, Stanley J, Waa A, Ouimet J, Fong GT. Support for New Zealand's Smokefree 2025 goal and key measures to achieve it: findings from the ITC New Zealand Survey. *Aust N Z J Public Health*. 2021;45(6):554-561.
- 182. Ontario Tobacco Research Unit. Indicators of OTS Progress [Special Reports: Monitoring and Evaluation Series, 2003-2004 (Vol. 10, No. 3). 2004; <a href="http://otru.org/wp-content/uploads/2012/06/10mr">http://otru.org/wp-content/uploads/2012/06/10mr</a> no3 final.pdf.
- 183. Edwards R, Wilson N, Peace J, Weerasekera D, Thomson GW, Gifford H. Support for a tobacco endgame and increased regulation of the tobacco industry among New Zealand smokers: results from a National Survey. *Tob Control*. 2013;22(e1):e86-93.
- 184. Thomson G, Wilson N, Edwards R. Kiwi support for the end of tobacco sales: New Zealand governments lag behind public support for advanced tobacco control policies. *N Z Med J*. 2010;123(1308):106-111.
- 185. Fix BV, O'Connor RJ, Fong GT, Borland R, Cummings KM, Hyland A. Smokers' reactions to FDA regulation of tobacco products: findings from the 2009 ITC United States survey. *BMC Public Health*. 2011;11:941.
- 186. Shahab L, West R. Public support in England for a total ban on the sale of tobacco products. *Tob Control*. 2010;19(2):143-147.
- 187. Gallus S, Lugo A, Fernandez E, et al. Support for a tobacco endgame strategy in 18 European countries. *Prev Med.* 2014;67:255-258.
- 188. Hayes L, Wakefield MA, Scollo MM. Public opinion about ending the sale of tobacco in Australia. *Tob Control*. 2014;23(2):183-184.
- 189. Li J, Tu D, Trappitt R. *Public opinion about a smokefree New Zealand -- Health and Lifestyles Survey 2010 [In Fact]*. Wellington: Health Sponsorship Council;2011.
- 190. ITC Project. *ITC Bhutan Project Report*. University of Waterloo, Ontario, Canada, and Ministry of Health, Thimphu, Bhutan.; May 2011.
- 191. Connolly GN, Behm I, Healton CG, Alpert HR. Public attitudes regarding banning of cigarettes and regulation of nicotine. *Am J Public Health*. 2012;102(4):e1-2.
- 192. Jaine R, Healey B, Edwards R, Hoek J. How adolescents view the tobacco endgame and tobacco control measures: trends and associations in support among 14-15 year olds. *Tob Control*. 2015;25(5):449-454.

- 193. White J. Young people's opinion on the sale of tobacco in New Zealand. [In Fact]. Wellington: Health Promotion Agency Research and Evaluation Unit;2013.
- 194. Gendall P, Hoek J, Maubach N, Edwards R. Public support for more action on smoking. *N Z Med J*. 2013;126(1375):85-94.
- 195. Newcombe R, Li J. *Public opinion on access to tobacco [In Fact]*. Wellington: Health Promotion Agency Research and Evaluation Unit;2013.
- 196. Wang MP, Wang X, Lam TH, Viswanath K, Chan SS. The tobacco endgame in Hong Kong: public support for a total ban on tobacco sales. *Tob Control*. 2015;24(2):162-167.
- 197. White J. *Young peoples' opinions on tobacco control measures -- 2014 [In Fact]*. Wellington: Health Promotion Agency Research and Evaluation Unit; 2015.
- 198. Palladino R, Hone T, Filippidis FT. Changes in support for bans of illicit drugs, tobacco, and alcohol among adolescents and young adults in Europe, 2008-2014. *Int J Public Health*. 2018;63(1):23-31.
- 199. Boeckmann M, Kotz D, Shahab L, Brown J, Kastaun S. German Public Support for Tobacco Control Policy Measures: Results from the German Study on Tobacco Use (DEBRA), a Representative National Survey. *Int J Environ Res Public Health*. 2018;15(4).
- 200. Schreuders M, Lagerweij NA, van den Putte B, Kunst AE. To what extent and why adolescents do or do not support future tobacco control measures: a multimethod study in the Netherlands. *Tob Control*. 2018;27(5):596-599.
- 201. Wamamili B, Gartner C, Lawler S. Factors associated with support for reducing and ending tobacco sales among university students in Queensland, Australia and New Zealand. *Aust N Z J Public Health*. 2022;46(4):477-481.
- 202. Nogueira SO, Driezen P, Fu M, et al. Beyond the European Union Tobacco Products Directive: smokers' and recent quitters' support for further tobacco control measures (2016-2018). *Tob Control*. 2022;31(6):765-769.
- 203. Brennan E, Durkin S, Scollo MM, Swanson M, Wakefield M. Public support for phasing out the sale of cigarettes in Australia. *Med J Aust*. 2021;215(10):471-472.
- 204. Brennan E, Ilchenko E, Scollo M, Durkin SJ, Wakefield MA. Public support for policies to phase out the retail sale of cigarettes in Australia: results from a nationally representative survey. *Tob Control.* 2022 May 3:tobaccocontrol-2021-057122.
- 205. Siddiqi K, Siddiqui F, Boeckmann M, et al. Attitudes of smokers towards tobacco control policies: findings from the Studying Tobacco users of Pakistan (STOP) survey. *Tob Control*. 2022;31(1):112-116.
- 206. Kang H, Yoon W, Seo HG, et al. Public support for tobacco endgame policies in South Korea: Findings from the 2020 International Tobacco Control Korea Survey. *Tob Control*. 2024 Feb 21:tc-2023-058454.
- 207. Al-Shawaf M, Grooms KN, Mahoney M, Buchanan Lunsford N, Lawrence Kittner D. Support for policies to prohibit the sale of menthol cigarettes and all tobacco products among adults, 2021. *Prev Chronic Dis.* 2023;20:E05.
- 208. Avishai A, Ribisl KM, Sheeran P. Realizing the tobacco endgame: Understanding and mobilizing public support for banning combustible cigarette sales in the United States. *Soc Sci Med*. 2023;327:115939.
- 209. Cosgrave EJ, Blake M, Murphy E, Sheridan A, Doyle F, Kavanagh P. Is the public ready for a tobacco-free Ireland? A national survey of public knowledge and attitudes to tobacco endgame in Ireland. *Tob Control*. 2023 May 26:tc-2023-057958.
- 210. Khoo D, Chiam Y, Ng P, Berrick AJ, Koong HN. Phasing-out tobacco: proposal to deny access to tobacco for those born from 2000. *Tob Control*. 2010;19(5):355-360.

- 211. Trainer E, Gall S, Smith A, Terry K. Public perceptions of the tobacco-free generation in Tasmania: adults and adolescents. *Tob Control*. 2017;26(4):458-460.
- 212. Wu YS, Wang MP, Ho SY, et al. Positive perceptions of electronic cigarettes relative to combustible cigarettes are associated with weaker support for endgame policies on combustible cigarettes: A population-based cross-sectional study in Hong Kong. *Tob Induc Dis.* 2019;17:61.
- 213. Kock L, Shahab L, Moore G, Shortt NK, Pearce J, Brown J. Assessing the profile of support for potential tobacco control policies targeting availability in Great Britain: a cross-sectional population survey. *Tob Control*. 2024;33:221-231.
- 214. Wakefield M, Giovino G. Teen penalties for tobacco possession, use, and purchase: evidence and issues. *Tob Control*. 2003;12 Suppl 1:i6-13.
- 215. Jason LA, Pokorny SB, Muldowney K, Velez M. Youth tobacco sales-to-minors and possession-use-purchase laws: a public health controversy. *J Drug Educ*. 2005;35(4):275-290.
- 216. Galiatsatos P, Kineza C, Hwang S, et al. Neighbourhood characteristics and health outcomes: evaluating the association between socioeconomic status, tobacco store density and health outcomes in Baltimore City. *Tob Control*. 2018;27(e1):e19-e24.
- 217. Lee JG, Sun DL, Schleicher NM, Ribisl KM, Luke DA, Henriksen L. Inequalities in tobacco outlet density by race, ethnicity and socioeconomic status, 2012, USA: results from the ASPiRE Study. *J Epidemiol Community Health*. 2017;71(5):487-492.
- 218. Centers for Disease Control and Prevention. Current cigarette smoking among adults in the United States. 2019; <a href="https://www.cdc.gov/tobacco/data">https://www.cdc.gov/tobacco/data</a> statistics/fact sheets/adult data/cig smoking/index.htm. Accessed July 21, 2020.
- 219. ChangeLab Solutions. PUP in Smoke: Why youth tobacco possession and use penalties are ineffective and inequitable. 2019; <a href="https://www.changelabsolutions.org/sites/default/files/2019-05/PUPinSmoke">https://www.changelabsolutions.org/sites/default/files/2019-05/PUPinSmoke</a> FINAL 2019-04-17.pdf. Accessed July 21, 2020.
- 220. Gottlieb NH, Loukas A, Corrao M, McAlister A, Snell C, Huang PP. Minors' tobacco possession law violations and intentions to smoke: implications for tobacco control. *Tob Control*. 2004;13(3):237-243.
- 221. Malone RE, McAfee T. Birthdate-based commercial tobacco sales restrictions: will 'tobacco-free generation' policies advance or delay the endgame? Tobacco Control Published Online First: 19 June 2024. doi: 10.1136/tc-2024-058716
- 222. Twinamatsiko, Andrew, States Don't Need to Wait for FDA to Adopt Nicotine Reduction Endgame Strategies: Lessons from Flavored Tobacco Litigation (2023). Food and Drug Law Journal Volume 78, Number 4, 2023, Available at SSRN: <a href="https://ssrn.com/abstract=4761319">https://ssrn.com/abstract=4761319</a>

