R Street
Free markets. Real solutions.

R Street Policy Study
No. 330
July 2025

The Impact of Tobacco Harm Reduction on Smoking: An Analysis of the United States, Japan, and Türkiye

By Jeffrey Smith

These three national case studies highlight that there is not a single pathway toward improving public health—but they also underscore that regulatory openness to innovation, alongside strong consumer protections, is essential for long-term progress.

Executive Summary

Despite decades of tobacco control measures, smoking claims over 8 million lives per year globally. Innovative approaches are necessary to move the needle, including promoting the use of reduced-risk products (RRPs) like e-cigarettes and heated tobacco products (HTPs). This paper analyzes tobacco control policies and the impact of RRPs in the United States, Japan, and Türkiye. These countries were selected for their significant smoking populations and distinct regulatory frameworks, to offer evidence-based recommendations for reducing smoking prevalence.

Our analysis reveals opportunities to reduce smoking prevalence by integrating RRPs with traditional tobacco control strategies. The United States benefits from e-cigarette adoption but is hampered by regulatory fragmentation and public misperceptions about RRPs. Japan's permissive stance on HTPs demonstrates

Table of Contents

significant cigarette use reductions, though industry influence complicates regulation. Türkiye's restrictive policies and RRP bans sustain high smoking rates, which are exacerbated by illicit trade. Drawing on global best practices, such as the United Kingdom's e-cigarette integration and Sweden's snus model, this paper proposes the following recommendations:

- **Recognize RRPs as cessation Tools**. Support the inclusion of RRPs in national tobacco control programs.
- **Communicate the Risks**. Generate clear campaigns to address misperceptions.
- **Fund Educational Campaigns**. Tailor campaigns to reach low-income groups.
- **Improve Regulatory Frameworks**. Streamline the FDA's premarket process in the U.S., address Japan's industry-driven inconsistencies, and lift Türkiye's RRP bans with safety controls to enhance access.
- **Reduce Youth Access**. The U.S. Tobacco 21 law and Japan's Taspo system reduced access. Türkiye must strengthen its age-18 enforcement.

The varied approaches of the United States, Japan, and Türkiye highlight the potential of RRPs as complements to traditional tobacco control when supported by balanced, evidence-based policies. The United States shows moderate success with e-cigarettes, Japan demonstrates significant cigarette declines through promoting HTPs, whereas Türkiye's restrictive policies limit harm reduction potential. Integrating RRPs with robust consumer protections, clear risk communication, and youth access restrictions can accelerate reductions in smoking-related diseases, saving millions of lives across the world.

Introduction

Globally, more than 8 million individuals die from smoking-related diseases each year.[1] This number continues to rise, despite the World Health Organization's (WHO's) emphasis on traditional tobacco control efforts such as smoking bans, package warnings, advertising restrictions, taxation, and educational initiatives.[2] This suggests that different approaches to tobacco control are needed to more effectively curb smoking-related deaths.

In some countries, reduced-risk tobacco and nicotine products (RRPs), which have been available in different forms for over a decade, are being explored in this regard.[3] However, there are significant barriers to the widespread support and adoption of these products, including uncertainty around their safety and the need to restrict youth access.

This paper examines how current tobacco control policies and the availability of RRPs have shaped smoking rates in the United States, Japan, and Türkiye (formerly known as Turkey). We selected these three countries as the focus of this paper because each has a large population of individuals who smoke,

Globally, more than 8 million individuals die from smoking-related diseases each year. This number continues to rise, despite the World Health Organization's emphasis on traditional tobacco control efforts such as smoking bans, package warnings, advertising restrictions, taxation, and educational initiatives.

1. "Status of tobacco use in the Region," World Health Organization, May 19, 2025. https://www.who.int/europe/news-room/fact-sheets/item/tobacco.
2. Jean Perriot et al., "Smoking and tobacco control: twenty years after the WHO Framework Convention on Tobacco Control," *Revue Medicale de Liege* 80:3 (March 2025), pp. 169-174. https://pubmed.ncbi.nlm.nih.gov/40079290.
3. Jonathan Livingstone-Banks et al., "Effects of interventions to combat tobacco addiction: Cochrane update of 2021 to 2023 reviews," *Addiction* 119:12 (December 2024), pp. 2101-2115. https://onlinelibrary.wiley.com/doi/abs/10.1111/add.16624.

a clear governmental response to tobacco control, and established policies on RRPs, offering unique opportunities for learning. In each case, we explore these countries' tobacco marketplaces, regulatory challenges, and tobacco harm reduction (THR) approaches. We conclude by synthesizing the lessons from each country to offer policymakers actionable recommendations for effective, innovative approaches to tobacco control and harm reduction.

United States

The United States offers a unique case study on the interaction between established tobacco control policies and the gradual introduction of RRPs. Although regulatory complexities and political resistance have slowed tobacco control progress, the country has still seen a decline in smoking rates, due in part to increased RRP use. This section explores the structure of the U.S. tobacco marketplace, federal and state regulatory frameworks, and the evolving role of harm reduction in reducing combustible cigarette consumption.

Tobacco Market and Use

Several factors have slowed the acceptance and adoption of nontraditional tobacco and nicotine products in the United States. These challenges extend beyond general public health considerations and include entrenched economic and regulatory interests. Specifically, the U.S. tobacco industry is heavily regulated and generates substantial revenue related to farming, manufacturing, and sales.

In 2022 (the most recent year of data available), U.S. tobacco farming produced 431.6 million pounds across 180,000 acres and generated $1.6 billion in revenue, primarily in North Carolina and Kentucky.[4] Even though these numbers are noteworthy, they are lower than past years; from 2012 to 2017, the number of U.S. tobacco farms fell by 15 percent because of reduced demand, increased global competition, and an evolving marketplace.[5] This decrease was also affected by the 2004 Tobacco Buyout, which eliminated quotas and increased market volatility for farmers.[6] To mitigate these economic losses, lawmakers implemented several initiatives to help farmers diversify into crops like hemp.[7]

In 2022 (the most recent year of data available), U.S. tobacco farming produced 431.6 million pounds across 180,000 acres and generated $1.6 billion in revenue, primarily in North Carolina and Kentucky. Even though these numbers are noteworthy, they are lower than past years.

While farming revenue has declined, the tobacco manufacturing industry has remained relatively stable, with the most recent figures available valuing the sector at $49.4 billion in 2021.[8] One notable shift in this sector is a decrease in cigarette sales (a 27 percent drop from 2015 to 2021), which has driven manufacturers to invest in e-cigarettes, with the tobacco industry market ($75.9 billion) projected to grow 3.4 percent annually through 2030.[9]

4. "Crop Production," U.S. Department of Agriculture last accessed May 14, 2025. https://downloads.usda.library.cornell.edu/usda-esmis/files/k3569432s/9306v916d/wm119139b/cropan23.pdf.
5. Ibid.
6. Tom Capehart, "Trends in U.S. Tobacco Farming," Economic Research Service, November 2004. https://people.duke.edu/~rcd2/Dissertation/References/Tobacco%20Specific/Production/tbs25702.pdf.
7. Economic Research Service, "Tobacco and the Economy: Farms, Jobs, and Communities," U.S. Department of Agriculture, last accessed May 14, 2025. https://www.ers.usda.gov/publications/pub-details?pubid=41167.
8. Eloïse Trenda, "Tobacco manufacturing market value in the U.S. 2012-2022," Statista, Sept. 29, 2023. https://www.statista.com/statistics/491709/tobacco-united-states-market-value/#:~:text=The%20market%20value%20of%20the,figure%20projected%20to%20be%20lower.
9. Monica E. Cornelius et al., "State-Specific Prevalence of Adult Tobacco Product Use and Cigarette Smoking Cessation Behaviors, United States, 2018–2019," *Preventing Chronic Disease* 20:E107 (Nov. 16, 2023). https://pmc.ncbi.nlm.nih.gov/articles/PMC10684279.

According to the latest data from the Centers for Disease Control and Prevention (CDC), 18.7 percent of adults (46 million) use tobacco, mainly in the form of cigarettes (11.5 percent) and e-cigarettes (4.5 percent).[10] Both legal and illegal sales have revenue implications. Legal sales generated $19 billion in tax revenue for states in 2021.[11] However, this tax revenue would be even higher if the illicit market were better controlled; experts estimate illegal sales comprise 8.5 to 21 percent of the market.[12] Using tax increases and smoke-free policies to lower consumption is a common tactic in traditional tobacco control approaches, but those steps also require more investment in enforcement to combat illegal-market sales.[13] It is also worth noting that states collected $26 billion in 2024 from taxes and settlements from the 1998 Master Settlement Agreement.[14]

Tobacco Regulation

Tobacco regulation in the United States, coupled with comprehensive control initiatives, forms a robust framework to reduce public health harms and limit cigarette sales. Federal and state policies, alongside targeted programs, have significantly curtailed tobacco use.

The 2009 Family Smoking Prevention and Tobacco Control Act empowers the U.S. Food and Drug Administration (FDA) to regulate tobacco products by mandating graphic health warnings, banning flavored cigarettes (except menthol), and restricting youth-targeted marketing.[15] The FDA's 2016 rule extended oversight to e-cigarettes, cigars, and hookah, requiring premarket authorization to legally sell such products.[16] In 2019, the federal minimum tobacco purchasing age increased from 18 to 21, to further reduce youth access.[17] Proposed 2022 FDA rules that would ban menthol cigarettes and flavored cigars are designed to bolster these efforts, as these products are key drivers of youth use.[18] As of 2025, these rules remain unimplemented. Yet, wider tobacco regulation measures contributed to a 27 percent decline in cigarette sales from 2015 to 2021.[19]

In 2019, the federal minimum tobacco purchasing age increased from 18 to 21, to further reduce youth access.

These federal efforts are supported by tailored state-level policies. For example, in 2023, 34 states and more than 1,000 localities enforced comprehensive smoke-free laws in workplaces, restaurants, and bars, reducing smoking by limiting public use.[20] State cigarette excise taxes, which averaged $1.91 per pack in 2021, deter purchases, resulting in steeper declines of

10. Cornelius et al. https://pmc.ncbi.nlm.nih.gov/articles/PMC10684279.
11. "How do State and Local Cigarette and Vaping Taxes Work?," Tax Policy Center, last accessed June 13, 2025. https://taxpolicycenter.org/briefing-book/how-do-state-and-local-cigarette-and-vaping-taxes-work.
12. National Research Council, *Understanding the U.S. Illicit Tobacco Market: Characteristics, Policy Context, and Lessons from International Experiences* (National Academies Press, 2015). https://nap.nationalacademies.org/19016.
13. Chaloupka et al. https://tobaccocontrol.bmj.com/content/21/2/172.short.
14. Ibid.
15. "Family Smoking Prevention and Tobacco Control Act—An Overview," U.S. Food and Drug Administration, last accessed May 19, 2025. https://www.fda.gov/tobacco-products/rules-regulations-and-guidance-related-tobacco-products/family-smoking-prevention-and-tobacco-control-act-overview.
16. Ibid.
17. Andrea S. Gentzke et al., "Tobacco Product Use and Associated Factors Among Middle and High School Students – National Youth Tobacco Survey, United States, 2021," *Morbidity and Mortality Weekly Report: Surveillance Summaries* 71:5 (March 11, 2022), pp. 1-29. https://www.cdc.gov/mmwr/volumes/71/ss/ss7105a1.htm?utm_source=mp-fotoscapes.
18. "FDA Proposes Rules Prohibiting Menthol Cigarettes and Flavored Cigars to Prevent Youth Initiation, Significantly Reduce Tobacco-Related Disease and Death," U.S. Food and Drug Administration, last accessed May 19, 2025. https://www.fda.gov/news-events/press-announcements/fda-proposes-rules-prohibiting-menthol-cigarettes-and-flavored-cigars-prevent-youth-initiation.
19. Cornelius et al. https://pmc.ncbi.nlm.nih.gov/articles/PMC10684279.
20. Gentzke et al. https://www.cdc.gov/mmwr/volumes/71/ss/ss7105a1.htm?utm_source=mp-fotoscapes.

smoking rates in high-tax states like New York ($4.35 per pack).[21] Twenty-two states align with the federal age-21 law, and states like California ban flavored tobacco, including menthol, further reducing sales.[22] High-regulation states saw a 15 percent drop in cigarette use from 2011 to 2021.[23]

The CDC's National Tobacco Control Program (NTCP), established in 1999, funds state-level cessation programs, public education campaigns, and surveillance.[24] Campaigns like the CDC's Tips From Former Smokers (2012 to present) have prompted tens of millions of quit attempts.[25] The Truth Initiative's youth-focused campaigns, which were launched in 2014, lowered smoking initiation by 3 percentage points among adolescents by 2019.[26] State quitlines, supported by the NTCP, served 1.2 million callers in 2021, 30 percent of whom achieved cessation.[27] These initiatives amplify regulatory impacts and have helped reduce adult smoking prevalence from 20.1 percent in 2018 to 18.7 percent in 2021.

Regulations and control initiatives synergistically limit cigarette sales. Flavor bans and marketing restrictions reduce the appeal of combustible products, and taxes raise prices, with a 10 percent price increase cutting demand by 4 to 5 percent.[28] Smoke-free laws and campaigns decrease the social acceptability of smoking, and cessation programs support quitting.[29] Illicit trade (8.5 to 21 percent of the market) offsets some declines in estimated smoking rates, but enforcement efforts like track-and-trace systems (programs that determine where and when products were sold) counter these declines.[30]

Flavor bans and marketing restrictions reduce the appeal of combustible products, and taxes raise prices, with a 10 percent price increase cutting demand by 4 to 5 percent.

Tobacco Harm Reduction

RRPs, primarily electronic nicotine delivery systems (ENDS) and heated tobacco products (HTPs), have significantly influenced adult smoking behaviors in the United States, contributing to declines in cigarette use. However, transitioning smokers to these lower-risk alternatives can be challenging.

Between 2007 and 2022, the percentage of U.S. adults who smoked combustible cigarettes fell from 19.8 percent to 11.6 percent, equating to 28.8 million fewer smokers in 2022.[31] Concurrently, ENDS use among adults reached 6.5 percent by 2023, with higher rates of use among younger adults aged 18 to 24.[32]

21. Chaloupka et al. https://tobaccocontrol.bmj.com/content/21/2/172.short.
22. Cornelius et al. https://pmc.ncbi.nlm.nih.gov/articles/PMC10684279.
23. Ibid.
24. Ibid.
25. Rebecca Murphy-Hoefer et al., "Association of the Tips From Former Smokers Campaign with Smoking Cessation Among Adults – United States, 2012–2018," *Preventing Chronic Disease* 18 (Jun. 10, 2021), p. E59. https://pmc.ncbi.nlm.nih.gov/articles/PMC7478162.
26. Elizabeth C. Hair et al., "Using Aggregate Temporal Variation in Ad Awareness to Assess the Effects of the truth® Campaign on Youth and Young Adult Smoking Behavior" *Journal of Health Communication* 25:3 (March 4, 2020), pp. 223-231. https://www.tandfonline.com/doi/abs/10.1080/10810730.2020.1733144.
27. Monica E. Cornelius et al., "Tobacco Product Use Among Adults – United States, 2021," *Morbidity and Mortality Weekly Report* 72:18 (May 5, 2023), pp. 475-483. https://www.cdc.gov/mmwr/volumes/72/wr/mm7218a1.htm.
28. Chaloupka et al. https://tobaccocontrol.bmj.com/content/21/2/172.short.
29. Rebecca Murphy-Hoefer et al., "Association between the *Tips From Former Smokers* Campaign and Smoking Cessation Among Adults, United States, 2012–2018," *Preventing Chronic Disease* 17:E97 (Aug. 27, 2020), p. E59. https://pmc.ncbi.nlm.nih.gov/articles/PMC7478162.
30. National Research Council. https://nap.nationalacademies.org/19016.
31. Cornelius et al., "Tobacco Product Use Among Adults – United States, 2021." https://www.cdc.gov/mmwr/volumes/72/wr/mm7218a1.htm?s_cid=mm7218a1_w#suggestedcitation.
32. Anjel Vahratian et al., "Electronic Cigarette Use Among Adults in the United States, 2019–2023," Centers for Disease Control and Prevention, January 2025. https://www.cdc.gov/nchs/products/databriefs/db524.htm.

REDUCED RISK PRODUCTS ARE POWERFUL OPTIONS FOR THOSE WHO SMOKE

Research indicates that for those who smoke combustible cigarettes, ENDS are effective cessation aids, with 28.3 percent of smokers reporting having used e-cigarettes to quit, and with 20 to 30 percent of those successfully quitting compared to 5 to 10 percent for unaided attempts.[33] HTPs, though less common, also reduce cigarette consumption, with studies showing a 50 percent drop in cigarette use among adults who switched to a specific HTP over three months.[34] These shifts correlate with a 27 percent decline in combustible cigarette sales from 2015 to 2021.[35]

RRPs deliver nicotine with fewer toxicants, potentially lowering the risks of smoking-related diseases like lung cancer (which is responsible for 29 percent of related deaths) and chronic obstructive pulmonary disease (responsible for 21 percent).[36] However, long-term data are limited, and some studies suggest that ENDS may elevate cardiovascular risks, though less than cigarettes.[37] The uncertainty around relative risk complicates the adoption of ENDS as harm reduction tools. In addition, misperceptions about RRP risks are prevalent, with 40 percent of smokers believing e-cigarettes are as harmful as cigarettes, deterring use.[38] Another challenge in transitioning smokers to RRPs is a regulatory barrier established under the 2009 Family Smoking Prevention and Tobacco Control Act, which requires premarket authorization that delays or prevents access to new ENDS and HTPs.[39] Socioeconomic disparities further exacerbate barriers to adoption, as low-income smokers, who comprise 24 percent of smokers, face higher price sensitivity and limited access to cessation aids.[40] The illicit cigarette trade further undermines RRP adoption by providing less expensive alternatives.[41]

Despite these challenges, RRPs have driven significant reductions in adult smoking rates, with ENDS and HTPs aiding cessation and reducing combustible cigarette use.[42]

33. Jamie Hartmann-Boyce et al., "Electronic cigarettes for smoking cessation," *Cochrane Database of Systematic Reviews* 9 (Sept. 14, 2021). https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010216.pub6/abstract.
34. Christelle Haziza et al., "Favorable Changes in Biomarkers of Potential Harm to Reduce the Adverse Health Effects of Smoking in Smokers Switching to Menthol Tobacco Heating System 2.2 for 3 Months (Part 2)," *Nicotine & Tobacco Research* 22:4 (April 4, 2020), pp. 549-559. https://academic.oup.com/ntr/article-abstract/22/4/549/5498185.
35. Cornelius et al., "Tobacco Product Use Among Adults – United States, 2021." https://www.cdc.gov/mmwr/volumes/72/wr/mm7218a1.htm?s_cid=mm7218a1_w#suggestedcitation.
36. Ibid.
37. Christelle Haziza et al. https://academic.oup.com/ntr/article-abstract/22/4/549/5498185.
38. Hartmann-Boyce. https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010216.pub6/abstract.
39. David A. Kessler et al., "The Food and Drug Administration's Regulation of Tobacco Products," *The New England Journal of Medicine* 335:13 (Sept. 26, 1996). https://www.nejm.org/doi/full/10.1056/nejm199609263351321.
40. Brandi N. Martell et al., "Disparities in Adult Cigarette Smoking—United States, 2002–2005 and 2010–2013," *Morbidity and Mortality Weekly Report* 65:30 (Aug. 5, 2016), pp. 753-758. https://www.cdc.gov/mmwr/volumes/65/wr/mm6530a1.htm.
41. National Research Council. https://nap.nationalacademies.org/19016.
42. Hartmann-Boyce et al. https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010216.pub6/abstract.

Japan

Japan presents a unique model of tobacco control and harm reduction in which HTPs have gained significant market share despite limited support from public health authorities. In this section, we examine the dynamics of Japan's tobacco economy, its regulatory environment, and the specific ways in which harm reduction tools have influenced smoking behavior.

Tobacco Market and Use

Japan's tobacco industry contributes significantly to the country's economy but faces increasing regulatory scrutiny because of public health concerns. Though rates of adoption of certain types of RRPs have increased in Japan, smoking continues to be prevalent, and the role of RRPs in reducing smoking rates has been minimized.

Revenue is approximately $150 million annually, but Japan Tobacco (JT) has shifted to importing less expensive foreign tobacco, reducing the economic contribution of domestic farming.

Tobacco cultivation in Japan is primarily centered in Kyushu and Tohoku. In 2020, approximately 4,000 farmers (down from 80,000 in the 1980s) produced an estimated $100 million in leaf tobacco.[43] Revenue is approximately $150 million annually, but Japan Tobacco (JT) has shifted to importing less expensive foreign tobacco, reducing the economic contribution of domestic farming.[44] The 1984 Tobacco Business Law prioritized industry stability, limiting support for crop diversification despite declining farm viability.[45]

JT dominates Japan's $20.3 billion tobacco manufacturing sector. In 2022, the organization produced 52.2 billion cigarettes and HTP sticks.[46] Much like the United States, cigarette sales in Japan dropped 52.7 percentage points from 2011 to 2023, offset by HTP growth. The 2004 ratification of the WHO Framework Convention on Tobacco Control (FCTC) spurred regulations, but JT's influence, backed by the Minister of Finance, who owns 33 percent of the company, weakens enforcement.[47] Marketing expenditures reached $2.1 billion in 2022 and primarily targeted HTPs, despite FCTC advertising restrictions.[48]

In 2022, 18.6 million adults in Japan (16.7 percent) used tobacco, with 12 percent smoking combustible cigarettes and 4.5 percent using HTPs.[49] Tobacco taxes generated 2 trillion yen ($18 billion) in 2021, an amount that has remained relatively stable despite declining sales because of compensatory tax hikes, though smuggling illicit products also contributes to revenue losses.[50] The 2010 tax increase raised cigarette prices by 40 percent, reducing consumption but disproportionately impacting low-income groups.[51] Weak FCTC implementation, including inadequate smoke-free policies, hinders progress toward reducing smoking-related disease.[52]

43. Takashi Oshio, "Economic and Social Dimensions of Japan's Cigarette Tax," The Tokyo Foundation for Policy Research, Oct. 21, 2021. https://www.tokyofoundation.org/research/detail.php?id=861#.
44. Ibid.
45. Kaori Iida and Robert N. Proctor, "'The industry must be inconspicuous': Japan Tobacco's corruption of science and health policy via the Smoking Research Foundation," *Tobacco Control* 27:e1 (Feb. 4, 2018), pp. e3–e11. https://tobaccocontrol.bmj.com/content/27/e1/e3.abstract.
46. K. Michael Cummings et al., "Transformation of the tobacco product market in Japan, 2011–2023," *Tobacco Control* 33 (Oct. 29, 2024). https://tobaccocontrol.bmj.com/content/early/2024/10/29/tc-2024-058734.abstract.
47. Iida and Proctor. https://tobaccocontrol.bmj.com/content/27/e1/e3.abstract.
48. Kota Katanoda et al., "Tobacco control challenges in East Asia: proposals for change in the world's largest epidemic region," *Tobacco Control* 23:4 (April 17, 2013), pp. 359-368. https://tobaccocontrol.bmj.com/content/23/4/359.short.
49. Cummings et al. https://tobaccocontrol.bmj.com/content/early/2024/10/29/tc-2024-058734.abstract.
50. Oshio. https://www.tokyofoundation.org/research/detail.php?id=861#.
51. Ibid.
52. Katanoda et al. https://tobaccocontrol.bmj.com/content/23/4/359.short.

Tobacco Regulation

Japan's tobacco regulatory framework, shaped by federal policies and local ordinances, aims to mitigate public health harms while navigating economic ties to the tobacco industry. These regulations and control initiatives have contributed to a significant decline in cigarette sales, though challenges persist because of industry influence.

Japan's primary tobacco legislation, the 1984 Tobacco Business Law, prioritizes industry stability and revenue, reflecting the Ministry of Finance's one-third ownership of JT.[53] The 2004 ratification of the FCTC introduced measures like health warnings covering 50 percent of cigarette packs and a 59.9 percent tax rate on retail prices in 2022.[54] The 2018 Health Promotion Law bans smoking in schools, hospitals, and government buildings, with partial restrictions in workplaces and restaurants.[55] E-cigarettes with nicotine are regulated as pharmaceuticals, effectively banning their sale.[56] These policies reduced cigarette sales by 52.7 percent from 2011 to 2023, driven by tax hikes and HTP adoption.[57]

Prefectures and municipalities enforce stricter measures. Tokyo, Kanagawa, and Hyogo have strict indoor smoking bans, and larger establishments have designated smoking areas.[58] Chiyoda-ku, the central ward/city in Tokyo, pioneered street-smoking bans and related fines in 2002, whereas Kyoto expanded non-smoking streets in 2019.[59] Local taxes supplement federal levies, with cigarette prices averaging 600 yen (around $4 USD) per pack in 2023.[60] The Taspo system, introduced in 2008, requires age-verification cards for vending machine purchases, curbing youth access.[61] These local efforts contributed to a 56 percent drop in per capita cigarette demand from 2010 to 2022.[62]

Japan's Health Japan 21 program, launched in 2000, promotes cessation but omits smoking reduction targets because of industry opposition.[63] The Ministry of Health, Labour and Welfare funds cessation clinics, serving 51.2 percent of smokers. Public campaigns intensified before the 2020 Tokyo Olympics, raised awareness of second-hand smoke risks, and reduced smoking prevalence from 20.1 percent in 2011 to 16.7 percent in 2022.[64] Workplace smoking cessation programs, mandated in some prefectures, supported 26.1 percent of smokers wanting to quit.[65]

Public campaigns intensified before the 2020 Tokyo Olympics, raised awareness of second-hand smoke risks, and reduced smoking prevalence from 20.1 percent in 2011 to 16.7 percent in 2022.

Tobacco Harm Reduction

RRPs, particularly HTPs and ENDS, have significantly altered adult smoking rates in Japan, driving substantial declines in cigarette consumption. However,

53. Iida and Proctor. https://tobaccocontrol.bmj.com/content/27/e1/e3.abstract.
54. Cummings et al. https://tobaccocontrol.bmj.com/content/early/2024/10/29/tc-2024-058734.abstract.
55. Katanoda et al. https://tobaccocontrol.bmj.com/content/23/4/359.short.
56. Cummings et al. https://tobaccocontrol.bmj.com/content/early/2024/10/29/tc-2024-058734.abstract.
57. Ibid.
58. Katanoda et al. https://tobaccocontrol.bmj.com/content/23/4/359.short.
59. Oğuz Atuk and Mustafa Ugur Özmen, "Firm strategy and consumer behaviour under a complex tobacco tax system: implications for the effectiveness of taxation on tobacco control," *Tobacco Control* 26 (2017). https://tobaccocontrol.bmj.com/content/26/3/277.short.
60. Cummings et al. https://tobaccocontrol.bmj.com/content/early/2024/10/29/tc-2024-058734.abstract.
61. Atuk and Özmen. https://tobaccocontrol.bmj.com/content/26/3/277.short.
62. "Japan: Tobacco and Health Around the World." https://globalactiontoendsmoking.org/research/tobacco-around-the-world/japan.
63. Iida and Proctor. https://tobaccocontrol.bmj.com/content/27/e1/e3.abstract.
64. Cummings et al. https://tobaccocontrol.bmj.com/content/early/2024/10/29/tc-2024-058734.abstract.
65. "Japan: Tobacco and Health Around the World." https://globalactiontoendsmoking.org/research/tobacco-around-the-world/japan.

challenges in fully transitioning smokers to these lower-risk alternatives persist and are influenced by regulatory, social, and economic factors.

Declining smoking rates accelerated after 2015, coinciding with the introduction of HTPs, which captured a 31 percent market share by 2021 and a 44 percent share by 2024. By 2022, 5.6 million individuals were using HTPs, with clinical trials showing that 70 percent of smokers who switched to HTPs reduced cigarette use by over 50 percent within three months.[66] ENDS, which are restricted to non-nicotine variants because of pharmaceutical regulations, have minimal market presence, with illicit nicotine ENDS sales marginally contributing to declines in combustible cigarette use. The shift to HTPs has been a primary driver in the reduction of smoking rates, with regression analyses confirming a sharp per capita cigarette sales drop from 2016 to 2018 after the introduction of HTPs.[67]

By 2022, 5.6 million individuals were using HTPs, with clinical trials showing that 70 percent of smokers who switched to HTPs reduced cigarette use by over 50 percent within three months.

HTPs reduce exposure to harmful combustion byproducts, potentially lowering risks of lung cancer and cardiovascular disease, which account for 11 percent of Japan's smoking-related deaths.[68] However, long-term health outcomes are unclear, with studies indicating possible respiratory risks, though less severe than cigarettes.[69] This uncertainty fuels public skepticism in Japan about RRPs as harm reduction tools.

Challenges in transitioning smokers to RRPs in Japan include regulatory inconsistencies, industry influence, and misperceptions. Compliance is also weakened by Japan's Tobacco Business Law, its prioritization of industry revenue, and the Ministry of Finance's 33 percent stake in JT.[70] Only text-based health warnings, covering 50 percent of the pack, are required, reducing deterrence.[71] Public misperceptions also deter adoption, with 35 percent of smokers viewing HTPs as equally harmful as combustible cigarettes.[72] Socioeconomic barriers, particularly among low-income individuals who smoke (and who make up 20 percent of this group), limit access due to HTPs' high initial costs, despite universal health coverage for cessation treatments.[73]

Türkiye

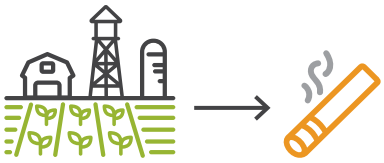
Türkiye has taken an aggressive stance on tobacco control through high taxes, graphic health warnings, and widespread smoking restrictions. However, limited access to RRPs, combined with high smoking prevalence and a thriving illicit market, has slowed progress. This section reviews Türkiye's tobacco marketplace, its regulatory infrastructure, and the significant challenges it faces in integrating THR into its tobacco control strategy.

66. Takahiro Tabuchi et al., "Awareness and Use of Electronic Cigarettes and Heat-Not-Burn Tobacco Products in Japan," *Addiction* 111:4 (April 2016), pp. 706-713. https://onlinelibrary.wiley.com/doi/abs/10.1111/add.13231.
67. Cummings et al. https://tobaccocontrol.bmj.com/content/early/2024/10/29/tc-2024-058734.abstract.
68. Tabuchi et al. https://onlinelibrary.wiley.com/doi/abs/10.1111/add.13231.
69. Katanoda et al. https://tobaccocontrol.bmj.com/content/23/4/359.short.
70. Iida and Proctor. https://tobaccocontrol.bmj.com/content/27/e1/e3.abstract.
71. Katanoda et al. https://tobaccocontrol.bmj.com/content/23/4/359.short.
72. Tabuchi et al. https://onlinelibrary.wiley.com/doi/abs/10.1111/add.13231.
73. Iida and Proctor. https://tobaccocontrol.bmj.com/content/27/e1/e3.abstract.

Tobacco Market and Use

The tobacco industry in Türkiye is economically significant but heavily regulated because of public health priorities. In 2017, tobacco farming, which is concentrated in the Aegean and Black Sea regions, involved 56,000 farmers producing 80,000 tons of leaf tobacco worth approximately $400 million annually.[74] Production has declined 50 percent since 2000 because of reduced domestic demand and competition from imports.[75] The 2008 privatization of TEKEL, a tobacco and alcohol company, ended state support of the tobacco industry, pushing farmers toward alternative crops like hazelnuts, though limited subsidies have hindered the transition.[76]

Türkiye's $12 billion tobacco manufacturing sector produced an estimated 150 billion cigarette sticks in 2022.[77] Cigarette sales fell 10 percent from 2010 to 2020 because of tax hikes, enabling HTPs to gain traction.[78] The 2008 Law No. 5247 expanded smoke-free laws and advertising bans, aligning with the FCTC, though industry lobbying has weakened its enforcement.[79] Manufacturers spent $1.2 billion on marketing in 2019, targeting premium segments.[80]



Türkiye's $12 billion tobacco manufacturing sector produced an estimated 150 billion cigarette sticks in 2022.

In 2022, 27 percent of adults (16 million individuals) smoked, primarily combustible cigarettes, with men (40 percent) outpacing women (15 percent).[81] In 2021, cigarette sales generated $10 billion in tax revenue, and a 20 percent Special Consumption Tax increase in 2010 reduced consumption by 15 percent.[82] Taxes, which account for 80 percent of the cost of cigarettes in Türkiye, yielded $11 billion in 2023, but illicit trade (which accounts for 15 to 20 percent of the market) erodes that revenue.[83] Higher taxes disproportionately affect low-income groups, though such strategies reduce smoking prevalence most in these populations.[84]

Tobacco Regulation

Türkiye's tobacco regulatory framework, supported by extensive control initiatives, aims to reduce the public health burden of smoking and has achieved notable declines in cigarette sales. Federal laws, local regulations, and strategic programs align with global standards but face challenges from industry influence and illicit trade.

74. Selin Arslanhan et al., "Economic analysis of tobacco elimination policies in Turkey," *Health Policy* 101:2 (July 2012), pp. 149-160. https://www.sciencedirect.com/science/article/pii/S0168851012000693?casa_token=_7l5tfcG9MkAAAAA:4KKtzbjLWMOnbe27grXqnfbnWzm56Ki0hrnJNqUskrPwPLmjMd6AXz3ZiVkNgGy-CCiW9K4fd_c.
75. Ibid.
76. Volkan Cetinkaya and Patricio V. Marquez, "Tobacco Taxation in Turkey," World Bank Group, last accessed May 19, 2025. https://www.sidalc.net/search/Record/dig-okr-1098626387/Description.
77. Tamer Cetin, "The effect of taxation and regulation on cigarette smoking: Fresh evidence from Turkey," *Health Policy* 121:12 (December 2017), pp. 1288-1295. https://www.sciencedirect.com/science/article/pii/S0168851017302439?casa_token=JoADsSVEDmQAAAAA:MpCvBiEcTFcLAtDV6D3yUXVQNT49twxJfm7vpDET9Kbt42rgr_A5atdx8E4rqrlSvG8Mi6dAkGg.
78. Ibid.
79. Atuk and Özmen. https://tobaccocontrol.bmj.com/content/26/3/277.short.
80. Ibid.
81. Ver Bilano et al., "Global trends and projections for tobacco use, 1990–2025: An analysis of smoking indicators from the WHO Comprehensive Information Systems for Tobacco Control," *The Lancet* 385:9972 (March 14, 2015), pp. 966-976. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60264-1/fulltext?rss%3Dyes=.
82. Cetinkaya and Marquez. https://www.sidalc.net/search/Record/dig-okr-1098626387/Description.
83. Arslanhan et al. https://www.sciencedirect.com/science/article/pii/S0168851012000693?casa_token=_7l5tfcG9MkAAAAA:4KKtzbjLWMOnbe27grXqnfbnWzm56Ki0hrnJNqUskrPwPLmjMd6AXz3ZiVkNgGy-CCiW9K4fd_c.
84. Bilano et al. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60264-1/fulltext?rss%3Dyes=.

The Law on Prevention and Control of Hazards of Tobacco Products (No. 4207), enacted in 1996 and strengthened by Law No. 5727 in 2008, forms the backbone of tobacco regulation.[85] It mandates comprehensive smoke-free zones in indoor public spaces, bans tobacco advertising and sponsorship, and requires health warnings covering 85 percent of cigarette pack fronts and 100 percent of backs, including graphic images.[86] Plain packaging, implemented in 2019, eliminates brand appeal, and sales to minors under age 18 are prohibited, though enforcement is inconsistent.[87] The 2019 ban on e-cigarette and HTP imports curbs emerging RRPs.[88]

Cigarette taxes, which account for 80 percent of retail prices via a special consumption tax, are adjusted biannually; in fact, a 20 percent tax hike in 2010 is estimated to have cut combustible cigarette consumption by 15 percent.

Provincial and municipal governments enforce additional restrictions. Istanbul, Ankara, and other cities have expanded smoke-free zones to outdoor public areas, such as parks and event venues, with fines of 188 Turkish lira (around $5 USD) for violations.[89] Local authorities mandate visible signs prohibiting sales to minors at retail points.[90] Cigarette taxes, which account for 80 percent of retail prices via a special consumption tax, are adjusted biannually; in fact, a 20 percent tax hike in 2010 is estimated to have cut combustible cigarette consumption by 15 percent.[91] These local efforts contributed to a decline in smoking prevalence from 43.6 percent in 1998 to 30.7 percent in 2016.[92]

Türkiye's National Tobacco Control Program (2008 to 2023), guided by the WHO's MPOWER strategies, drives cessation and prevention. The 2018 to 2023 Action Plan emphasizes public education, cessation support, and youth protection.[93] Campaigns, such as mandatory 90-minute anti-tobacco broadcasts on television, increased quit intentions by 14.4 percent from 2008 to 2012.[94] Provincial Tobacco Control Committees, though reliant on NGOs, promote awareness, whereas cessation clinics, integrated into primary care, served 1.2 million smokers by 2019, with 20 percent success rates.[95] The Global Adult Tobacco Survey monitors progress, noting a 13.4 percent smoking reduction from 2008 to 2012, though gains stalled post-2012 because of industry strategies like low-tar products.[96] These initiatives halved daily smoking rates in some demographics by 2016.[97]

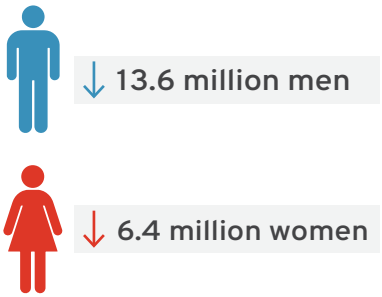
Plain packaging deters smokers, and high taxation reduces demand by 5 to 7 percent.[98] Smoke-free laws and campaigns lower social acceptability, while

85. Ibid.
86. Atuk and Özmen. https://tobaccocontrol.bmj.com/content/26/3/277.short.
87. Cetin. https://www.sciencedirect.com/science/article/pii/S0168851017302439?casa_token=JoADsSVEDmQAAAAA:MpCvBiEcTFcLAtDV6D3yUXVQNT49twxJfm7vpDET9Kbt42rgr_A5atdx8E4rqrlSvG8Mi6dAkGg.
88. "Turkey Legal Summary," Tobacco Control Laws, last accessed May 19, 2025. https://www.tobaccocontrollaws.org/legislation/turkey.
89. Ibid.
90. Bilano et al. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60264-1/fulltext?rss%3Dyes=.
91. Cetin. https://www.sciencedirect.com/science/article/pii/S0168851017302439?casa_token=JoADsSVEDmQAAAAA:MpCvBiEcTFcLAtDV6D3yUXVQNT49twxJfm7vpDET9Kbt42rgr_A5atdx8E4rqrlSvG8Mi6dAkGg.
92. Elif Oksan Calikoglu and Edanur Koycegiz, "Tobacco Control Policies in Turkey in Terms of MPOWER," *Eurasian Journal of Medicine* 51:1 (February 2019), pp. 80-84. https://pmc.ncbi.nlm.nih.gov/articles/PMC6422626.
93. Ibid.
94. Osman Elbek et al., "Tobacco Control in Turkey in the Light of the Global Adult Tobacco Survey," *Turkish Thoracic Journal* 22:1 (Jan. 1, 2021), pp. 90-92. https://pmc.ncbi.nlm.nih.gov/articles/PMC7919432.
95. Ibid.
96. Ibid.
97. Calikoglu and Koycegiz. https://pmc.ncbi.nlm.nih.gov/articles/PMC6422626.
98. Cetin. https://www.sciencedirect.com/science/article/pii/S0168851017302439?casa_token=JoADsSVEDmQAAAAA:MpCvBiEcTFcLAtDV6D3yUXVQNT49twxJfm7vpDET9Kbt42rgr_A5atdx8E4rqrlSvG8Mi6dAkGg.

cessation programs boost quit rates.[99] However, illicit trade (which accounts for 15 to 20 percent of the market) and industry innovations like slim cigarettes offset declines.[100] Enforcement gaps, particularly for advertising bans, persist.[101]

Tobacco Harm Reduction

RRPs have had a limited but growing impact on adult smoking rates in Türkiye, where cigarette smoking remains prevalent. Regulatory restrictions and socioeconomic factors pose significant challenges to transitioning smokers to these lower-risk alternatives. Türkiye's adult smoking prevalence declined from 31.4 percent in 2012 to 27.4 percent in 2022, with 20 million adults (13.6 million men and 6.4 million women) using tobacco products.[102] Cigarette consumption rose 5.5 percent from 63.8 packs per capita in 2010 to 67.3 in 2022, reflecting persistent demand.[103] RRP use is minimal due to a 2020 ban on HTPs and nicotine-containing ENDS, with only non-nicotine ENDS permitted.[104] The country's 2019 health survey reported daily e-cigarette use at 0.4 percent among adults.[105] Limited studies suggest that ENDS contribute marginally to cessation, with 7.1 percent of smokers in Türkiye quitting between 2008 and 2012, though most relied on unaided methods.[106] No primary data quantifies the impact of HTPs before the ban, but their absence likely sustains cigarette reliance.



Türkiye's adult smoking prevalence declined from 31.4 percent in 2012 to 27.4 percent in 2022, with 20 million adults (13.6 million men and 6.4 million women) using tobacco products.

RRPs, where available, reduce exposure to combustion-related toxicants linked to lung cancer (91.5 percent of tobacco-related deaths) and ischemic heart disease (27.4 percent).[107] However, the long-term health effects of ENDS remain understudied, with potential risks of airway inflammation noted in short-term studies.[108] This uncertainty, coupled with Türkiye's ban, limits the adoption of RRP's as harm reduction tools.

Challenges to transitioning smokers include stringent regulations, public misperceptions, and socioeconomic disparities. The 2020 ban on HTPs and ENDS enacted under Law No. 4207 restricts access, leaving smokers with the options of combustible cigarettes or unregulated, illicit-market products.[109] The illicit cigarette trade, fluctuating between 2.3 percent and 29 percent of the market from 2008 to 2022, undermines regulated alternatives.[110] Public awareness campaigns, intensified post-2008, increased quit intentions by 14.4 percent, but 35 percent of smokers perceive ENDS to be equally as harmful as cigarettes, deterring their use.[111] Low-income smokers, comprising 30 percent of users, face barriers because

99. Elbek et al. https://pmc.ncbi.nlm.nih.gov/articles/PMC7919432.
100. Atuk and Özmen. https://tobaccocontrol.bmj.com/content/26/3/277.short.
101. Bilano et al. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60264-1/fulltext?rss%3Dyes=.
102. Cetin. https://www.sciencedirect.com/science/article/pii/S0168851017302439?casa_token=JoADsSVEDmQAAAAA:MpCvBiEcTFcLAtDV6D3yUXVQNT49twxJfm7vpDET9Kbt42rgr_A5atdx8E4rqrlSvG8Mi6dAkGg.
103. Calikoglu and Koycegiz. https://pmc.ncbi.nlm.nih.gov/articles/PMC6422626.
104. Elbek et al. https://pmc.ncbi.nlm.nih.gov/articles/PMC7919432.
105. Mustafa Çakir, "Evaluation of Smoking and Associated Factors in Turkey," *Iranian Journal of Public Health* 52:4 (April 2023), pp. 766-772. https://pmc.ncbi.nlm.nih.gov/articles/PMC10404323.
106. Elbek et al. https://pmc.ncbi.nlm.nih.gov/articles/PMC7919432.
107. Cetin. https://www.sciencedirect.com/science/article/pii/S0168851017302439?casa_token=JoADsSVEDmQAAAAA:MpCvBiEcTFcLAtDV6D3yUXVQNT49twxJfm7vpDET9Kbt42rgr_A5atdx8E4rqrlSvG8Mi6dAkGg.
108. Tabuchi et al. https://onlinelibrary.wiley.com/doi/abs/10.1111/add.13231.
109. Elbek et al. https://pmc.ncbi.nlm.nih.gov/articles/PMC7919432.
110. Cetin. https://www.sciencedirect.com/science/article/pii/S0168851017302439?casa_token=JoADsSVEDmQAAAAA:MpCvBiEcTFcLAtDV6D3yUXVQNT49twxJfm7vpDET9Kbt42rgr_A5atdx8E4rqrlSvG8Mi6dAkGg.
111. Calikoglu and Koycegiz. https://pmc.ncbi.nlm.nih.gov/articles/PMC6422626.

of high cigarette taxes (accounting for 80.8 percent of the retail price) and limited access to cessation clinics, which only served 1.2 million by 2019.[112]

Policy Recommendations

The United States, Japan, and Türkiye each approach tobacco control and THR through different regulatory lenses. This review demonstrates opportunities among the different practices to reduce smoking prevalence by carefully integrating RRPs alongside traditional tobacco control strategies. The United States has seen a decline in cigarette smoking to 11.6 percent of adults in 2022, partly due to e-cigarette use, though regulatory barriers and misperceptions limit broader adoption.[113] As of 2024, Japan's HTPs hold a 44 percent market share, driving a 52.7 percent drop in cigarette sales from 2011 to 2023, yet regulatory inconsistencies persist.[114] Türkiye's high smoking prevalence (27 percent in 2022) coupled with bans on HTPs and nicotine e-cigarettes restricts THR potential.[115] Drawing on these examples alongside global best practices, such as the United Kingdom's e-cigarette policies and Sweden's snus model, the following recommendations offer evidence-based strategies to reduce smoking-related health impacts across these countries.

Recognize RRPs as Cessation Tools

Policy Recommendation 1

Endorsing RRPs as part of a comprehensive tobacco control strategy can accelerate smoking cessation, particularly for inveterate smokers unwilling or unable to quit nicotine entirely. A 2024 Cochrane review and a new meta-analysis of randomized controlled trials both report a relative risk (RR) of 1.77 (95 percent CI 1.29–2.44) for biochemically validated abstinence with nicotine e-cigarettes versus conventional therapies.[116] Policymakers in the United States, Japan, and Türkiye should formally acknowledge RRPs' potential and integrate them into national tobacco control programs while continuing research to address concerns about long-term safety.

Communicate the Risks

Policy Recommendation 2

Communicating the continuum of risk associated with tobacco and nicotine products is essential to encourage smokers to switch to less harmful alternatives. Combustible cigarettes are the most harmful and are responsible for diseases like lung cancer (29 percent of U.S. smoking-related deaths) and cardiovascular disease.[117] In contrast, RRPs like e-cigarettes and snus produce significantly fewer toxicants, with e-cigarettes estimated at 95 percent less harmful than cigarettes.[118] The FDA acknowledges this spectrum, noting that non-combustible products

112. Elbek et al. https://pmc.ncbi.nlm.nih.gov/articles/PMC7919432.
113. "State of Tobacco Control 2024 Report," American Lung Association, last accessed June 23, 2025. https://www.lung.org/getmedia/1b4b0ccc-6a41-41dd-ba13-7fadc86a7dc3/ALA-SOTC-2024.pdf.
114. Cummings et al. https://tobaccocontrol.bmj.com/content/early/2024/10/29/tc-2024-058734.abstract.
115. "WHO report on the global tobacco epidemic 2023: Country profile – Türkiye," World Health Organization, 2023. https://cdn.who.int/media/docs/default-source/country-profiles/tobacco/gtcr-2023/tobacco-2023-tur.pdf?sfvrsn=332cb311_3&download=true.
116. Jeremy Y. Levett et al., "Efficacy and Safety of E-Cigarette Use for Smoking Cessation: A Systematic Review and Meta-Analysis of Randomized Controlled Trials," *The American Journal of Medicine* 136:8 (August 2023). https://www.amjmed.com/article/S0002-9343(23)00295-4/fulltext.
117. "Current Cigarette Smoking Among Adults in the United States" Centers for Disease Control and Prevention, Sept. 17, 2024. https://www.cdc.gov/tobacco/php/data-statistics/adult-data-cigarettes/index.html.
118. Public Health England, "E-Cigarettes Around 95% Less Harmful Than Tobacco Estimates Landmark Review," GOV.UK, Aug. 19, 2015. https://www.gov.uk/government/news/e-cigarettes-around-95-less-harmful-than-tobacco-estimates-landmark-review.

pose lower risks.[119] However, misperceptions are widespread; for instance, only 20 percent of U.S. smokers believe e-cigarettes contain fewer harmful chemicals than cigarettes.[120] Likewise, in Türkiye, 35 percent of smokers view e-cigarettes as equally harmful to combustible cigarettes.[121]

Fund Educational Campaigns

Policy Recommendation 3

Funding robust educational campaigns is necessary to correct misperceptions and promote RRP adoption among smokers. One recent study found that a regional campaign increased smokers' motivation to quit by 4 percent in the intervention region compared to a 19 percent decrease in the control region.[122] Evidence-based campaigns modeled on the approach in countries like the United Kingdom can address these misperceptions by highlighting the relative safety of RRPs. These campaigns should be culturally tailored, and delivered through multiple channels, including mass media and in healthcare settings. In Japan, where 35 percent of smokers misperceive HTPs as equally harmful as cigarettes, targeted education could build on existing cessation programs like Health Japan 21.[123] In Türkiye, where RRP access is limited, campaigns could precede regulatory changes to prepare the public for their introduction.

Improve Regulatory Frameworks

Policy Recommendation 4

Improving regulatory frameworks to facilitate RRP access while ensuring safety and preventing youth uptake is critical. In the United States, the FDA's premarket tobacco product application (PMTA) process has authorized only 23 e-cigarette products since 2021, limiting options for smokers.[124] Streamlining this process, while maintaining rigorous safety standards, could mirror the United Kingdom's approach, where e-cigarettes are regulated as consumer products with clear safety guidelines.[125] Japan's regulatory inconsistencies, driven by the Ministry of Finance's stake in Japan Tobacco, weaken compliance with the WHO Framework Convention on Tobacco Control, allowing aggressive HTP marketing.[126] Similarly, Türkiye's 2020 ban on HTPs and nicotine e-cigarettes restricts any THR potential and must be revised.[127] A balanced framework would permit RRP sales with strict quality controls, limit youth-targeted marketing, and enforce health warnings. Differential taxation, with lower rates for RRPs than cigarettes, as implemented in some European countries, could incentivize switching while generating revenue for cessation programs.[128]

119. U.S. Department of Health and Human Services, "The Relative Risks of Tobacco Products," U.S. Food and Drug Administration, last accessed June 23, 2025. https://www.fda.gov/tobacco-products/health-effects-tobacco-use/relative-risks-tobacco-products.
120. Brian A. King and Benjamin A. Toll, "Opportunities and Considerations for Addressing Misperceptions About the Relative Risks of Tobacco Products Among Adults," *Addiction* 118:10 (2023). https://www.fda.gov/tobacco-products/ctp-newsroom/ctp-director-discusses-opportunities-and-considerations-addressing-misperceptions.
121. "WHO report on the global tobacco epidemic 2023: Country profile – Türkiye." https://cdn.who.int/media/docs/default-source/country-profiles/tobacco/gtcr-2023/tobacco-2023-tur.pdf?sfvrsn=332cb311_3&download=true.
122. Harry Tattan-Birch et al., "Evaluation of the Impact of a Regional Educational Advertising Campaign on Harm Perceptions of E-Cigarettes, Prevalence of E-Cigarette Use, and Quit Attempts Among Smokers," *Nicotine & Tobacco Research* 22:7 (June 12, 2020). https://pubmed.ncbi.nlm.nih.gov/31837223.
123. Cummings et al. https://tobaccocontrol.bmj.com/content/early/2024/10/29/tc-2024-058734.abstract.
124. U.S. Food and Drug Administration, "Premarket Tobacco Product Applications," U.S. Department of Health and Human Services, 2024. https://www.fda.gov/tobacco-products/market-and-distribute-tobacco-product/premarket-tobacco-product-applications.
125. Public Health England. (2022). Nicotine vaping in England: 2022 evidence update main findings. https://www.gov.uk/government/publications/nicotine-vaping-in-england-2022-evidence-update/nicotine-vaping-in-england-2022-evidence-update-main-findings.
126. Cummings et al. https://tobaccocontrol.bmj.com/content/early/2024/10/29/tc-2024-058734.abstract.
127. "WHO report on the global tobacco epidemic 2023: Country profile – Türkiye." https://cdn.who.int/media/docs/default-source/country-profiles/tobacco/gtcr-2023/tobacco-2023-tur.pdf?sfvrsn=332cb311_3&download=true.
128. Lars Ramström et al., "Patterns of Smoking and Snus Use in Sweden: Implications for Public Health," *International Journal of Environmental Research and Public Health* 13:11 (Nov. 9, 2016). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5129320.

Policy Recommendation 5

Reduce Youth Access

Robust strategies to reduce youth access to tobacco and nicotine products are paramount to preserving RRP availability for adult smokers. The U.S. Tobacco 21 law, enacted in 2019, reduced the perceived ease of purchasing tobacco products among youth by 8 percentage points within a year.[129] In Needham, Massachusetts, a T21 law led to a 47 percent reduction in high school smoking after five years.[130] Likewise, Japan's Taspo system, requiring age-verification cards for vending machine purchases, has curbed youth access since 2008.[131] Türkiye's age 18 sales prohibition, is inconsistently enforced but could be strengthened by adopting T21 standards.[132] All three countries should support T21 laws with strong enforcement mechanisms, such as mandatory retail licensing, unannounced compliance checks, and penalties for violations. A growing challenge noted in T21 enforcement studies is online sales, which will require digital age-verification systems and international cooperation to regulate cross-border sales.[133] These measures ensure that RRPs remain accessible to adult smokers without encouraging youth uptake.

Conclusion

All three countries we focused on in this paper take different approaches to tobacco control and have varied levels of success in reducing smoking rates in their populations. While the United States has seen some decline in smoking rates, progress has been hindered by regulatory fragmentation, political resistance, and a risk-averse view of RRPs. In contrast, Japan's experience has shown how a more permissive stance toward RRPs—their rapid adoption of HTPs—can lead to dramatic reductions in cigarette use even without product bans. Türkiye, meanwhile, has demonstrated how following a path of more aggressive, state-led tobacco control with virtually no access to RRPs has enabled high rates of smoking to persist.

These three national case studies highlight that there is not a single pathway toward improving public health—but they also underscore that regulatory openness to innovation, alongside strong consumer protections, is essential for long-term progress. As countries continue to grapple with how best to reduce smoking-related harms, balanced, evidence-based frameworks that adapt to changing technologies and consumer behavior will be critical to achieving sustainable outcomes and saving millions of lives.

While the United States has seen some decline in smoking rates, progress has been hindered by regulatory fragmentation, political resistance, and a risk-averse view of RRPs.

About the Author

Jeffrey Smith is a behavioral neuroscientist and resident senior fellow in the R Street Institute's integrated harm reduction program.

129. Israel T. Agaku et al., "A Rapid Evaluation of the U.S. Federal Tobacco 21 (T21) Law and Lessons From Statewide T21 Policies: Findings From Population-Level Surveys," *Preventing Chronic Disease* 19 (June 2, 2022). https://www.cdc.gov/pcd/issues/2022/21_0430.htm.
130. Jonathan P. Winickoff et al., "Maximizing the Impact of Tobacco 21 Laws Across the United States," *American Journal of Public Health* 108:5 (May 2018). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5888072.
131. Cummings et al. https://tobaccocontrol.bmj.com/content/early/2024/10/29/tc-2024-058734.abstract.
132. "WHO report on the global tobacco epidemic 2023: Country profile – Türkiye." https://cdn.who.int/media/docs/default-source/country-profiles/tobacco/gtcr-2023/tobacco-2023-tur.pdf?sfvrsn=332cb311_3&download=true.
133. Summer Woolsey et al., "Strengthening Tobacco 21 implementation and enforcement to reduce tobacco-related health disparities: A stakeholder engagement project," *Tobacco Prevention and Cessation* 9:20 (June 16, 2023). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10277890.