GLOBAL STATE OF TOBACCO HARM REDUCTION 2024

A SITUATION REPORT

Section Four

JAPAN

4

Report overview

The Global State of Tobacco Harm Reduction 2024: A situation report is a multi-component publication, grouped into two parts, ***Global perspectives*** and ***Regional and national insights.*** The extent to which SNP are replacing and substituting for combustible and risky oral tobacco products is the unifying theme.

Global perspectives uses the latest evidence and new data projections to report on the current global THR situation and its potential to rapidly reduce the burden of disease and mortality associated with risky tobacco use. Measuring changes in SNP uptake, policy and regulation, it considers how these factors interrelate to support or undermine progress.

Regional and national insights considers the status of tobacco use and THR at the regional or national level. The document you are about to read, **Cigarette sales halved: heated tobacco products and the Japanese experience**, is one of four profiles of countries that have enabled THR to drive down smoking rates. Similar profiles for **Aotearoa New Zealand**, **Norway** and the **UK** are also available. A broader regional focus is applied to **Latin America** and **Eastern Europe and Central Asia**.

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Cigarette sales halved: heated tobacco products and the Japanese experience

Introduction

As in most high-income countries, smoking rates in Japan have been falling in recent decades, but the introduction of heated tobacco products (HTP), coupled with a favourable legislative climate, has accelerated that decline. Over the last 10 years, millions of Japan's adult smokers have started to use HTP, leading to a globally unprecedented 52% fall in cigarette sales, and this Country Profile explores the story behind this rapid transition.

What is the history of tobacco use in Japan and what impact has it had?

Tobacco is generally accepted to have reached Japan by the end of the 16th century. The traditional method of smoking tobacco involved the use of a kiseru, a long, thin pipe into which fine-cut, hair-like tobacco would be added. Cigarettes were introduced to the country in the latter half of the 19th century and quickly became popular.

An annual, cross-sectional nationwide survey on smoking in Japan shows smoking rates for men peaked in 1970, when 79% of those aged 20-29 years old smoked.[1] The highest rates for women came in 2000, when 23% of 20-29-year-olds smoked.

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The impact of smoking in Japan has been significant over the last few decades. In 1990, the total number of deaths from all causes that were attributed to smoking was 126,240.[2] By 2021, this figure had risen to 132,467, though other sources claim that as many as 211,000 people died from smoking in 2019.[3] This meant that for Japanese men, 23.5% of their deaths were attributable to tobacco use that year, and for women this figure was 6.4%.

One study on people born between 1920 and 1945 found that for those who continued to smoke, having started before they were 20, their life expectancy was reduced by an average of 10 years.[4] In 2021, tobacco was ranked second in the list of risk factors driving the most deaths and disability combined in Japan.[5] Tobacco was also found to be responsible for 78.9% of all lung cancer deaths and 62.9% of all chronic obstructive pulmonary disease (COPD) deaths.[6] The economic cost of smoking and tobacco use in Japan each year is estimated to be 6,988,987,105,280 yen (around $48 billion).[7]

How long have heated tobacco products been in Japan?

HTP arrived in Japan in 2014 when Philip Morris International (PMI) decided to test its IQOS product in Nagoya, before rolling it out across the country two years later. IQOS was soon followed by other products, with some of the leading brands including Ploom TECH, launched in March 2016 by Japan Tobacco, and British American Tobacco's glo, which arrived in the country in December 2016.[8]

What made Japan a receptive market for heated tobacco products?

Japan presented a unique opportunity for the manufacturers of HTP for a variety of reasons. While smoking rates had been falling steadily for some time when HTP arrived, 29.7% of men and 9.7% of women were still smoking in 2016.[9] This meant there was a large potential market of consumers who might like to switch away from smoking to an SNP that would reduce the harm connected to their use of tobacco (see Chapter 2 of this report for more details about the relative safety of HTP compared to smoking). And, with nicotine vapes effectively banned in Japan, there were no other SNP to compete with HTP. The country also offered a tobacco-friendly business environment, in part because the government owns one-third of Japan Tobacco Inc. Indeed, the tobacco industry was a state monopoly until 1985, and Japan's tobacco control policies are considered to be weaker than those in other high-income countries.[10]

There were also a range of societal and cultural factors that meant HTP might prove successful in the country. Japanese people are keen adopters of new technologies. They are also motivated by a desire to reduce their impact on their fellow citizens, while maintaining high standards of hygiene. It was therefore reasonably likely they would want to try out a new electronic gadget which produced neither the smoke associated with combustible cigarettes, nor the smell or ash.[11]

What do people in Japan say about their decision to start using HTP?

The Global State of Smoking Poll 2019, carried out by the Foundation for a Smoke-Free World, found the most common reason Japanese smokers switched from cigarettes to HTP was due to concern about the health risks to others associated with second-hand smoke from cigarettes (40%).[12] This was followed by 36% who said HTP may not be as bad for their own health, and 35% who said they could use HTP in places where smoking was not allowed, another aspect of the dual use issue.

Peer-reviewed scientific research has also assessed the reasons both current and former adult smokers are using HTP. One study found that the belief that HTP are less harmful to either themselves (90.6%) or others (86.7%) were the most important factors.[13] This was followed by personal enjoyment (76.5%), while 74.4% said HTP use was more socially acceptable than smoking cigarettes. Among current smokers, 55.1% said they used HTP in the hope they may help them quit smoking.

However, research from both independent and industry-sponsored studies has revealed that a significant proportion of HTP users in Japan also smoke cigarettes.[14,15,16,17] One study showed that for two-thirds of these dual users, HTP use allowed them to reduce the number of cigarettes they smoked.[18] But for many of this group, switching completely was not their ultimate goal, with the same study finding 52% of those using HTP said they replaced some of the cigarettes they consumed with HTP so that they did not have to completely give up smoking. Therefore, dual use is playing an important role in the reduction in smoking seen in Japan.

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How many people are using HTP and how have smoking rates been affected?

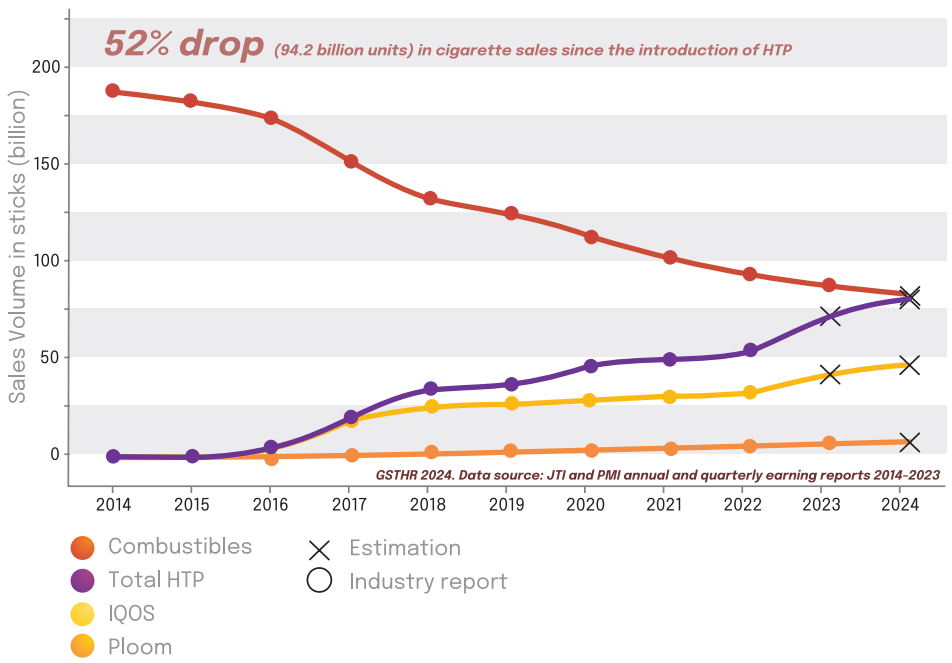
The rise in the use of HTP in Japan has been significant and rapid. By February 2018, just two years after they had become available across the whole of the country, one study found there were 5.23 million HTP users in Japan.[19] This figure equated to one in four of all Japanese tobacco users and meant 8.3% of men (4.21 million) and 1.9% of women (1.02 million) in the country were HTP consumers. By comparison, 22% of men and 7.5% of women were current cigarette smokers that year (down from 29.7% of men and 9.7% of women in 2016). By 2022, the number of HTP users had more than doubled, with 17.9% of men and 6% of women using this SNP.[20]

As previously noted, smoking rates had been falling for a number of years in Japan, but the speed of this decline accelerated after the introduction of HTP. The reduction in cigarette sales between 2016-2019 was five times greater than the drop between 2011-2015.[21]

Other research shows that the combined use of IQOS, Ploom, and glo increased ten fold between 2015-16 and 2017-18.[22] This research found that by 2018, HTP use had spread to one in three current cigarette smokers who wanted to quit, but also one in four current smokers who had no intention of quitting. It further revealed that HTP use had dramatically increased in all subgroups they assessed except, importantly, for those who had never smoked.

Our own Global State of Tobacco Harm Reduction research, which compares sales volumes, further emphasises the changing nature of cigarette and HTP consumption. Using market data released in annual and quarterly reports by PMI and Japan Tobacco, the sales of individual cigarettes were around 182.34 billion units when HTP started to become more widely available in 2015. By 2023 this had dropped 52% to just 88.1 billion units, a fall of 94.2 billion units, while the sale of the tobacco sticks used in HTP that year had risen to 62 billion units in under 10 years.

Japanese tobacco market size in retail units



How does the Japanese government regulate safer nicotine products?

While HTP and snus can both be legally sold under the framework of the Tobacco Industries Act as non-medicinal tobacco products,[23] nicotine vapes and nicotine pouches are subject to different regulation. Nicotine and its preparations in concentrations of 10% or more are designated as poisons under the Poisonous and Deleterious Substances Control Act in Japan.[24] Even lower concentrations of nicotine are regulated under the Pharmaceutical and Medical Device Act, and vaping devices themselves are subject to the same Act.[25] This means they require

approval before they can be manufactured and sold, but to date, no nicotine liquids or vaping devices have been approved for sale in Japan.

As both vapes and nicotine pouches contain nicotine but no tobacco leaves, they are treated as pharmaceutical products. If they were to contain tobacco, they would come under the Tobacco Industries Act and could be sold legally as non-medicinal tobacco products. This regulatory quirk has led to manufacturers adding tobacco leaf to nicotine pouches, simply as a way to get them on the Japanese market without the need to obtain pharmaceutical approval.[26]

HTP are generally regulated in a similar way to combustible cigarettes in Japan, though the actions of the government have tended to treat HTP more favourably. Neither of these products can be sold to anyone under 20, but there are some crucial differences in the laws governing where they can be used. Since 2019, under revisions made to the Health Promotion Law, both cigarettes and HTP are banned from hospitals, schools and government offices.[27] Since 2020 in factories, general offices and restaurants, cigarette use has only been permitted in special tobacco rooms that are used exclusively by smokers for smoking and nothing else. HTP users, however, while also restricted to designated rooms within these venues, can also undertake other activities in these spaces, for example, eating and drinking.

There are also differences in the way both products are taxed. In 2021, the total excise tax for cigarettes was more than double that of HTP, being ¥284.9 per pack compared to ¥131.03 for HTP.[28] It should be added, though, that research has found that 85% of HTP sold in the country were priced at the same level as premium brand cigarettes, with one survey finding current or former smokers who had begun using HTP were not doing so to save money[29].

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There are no restrictions on tobacco advertising under national law. This means the producers of HTP in Japan are able to claim that their products are “less harmful” alternatives to combustible cigarettes. But despite the lack of legislation, the industry itself does impose some voluntary limits through self-regulation, for instance by encouraging companies to target their marketing to adults only. So, while they should refrain from promotion in ‘highly public places’, such as TV, radio, internet, newspapers, or magazines, they can advertise their products on posters, billboards or on buildings where tobacco can be bought.[30]

Key takeaways

The success of HTP in helping to reduce the sale of cigarettes by 52% in Japan offers a valuable insight into the potential for SNP to reduce the number of smokers around the world. There may be some social and cultural factors that made Japan uniquely suited to HTP, such as an openness to new technology and a desire to limit an individual’s impact on others, but this transition has been overwhelmingly driven by consumers’ concerns about health, whether their own or others’.

The situation in Japan demonstrates that if SNP are made widely available and are allowed to be promoted to adult smokers as a safer alternative to smoking, then many smokers will make that switch, or reduce their consumption of cigarettes through dual use, with all the benefits that brings to public health. It should also be noted that unlike the UK, whose government has actively endorsed the use of nicotine vapes as smoking cessation tools, this rapid and unrivalled change has taken place in a country whose political leaders neither opposed nor came out strongly in favour of HTP.

Chapter references

1 Funatogawa, I., Funatogawa, T., & Yano, E. (2013). Trends in smoking and lung cancer mortality in Japan, by birth cohort, 1949–2010. *Bulletin of the World Health Organization*, *91*(5), 332–340. https://doi.org/10.2471/BLT.12.108092, pp. 1949–2010.

2 *Number of deaths from tobacco smoking*. (2021). Our World in Data. https://ourworldindata.org/grapher/number-of-deaths-from-tobacco-smoking?tab=table.

3 *Japan*. (n.d.). Tobacco Atlas. Retrieved 15 October 2024, from https://tobaccoatlas.org/factsheets/japan/.

4 Sakata, R., McGale, P., Grant, E. J., Ozasa, K., Peto, R., & Darby, S. C. (2012). Impact of smoking on mortality and life expectancy in Japanese smokers: A prospective cohort study. *BMJ*, *345*, e7093. https://doi.org/10.1136/bmj.e7093.

5 *Health research by location*. (n.d.). Retrieved 15 October 2024, from https://www.healthdata.org/research-analysis/health-by-location/profiles.

6 *Japan. Tobacco and Health Around the World*. (n.d.). Global Action to End Smoking. Retrieved 15 October 2024, from https://globalactiontoendsmoking.org/research/tobacco-around-the-world/japan/.

7 *Japan*, n.d.

8 Xu, S. S., Meng, G., Yan, M., Gravely, S., Quah, A. C. K., Ouimet, J., O'Connor, R. J., Sutanto, E., Yoshimi, I., Mochizuki, Y., Tabuchi, T., & Fong, G. T. (2020). Reasons for Regularly Using Heated Tobacco Products among Adult Current and Former Smokers in Japan: Finding from 2018 ITC Japan Survey. *International Journal of Environmental Research and Public Health*, *17*(21), 8030. https://doi.org/10.3390/ijerph17218030.

9 *Japan Smoking Rate Survey: Results of the 2016 Survey*. (2016). [Annual Survey Report]. Japan Tobacco Inc. https://www.jt.com/media/news/2016/pdf/20160728_E02.pdf.

10 Xu, Meng, Yan, Gravely, Quah, Ouimet, O'Connor, Sutanto, Yoshimi, Mochizuki, Tabuchi, & Fong, 2020.

11 *The story of THS in Japan, an interview with Tomoko Iida*. (2022, October 24). PMI Science. https://www.pmiscience.com/content/pmiscience/language-master/en/news-events/scientific-update-magazine/the-story-of-ths-in-japan--an-interview-with-tomoko-iida-.html.

12 Key Takeaways from the 2019 Global Poll, Individual Country Reports–Japan. (2019). *Foundation for a Smoke-Free World*. https://www.smokefreeworld.org/global-state-of-smoking-poll-2019/individual-country-reports-japan/.

13 Xu, Meng, Yan, Gravely, Quah, Ouimet, O'Connor, Sutanto, Yoshimi, Mochizuki, Tabuchi, & Fong, 2020.

14 *Transforming Tobacco. Sustainability Report 2018*. (2018). British American Tobacco (BAT). https://www.bat.com/group/sites/UK__9D9KCY.nsf/vwPagesWebLive/DOAWWEKR/$file/Sustainability_Report_2018.pdf.

15 Kim, J., Yu, H., Lee, S., & Paek, Y.-J. (2018). Awareness, experience and prevalence of heated tobacco product, IQOS, among young Korean adults. *Tobacco Control*, *27*(Suppl 1), s74–s77. https://doi.org/10.1136/tobaccocontrol-2018-054390.

16 Kubota, T., Minami, N., Kimura, Y., & Kakehi, A. (2019). *Use behaviour patterns in Japanese novel tobacco vapour product (NTV) users*. CORESTA. https://www.coresta.org/abstracts/use-behaviour-patterns-japanese-novel-tobacco-vapour-product-ntv-users-32852.html.

17 Sutanto, E., Miller, C., Smith, D. M., O'Connor, R. J., Quah, A. C. K., Cummings, K. M., Xu, S., Fong, G. T., Hyland, A., Ouimet, J., Yoshimi, I., Mochizuki, Y., Tabuchi, T., & Goniewicz, M. L. (2019). Prevalence, Use Behaviors, and Preferences among Users of Heated Tobacco Products: Findings from the 2018 ITC Japan Survey. *International Journal of Environmental Research and Public Health*, *16*(23), 4630. https://doi.org/10.3390/ijerph16234630.

18 Xu, Meng, Yan, Gravely, Quah, Ouimet, O'Connor, Sutanto, Yoshimi, Mochizuki, Tabuchi, & Fong, 2020.

19 Kinjo, A., Kuwabara, Y., Fujii, M., Imamoto, A., Osaki, Y., Minobe, R., Maezato, H., Nakayama, H., Takimura, T., & Higuchi, S. (2020). Heated Tobacco Product Smokers in Japan Identified by a Population-Based Survey. *Journal of Epidemiology*, *30*(12), 547–555. https://doi.org/10.2188/jea.JE20190199.

20 Odani, S., & Tabuchi, T. (2022). Prevalence and denial of current tobacco product use: Combustible and heated tobacco products, Japan, 2022. *Preventive Medicine Reports*, *30*, 102031. https://doi.org/10.1016/j.pmedr.2022.102031.

21 Cummings, K. M., Nahhas, G. J., & Sweanor, D. T. (2020). What Is Accounting for the Rapid Decline in Cigarette Sales in Japan? *International Journal of Environmental Research and Public Health*, *17*(10), 3570. https://doi.org/10.3390/ijerph17103570.

22 Hori, A., Tabuchi, T., & Kunugita, N. (2023). The spread of heated tobacco product (HTP) use across various subgroups during 2015–16 and 2017–18 in Japan. *Environmental Health and Preventive Medicine*, *28*, 5. https://doi.org/10.1265/ehpm.22-00219.

23 Act No. 68 of 1984. Tobacco Business Act. https://elaws.e-gov.go.jp/document?lawid=359AC0000000068

24 *Poisonous and Deleterious Substances Control Act-apanese/English-apanese Law Translation*. (1950). https://www.japaneselawtranslation.go.jp/en/laws/view/3387.

25 *Act on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices-apanese/English-apanese Law Translation*. (1960). https://www.japaneselawtranslation.go.jp/en/laws/view/3213.

26 TobaccoIntelligence. (2021, July 14). Japanese health ministry denies plan to widen access to tobacco-free pouches. TobaccoIntelligence. https://tobaccointelligence.com/japanese-health-ministry-denies-plan-to-widen-access-to-tobacco-free-pouches/.

27 Outline of the Act on the Partial Revision of the Health Promotion Act (No. 78 of 2018). https://www.mhlw.go.jp/english/policy/health-medical/health/dl/201904kenko.pdf

28 State of Smoking in Japan. (2023, July 28). *Foundation for a Smoke-Free World*. https://www.smokefreeworld.org/health-science-research-2/health-science-technology-agenda/data-analytics/global-state-of-smoking-landscape/state-smoking-japan/.

29 Xu, Meng, Yan, Gravely, Quah, Ouimet, O'Connor, Sutanto, Yoshimi, Mochizuki, Tabuchi, & Fong, 2020.

30 Craig, L. V., Yoshimi, I., Fong, G. T., Meng, G., Yan, M., Mochizuki, Y., Tabuchi, T., Thrasher, J. F., Xu, S. S., Quah, A. C. K., Ouimet, J., Sansone, G., & Chung-Hall, J. (2020). Awareness of Marketing of Heated Tobacco Products and Cigarettes and Support for Tobacco Marketing Restrictions in Japan: Findings from the 2018 International Tobacco Control (ITC) Japan Survey. *International Journal of Environmental Research and Public Health*, *17*(22), 8418. https://doi.org/10.3390/ijerph17228418.

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