Tobacco Control Policy-related Survey 2023
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Stringent and Innovative Policies Needed to Achieve Tobacco Endgame in Hong Kong

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1. Introduction

Although the smoking prevalence in Hong Kong dropped to 9.1% in 2023, smoking remains a pressing public health concern and is responsible for nearly 7,000 deaths each year[1]. It is one of the leading causes of non-communicable illnesses such as lung cancer, the most and second most common cancer in male and female, respectively, in Hong Kong. Secondhand smoke (SHS) causes many diseases as well. The World Health Organization (WHO) aims to reduce the prevalence of smoking by 30% by 2025[2] and deaths associated with smoking worldwide. In accordance with WHO's goal, the Hong Kong Government aims to reduce the smoking prevalence in people aged 15 years or above to 7.8% in 2025.

To achieve this goal, the Government has enhanced smoke-free legislation and enforcement against smoking offences, public education and smoking cessation services, increased the tobacco tax and implemented a total ban on alternative smoking products (ASPs). The recently adopted measures include the ban on alternative smoking products in 2022 and an increase in taxation in 2023 and 2024. In mid-2023, a public consultation was conducted to gather public opinions on strengthening tobacco control with four main strategies, including "Regulate Supply, Suppress Demand", "Ban Promotion, Reduce Attractiveness", "Expand No-smoking Areas, Mitigate Harm" and "Enhance Education, Support Cessation". Measures such as raising the minimum legal age of sale of tobacco products, plain packaging, banning flavoured tobacco products, mechanism to raise the tobacco tax regularly and smoke-free generation were proposed.

Tobacco endgame seeks to reduce the smoking prevalence to 5% or below by a certain year, and eliminate tobacco use entirely. To date, around 60 countries/places announced an endgame goal. Taking into account the smoking prevalence and efforts put into tobacco control, 28 countries/places (e.g. New Zealand, Sri Lanka, Singapore and the United Kingdom (UK)) are deemed endgame ready, while another 48 countries/places are deemed almost endgame ready (e.g. Australia, Canada, Hungary, Ireland, the Netherlands and Spain)[3].

To achieve tobacco endgame, tobacco control measures commonly undertaken include plain packaging, no-smoking area, restricting youth access to tobacco, complete advertising bans, high tobacco tax, comprehensive cessation support, regulation of e-cigarettes (ECs) and stringent regulations on health warnings on smoking products. Innovative strategies suggested include smoke-free generation, reducing nicotine content in cigarettes to reduce addictiveness, and reducing the number of tobacco retailers.

The Hong Kong Council on Smoking and Health (COSH) has proposed to reduce smoking prevalence to 5% or below and then ban smoking completely. The "Charter on Tobacco Endgame" was introduced in 2022 to strive for support from community leaders [4]. The Charter proposed measures that are important for strengthening tobacco control and achieving endgame, such as tobacco tax increase, expansion of statutory no-smoking areas, plain packaging, enhancing education and smoking cessation services, and advanced measures

such as raising legal age of tobacco sale and reducing the attractiveness and addictiveness of tobacco products.

The Tobacco Control Policy-related Survey (TCPS), conducted annually since 2013, gathers data on smoking-related topics including current smoking behaviour, the impact of tobacco control policies and opinions on current and future policies. It also provides critical data to support advances in tobacco control in Hong Kong, including tobacco tax increase, ASP ban, enlargement of pictorial health warnings (PHWs) and expansion of no-smoking areas. In this report, the key findings of TCPS 2023 will be presented, and the tobacco control policies that need to be addressed will be discussed. Specifically, this report focuses on support for tobacco endgame, flavoured cigarette use, and opinions on the policies of reducing attractiveness of tobacco products and tobacco tax increase.

2. Methods

2.1 Study design and participants

TCPS 2023 was a cross-sectional survey conducted from late February to June 2023. Hong Kong residents aged 15 years or above who spoke Cantonese were recruited. Three target groups included: (1) current smokers who used any forms of smoking products daily or occasionally, (2) ex-smokers who had used any forms of smoking products in the past but had quit, and (3) never smokers who had never used any forms of smoking products.

Landline interviews and mobile phone interviews were conducted by the Social Policy Research Limited (SPR) to collect data. Initial calls took place between 2:00 pm and 10:30 pm on weekdays and weekends in order to cover respondents of diversified working hours of different industries. Each randomly selected telephone number was called 5 times, at different times and on different days, before it was dropped as "non-contact". All interviews were conducted anonymously except for those who were willing to participate in follow-up surveys. Participants could withdraw from the survey at any time without providing a reason and with no consequences.

2.2 Sampling methods and respondent selection

TCPS 2023 recruited 5,600 participants, including 2,600 current smokers, 1,500 ex-smokers and 1,500 never smokers. A quarter of respondents (25.0%, n=1,400) were recruited via landline interviews, while the remaining (75.0%, n=4,200) via mobile phone interviews. Ex- and current smokers were oversampled for more precise estimates and detailed analysis regarding smoking behaviours due to the relatively small proportions of the two groups in Hong Kong population.

For landline interviews, telephone numbers were first drawn randomly from residential telephone directories as seed numbers, from which another set of numbers were generated by a computer programme using the "plus/minus one/two" method to capture unlisted numbers. Duplicated numbers were then filtered and the remaining numbers were mixed in random order to produce the final sampling frame. When a telephone contact was successfully established with a target household, one person of the household was selected from all eligible household members using the "next birthday" rule. For mobile phone interviews, numbers were randomly generated using known prefixes assigned to telecommunication services providers under the Numbering Plan of the Office of the Communications Authority and mixed in random order to produce the final sampling frame. Only the users of the contacted mobile numbers were interviewed.

2.3 Questionnaire development

The questionnaire was modified from previous waves of TCPS and included two sections: core questions and random questions. Core questions were answered by all respondents and consisted of questions on tobacco use, SHS exposure, nicotine dependence, etc. Random questions were designed for random subsets of respondents with specific smoking status (6 for current smokers, 4 for ex-smokers and 2 for never-smokers), including third-hand (THS) exposure, tobacco advertising, plain packaging, tobacco tax increase and tobacco endgame, etc. All respondents in a subset answered the same sets of random questions.

2.4 Weighting and statistical analysis

The whole sample was weighted against the sex, age and smoking status distribution of the 2021 Hong Kong resident population (inmates of correctional institutions, domestic helpers and persons living on board vessels were excluded)[5]. Univariate analysis of variables of interest by overall smoking status, the status of using specific smoking products (regardless of the use of other products), or sex was conducted. Chi-square test or linear regression was used to examine differences by subgroups. Statistical significance was set as $P<0.05$. All analyses were conducted using STATA (Version 15.1, TX: StataCorp LP).

3. Results

3.1 Socio-demographic characteristics

Table 1 shows that current smokers (82.0%) and ex-smokers (85.1%) were more likely to be male compared to never smokers (40.9%) ($P<0.001$). A higher proportion of current smokers (68.9%) and ex-smokers (83.2%) were aged 40 years or older compared to never smokers (60.0%) ($P<0.001$). Never smokers were more likely to have had a tertiary education (38.9%) compared to ex-smokers (22.4%) and current smokers (19.8%) ($P<0.001$).

Table 1 Socio-demographic characteristics of respondents

	Never smokers (n=1,500)	Ex-smokers (n=1,500)	Current smokers (n=2,600)	Total (n=5,600)	P-value
Sex					**<0.001**
Male	40.9%	85.1%	82.0%	47.5%	
Female	59.1%	14.9%	18.0%	52.5%	
Age (years)					**<0.001**
15-29	17.2%	2.3%	8.5%	15.5%	
30-39	15.1%	7.9%	16.0%	14.8%	
40-49	14.8%	11.9%	23.6%	15.5%	
50-59	16.6%	18.9%	20.5%	17.2%	
60 or above	28.6%	52.4%	24.8%	29.5%	
DK/RTA	7.7%	6.7%	6.6%	7.5%	
Education level					**<0.001**
Primary or below	14.0%	21.4%	11.8%	14.2%	
Secondary	46.9%	56.2%	68.4%	49.6%	
Tertiary	38.9%	22.4%	19.8%	36.1%	
DK/RTA	0.1%	0.0%	0.0%	0.1%	
Employment					**<0.001**
Employed	55.9%	56.6%	77.3%	58.1%	
Employer	1.5%	3.1%	2.4%	1.7%	
Student	6.6%	0.7%	1.5%	5.8%	
Home-maker	21.2%	4.5%	3.7%	18.5%	
Unemployed	3.6%	2.7%	3.1%	3.5%	
Retired	11.2%	32.5%	12.0%	12.5%	
DK/RTA	0.1%	0.0%	0.0%	0.0%	

Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by smoking status was tested by Chi-square test
DK/RTA=Don't know/Refuse to answer

3.2 Use of smoking products

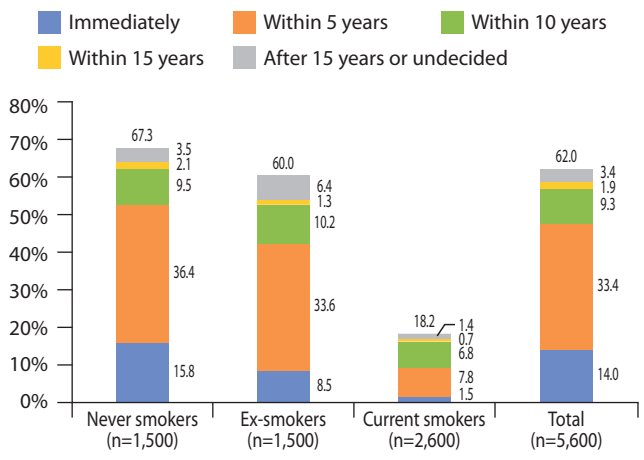
The prevalence of current use of tobacco products was 10.2%. Conventional cigarettes (9.8%) were the most commonly used, followed by ECs (0.8%), waterpipe tobacco (0.5%) and heated tobacco products (HTPs) (0.3%). Two-thirds (65.2%) of current cigarette smokers smoked daily or almost daily. The average daily cigarette consumption was 12.2 cigarettes per day. Over two-thirds (73.9%) had heavier nicotine dependence that they smoked the first cigarette within half an hour after waking up.

3.3 Public opinions on tobacco endgame

Figure 1 shows that 62.0% of all respondents supported for a total ban on tobacco sale, with 14.0% in favour of an immediate ban and the remaining 48.0% supported the ban at a later date. In never smokers, 67.3% supported the ban, with 15.8% supported an immediate ban and the remaining 51.5% supported the ban at a later date. The ex-smoker group showed a similar pattern with 60.0% supporting the ban. Only 18.2% of current smokers supported a total ban on tobacco sale.

Figure 1

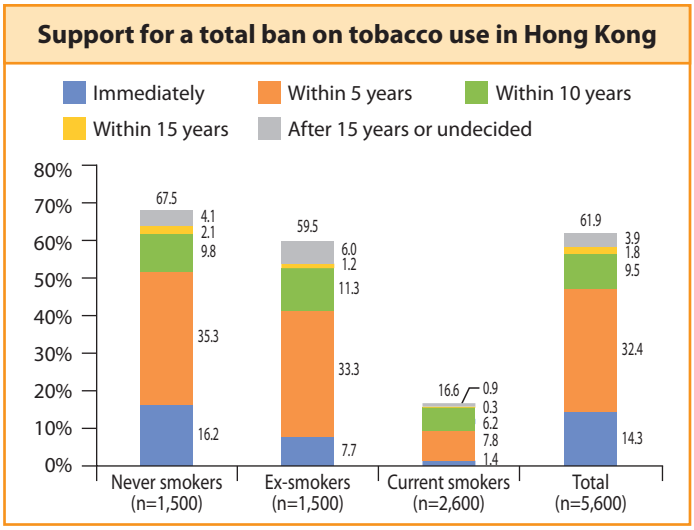
Support for a total ban on tobacco sale in Hong Kong



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by smoking status was tested by Chi-square test (P<0.001)

Figure 2 shows that 61.9% of all respondents supported a total ban on tobacco use. While 14.3% supported an immediate ban, 47.5% supported the ban at a later date. In never smokers, 67.5% supported the ban with 16.2% supporting an immediate ban and 51.3% supporting a ban at a later date. The ex-smoker group showed a similar pattern, with 59.5% supporting the ban. Only 16.6% of current smokers supported a total ban on tobacco use.

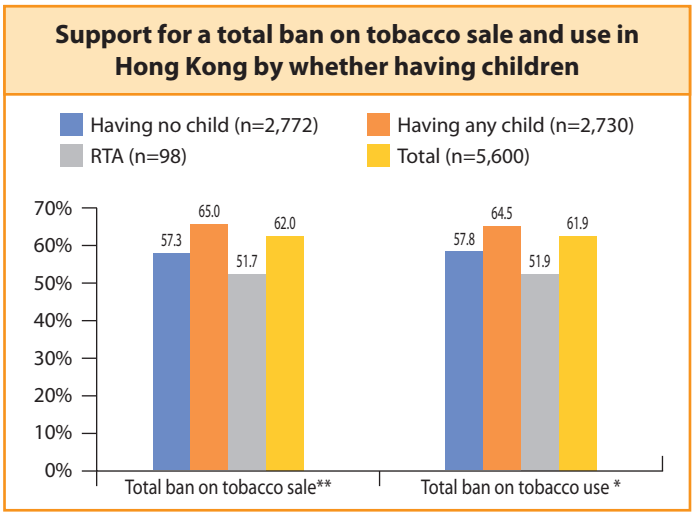
Figure 2



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by smoking status was tested by Chi-square test (P<0.001)

Figure 3 shows stronger support for banning tobacco in respondents with children. The support for a total ban on tobacco sale and use in respondents with children was 65.0% and 64.5%, respectively. The support in respondents with no child was lower but still common, at 57.3% and 57.8% respectively.

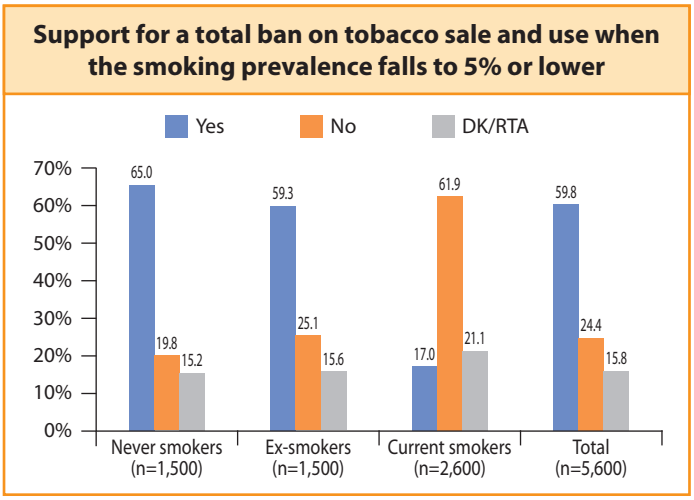
Figure 3



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by number of children was tested by Chi-square test (*P<0.05, **P<0.01, ***P<0.001)
RTA = Refuse to answer

Figure 4 shows that over half (59.8%) respondents supported a total ban on tobacco sale and use when the smoking prevalence falls below 5%. The support was highest in never smokers, with 65.0% in favour of the ban, compared to 59.3% in ex-smokers and 17.0% in current smokers.

Figure 4

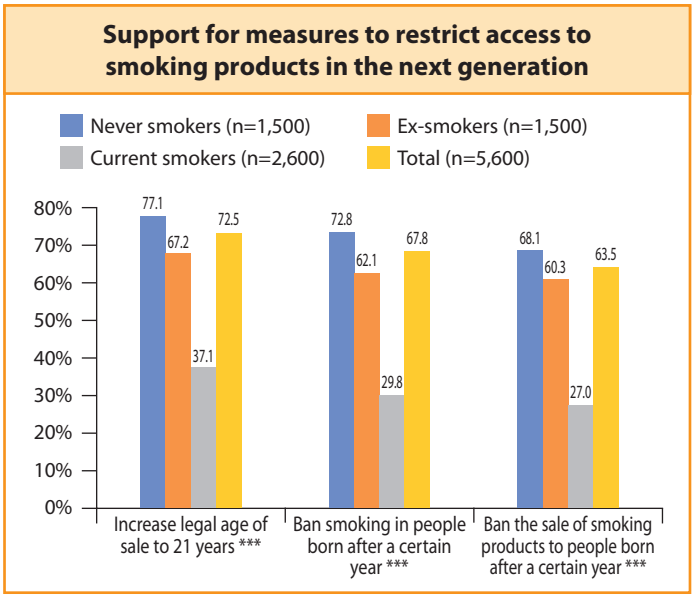


Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by smoking status was tested by Chi-square test (P<0.001)
DK/RTA = Don't know/Refuse to answer

Figure 5 shows strong support for measures to restrict tobacco access. Increasing the minimum legal age of sale of smoking products to 21 years had the highest overall support (72.5%), with 77.1% of never smokers favouring this measure. Majority of respondents also supported to ban smoking in and the sale of smoking products to people born after a certain year (67.8% and 63.5%), particularly in never smokers (72.8% and 68.1%). In contrast, current smokers consistently showed the lowest support for the three measures, with 37.1% supporting raising the legal age of smoking product sale, 29.8% supporting a smoking ban and 27.0% supporting a sale ban to people born after a certain year. Ex-smokers exhibited a moderate support, but lower than never smokers.

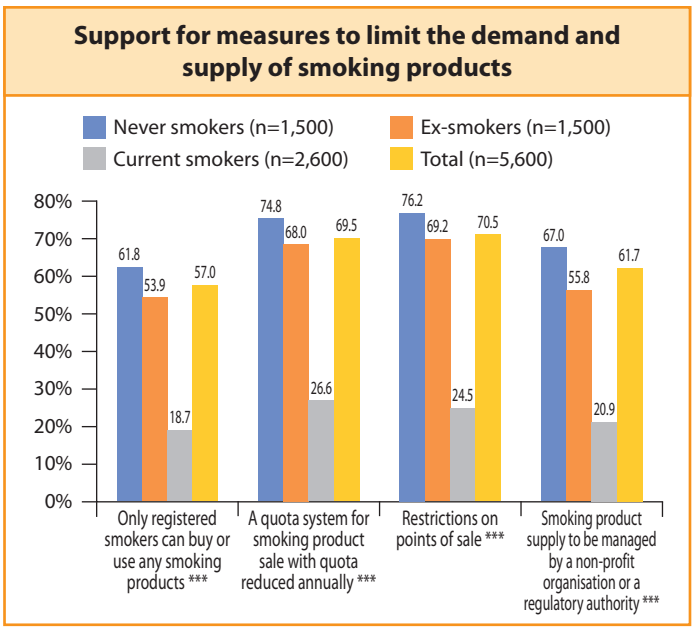
Figure 6 shows that a majority of respondents supported measures to limit the demand and supply of smoking products. More than half of all respondents supported restricting the number, locations and types of points of sale of smoking products (70.5%), setting a quota system for smoking product sale with the quota reduced annually (69.5%), assigning a non-profit organization or a regulatory authority to manage smoking product supply (61.7%), and allowing only registered smokers could buy or use any smoking products (57.0%). Support varied across smoking status, with never smokers showing the highest support (ranging from 61.8% to 76.2%) for all measures, while current smokers showing the lowest support (ranging from 18.7% to 26.6%).

Figure 5



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by smoking status was tested by Chi-square test (*P<0.05, **P<0.01, ***P<0.001)

Figure 6

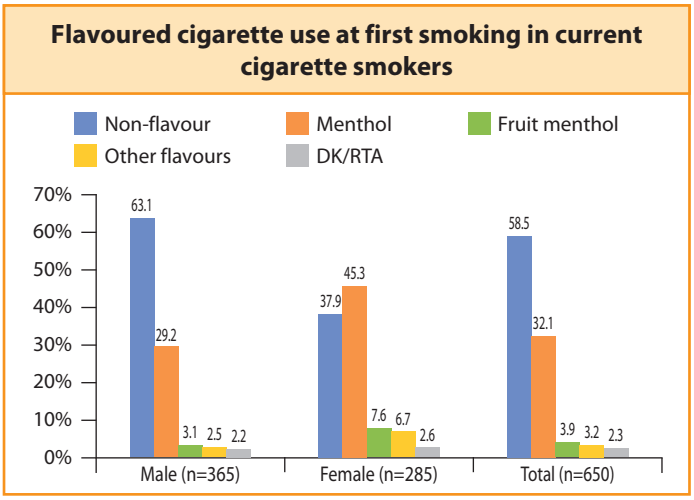


Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by smoking status was tested by Chi-square test (*P<0.05, **P<0.01, ***P<0.001)

3.4 Flavoured cigarette use

Figure 7 shows that 58.5% of current cigarette smokers had a non-flavoured cigarette as their first cigarette, and 39.2% had a flavoured cigarette (such as menthol and fruit menthol). Flavoured cigarette use at first smoking was much more common in female (59.5%) than in male (34.7%) (P<0.001). In smokers who smoked a flavoured cigarette at first smoking, 81.8% smoked a menthol cigarette, 10.0% smoked a fruit menthol cigarette and 8.3% smoked a cigarette of another flavour.

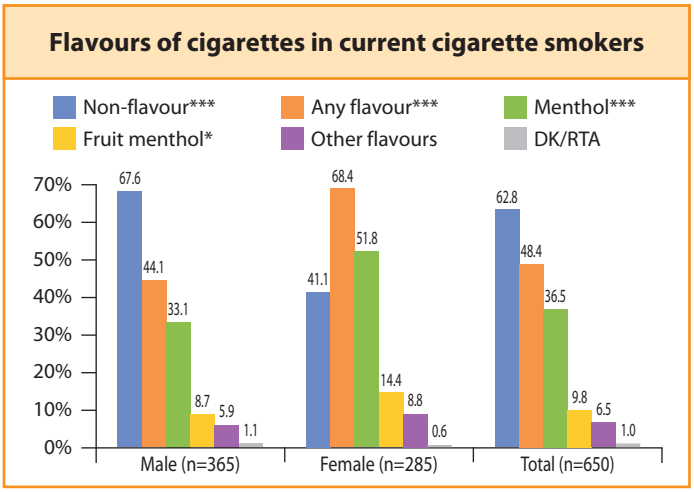
Figure 7



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by flavoured cigarette use by sex was tested by Chi-square test (P<0.001)
DK/RTA = Don't know/Refuse to answer

Figure 8 shows that 62.8% of current cigarette smokers currently smoked non-flavoured cigarettes while, 48.4% currently smoked flavoured cigarettes. The proportion of flavoured cigarette use was much higher in female (68.4%) than male (44.1%) (P<0.001). In current flavoured cigarette smokers, menthol (75.3%) was the most commonly used flavour.

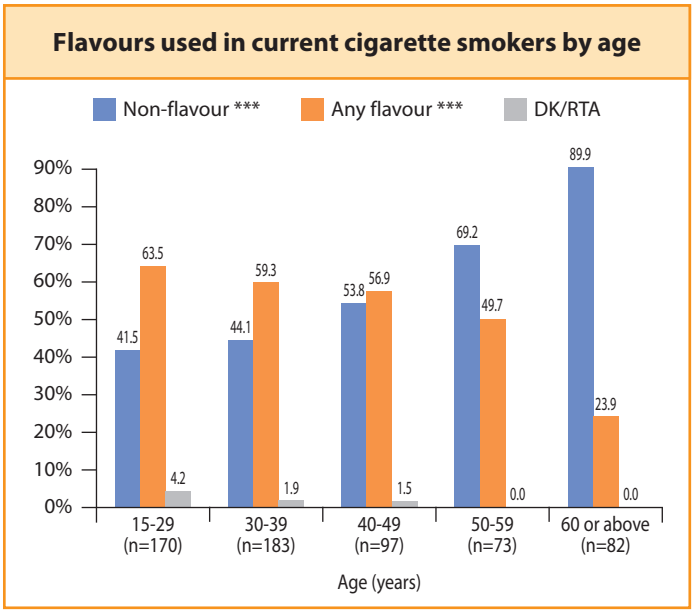
Figure 8



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference in current use of flavoured cigarette use by sex was tested by Chi-square test (*P<0.05, **P<0.01, ***P<0.001)
Multiple responses were allowed

Figure 9 shows that flavoured cigarette use was more common in younger cigarette smokers than the older ones. The highest proportion of flavoured cigarette use was observed in cigarette smokers aged 15-29 years (63.5%), while the lowest proportion was observed in those aged 60 years or above (23.9%).

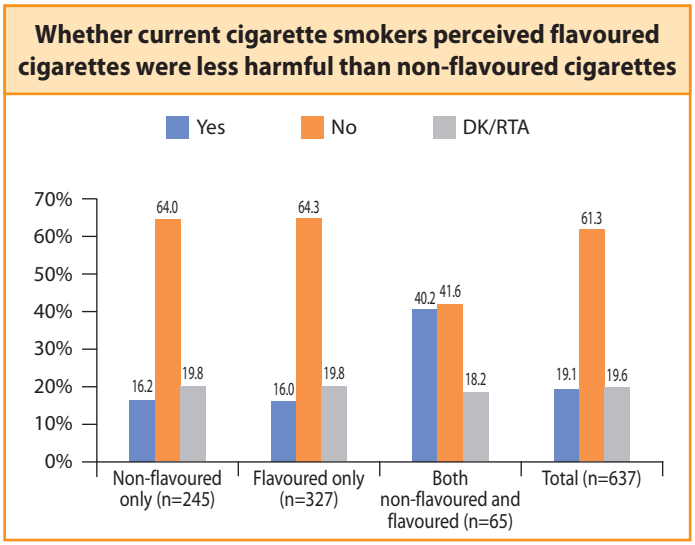
Figure 9



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference in current use of flavoured cigarette use by age was tested by Chi-square test (*P<0.05, **P<0.01, ***P<0.001)
DK/RTA = Don't know/Refuse to answer. "Don't know/Refuse to answer" for age is not displayed
Multiple responses were allowed

Figure 10 shows that 61.3% of current smokers did not believe that flavoured cigarettes were less harmful while 19.1% believed they were less harmful. In both the smokers who only smoked non-flavoured cigarettes and only smoked flavoured cigarettes, 16.0% believed that flavoured cigarettes were less harmful. In current cigarette smokers who smoked both non-flavoured and flavoured cigarettes, 40.2% believed that flavoured cigarettes were less harmful.

Figure 10



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by flavoured cigarette use was tested by Chi-square test (P<0.01)
Respondents who did not know or refused to tell the cigarette flavours were excluded from analysis

3.5 Reducing attractiveness of smoking products

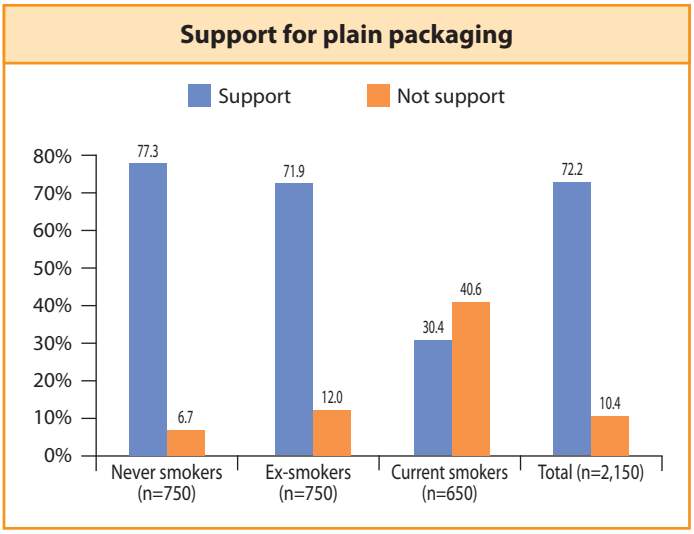
Figure 11 shows that 61.6% of all respondents (66.4% of never smokers, 59.5% of ex-smokers and 22.9% of current smokers) supported to ban flavoured smoking products. Additionally, 74.1% of the total respondents supported to reduce nicotine concentration in smoking products. The support in never smokers (78.4%) and ex-smokers (73.2%) was greater than that in current smokers (39.1%) (P<0.001).

Figure 11

Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by smoking status was tested by Chi-square test (*P<0.05, **P<0.01, ***P<0.001)

Figure 12 shows that two-thirds (72.2%) of all respondents supported plain packaging in Hong Kong, with greater support in never smokers (77.3%) and ex-smokers (71.9%) than current smokers (30.4%).

Figure 12

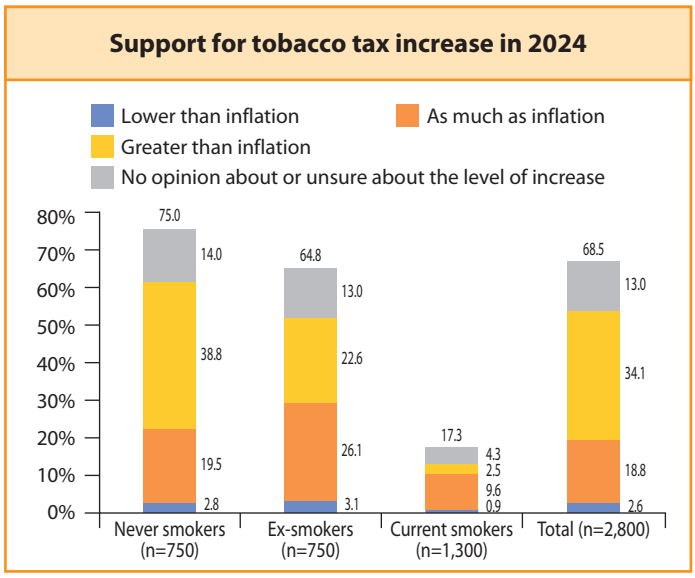


Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by smoking status was tested by Chi-square test (P<0.001)
"Don't know/Refuse to answer" is not displayed

3.6 Tobacco tax

Figure 13 shows 75.0% of never smokers, 64.8% of ex-smokers and 17.3% of current smokers supported for tobacco tax increase in 2024, contributing to an overall support of 68.5%. The support for an increase at least with inflation was higher in never smokers (58.2%) and ex-smokers (48.7%) compared to current smokers (12.1%).

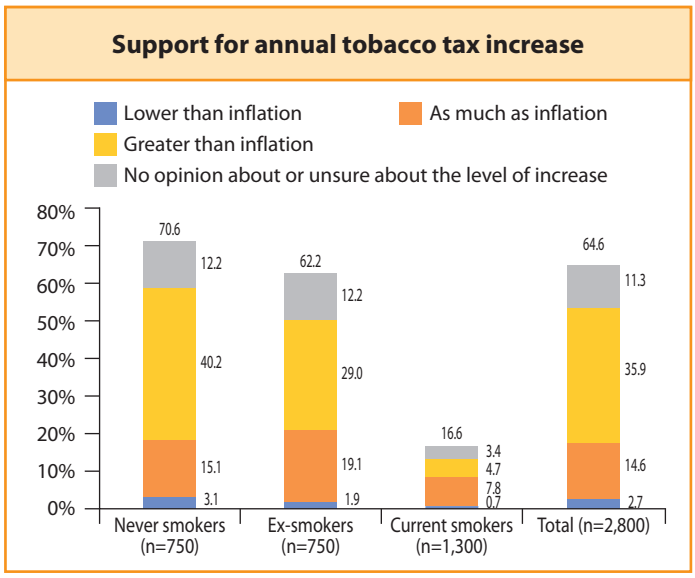
Figure 13



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by smoking status was tested by Chi-square test (P<0.001)

Figure 14 shows that 64.6% of respondents supported annual tobacco tax increase, including 70.6% of never smokers, 62.2% of ex-smokers and 16.6% of current smokers. Half (50.5%) respondents agreed that the increase should be as much as inflation or greater.

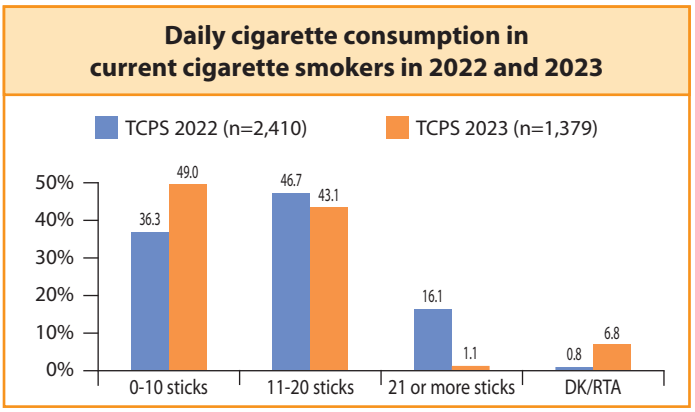
Figure 14



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by smoking status was tested by Chi-square test (P<0.001)

Figure 15 shows that cigarette consumption patterns in current cigarette smokers shifted between the TCPS surveys in 2022 and 2023. Overall, there was a significant increase in light daily cigarette consumption (0-10 sticks), rising from 36.3% in 2022 to 49.0% in 2023. The proportion of current cigarette smokers smoking 11-20 sticks daily remained relatively stable, slightly decreasing from 46.7% to 43.1%. Most notably, there was a substantial decrease in the percentage of heavy smokers (smoking 21 or more sticks daily), dropping dramatically from 16.1% to just 1.1%. This suggests a general trend of reduction in daily cigarette consumption in current cigarette smokers over the period (P<0.001).

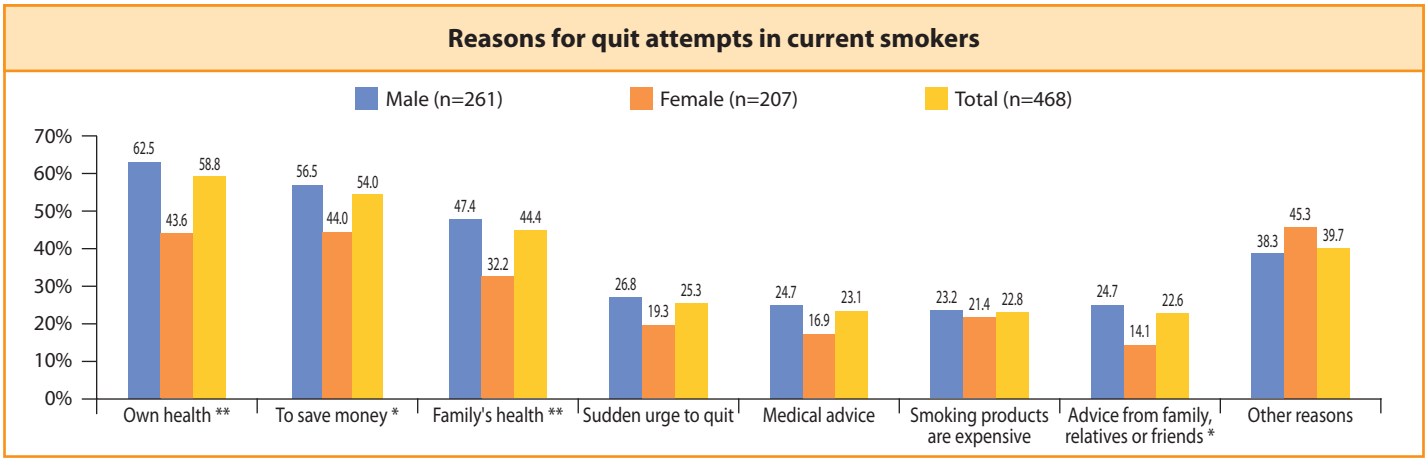
Figure 15



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by year was tested by Chi-square test (P<0.001)
DK/RTA = Don't know/Refuse to answer

Figure 16 shows that the primary reason for quit attempts in current smokers was concern for their own health (58.8%). Saving money was the second most common reason (54.0%), followed by family's health (44.4%), a sudden urge to quit (25.3%), medical advice (23.1%), the high cost of smoking products (22.8%), and advice from family, relative or friends (22.6%). Male current smokers were also significantly more likely to quit smoking for their own health (62.5% vs 43.6%), to save money (56.5% vs 44.0%), for their family's health (47.4% vs 32.2%) and due to advice from family, relative or friends (24.7% vs 14.1%), when compared to female current smokers.

Figure 16



Results were weighted by sex, age and smoking status of the 2021 Hong Kong population
Difference by gender was tested by Chi-square test (*P<0.05, **P<0.01, ***P<0.001)
Multiple responses were allowed

4. Discussion

The concept of tobacco endgame goes beyond tobacco control, and seeks to end the tobacco epidemic[6]. While Hong Kong has not yet formulated a specific endgame plan or strategy to completely ban smoking, the Government has launched the "Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong"[7], with reducing the smoking prevalence to 7.8% by 2025 as one of the targets. Although tobacco control efforts have been strengthened gradually since the early 1980s, the decline in smoking prevalence in Hong Kong has plateaued in recent years. Only limited new or strengthened tobacco control policies have been implemented in the past decade. These included tax increase in 2014, 2023 and 2024, minor expansion of designated no-smoking areas in 2016, 2018 and 2021, enlargement of pictorial health warnings in 2018, and prohibition of sale of ASPs in 2022. The stagnation emphasizes the pressing need for stringent, robust and innovative measures to deter smoking uptake and encourage smoking cessation.

Public support is crucial for the formulation and implementation of tobacco control policies. Our results showed that the support for banning tobacco sales (62.0%) and banning tobacco use (61.9%) are high. The support rate in Hong Kong is relatively high compared to places which have announced the endgame goal. This disparity is likely due to the already low smoking prevalence (9.1% in 2023) in Hong Kong. For instance, in the UK whose smoking prevalence was 14.0% in 2020 and announced an endgame target by 2030, only 34.5% of adults supported a complete ban on the use or sale of tobacco[8]. The public support provides a good reference for Hong Kong policymakers to consider planning for a ban on tobacco sale and use. The feasibility of banning tobacco sales in Hong Kong may be higher than in many Asian places due to the low smoking prevalence, the availability of free smoking cessation services and relatively advanced tobacco control legislation[9,10]. For example, in Mainland China, smoke-free legislation is enacted in over 20 provinces and cities, yet a national law is to be established. Smoking cessation services and medications are available only in major cities and access to nicotine replacement therapy is limited. These may discourage smokers from attempting to quit. The unique conditions in Hong Kong create a conducive environment for more stringent and aggressive tobacco control measures[11].

Majority of smokers started smoking during adolescence and progress to regular daily smoking by the age of 21 years[12]. Thematic Household Survey Report No. 79, reported that nearly 60% of daily cigarette smokers in Hong Kong began smoking weekly before they turned 19 years old[11]. Adverse effects of starting smoking at a younger age are well-documented, including an increased risk of developing chronic diseases and a higher likelihood of continuing smoking into adulthood[13,14]. Raising the minimum age of the sale of tobacco products is a key measure to restrict adolescent access to tobacco and to prevent further progression to regular smoking. Increasing countries, such as the United States (US), have implemented "Tobacco 21" (banning the sale of tobacco products to people aged 21 years or below) with notable effectiveness, resulting in a 12.4% reduction for cigarette sales in US with the highest quartile of individuals under 21 years old[15]. In Hong Kong, there is strong public support for increasing the legal smoking age, which aligns with global trends.

Flavours in cigarettes, especially menthol, reduce or mask the harshness and bitterness of tobacco, making it less irritating and more palatable[16]. Research indicates that flavoured cigarettes can facilitate the transition from experimental to regular smoking by enhancing the sensory experience and reducing the initial aversive effects of nicotine. Additionally, flavourings in cigarettes can lessen the initial adverse reactions to nicotine, such as coughing and throat irritation, making it easier for novice smokers to adapt to and accept smoking, thereby increasing the likelihood of repeated use[17]. The tobacco industry increases the attractiveness of tobacco products with flavourings, particularly in young people and females. Our survey revealed that 39.2% of current smokers began smoking with flavoured cigarettes, the proportion was much higher in female (59.5%) than in male current smokers (34.7%). Our survey also revealed that 48.4% of current smokers used flavoured cigarettes, and the proportion of flavoured cigarette smokers was notably higher among young and female current smokers, with 63.5% in the 15-29 age group and 68.4% in female. Menthol cigarettes were most common across all age groups and in both sexes. It suggested that flavoured cigarettes (especially menthol cigarettes) played a significant role in initiating and maintaining smoking habits, particularly for young people and female.

The World Health Organization Framework Convention on Tobacco Control (WHO FCTC) Article 9 requires Parties to the treaty to regulate the contents of tobacco products, recommending the prohibition or restriction of ingredients that may increase the palatability of these products[18]. A number of countries such as Canada have successfully implemented bans on flavoured cigarettes, providing valuable examples for Hong Kong[19,20]. The initial legislation in 2010 exempted menthol[21], while the later legislation in 2017 extended the ban to menthol (including all analogues and derivatives) in cigarettes[20]. Studies have shown that the menthol cigarette ban significantly increased quit attempts and maintained abstinence in menthol smokers compared to non-menthol smokers[20]. Additionally, the Canadian measures have successfully reduced the use of flavoured tobacco, including menthol cigarettes, and promoted smoking cessation[21]. The ban also prevented relapse among former smokers, particularly the heaviest smokers[21]. In the US, the Family Smoking Prevention and Tobacco Control Act was passed in 2009, which included a ban on flavoured cigarettes (excluding menthol). Research indicates that the ban effectively reduced youth tobacco use, lowering the probability of adolescents becoming smokers by 17.1%[22]. In May 2020, the UK prohibited menthol cigarettes (including capsule variants). After the ban, the proportion of young people in England smoked menthol cigarettes dropped significantly, from 12.1% in February 2020 to 3.0% in August 2020[23]. Flavour accessories for tobacco products have been readily available in many countries worldwide to circumvent the flavour bans[24]. These accessories are not classified as tobacco products and thus are not subject to the tobacco control regulations. However, their wide variety and appealing scents make them attractive to smokers, leading to significant public health concerns. Therefore, a comprehensive flavour ban should cover also the flavour accessories to avoid loopholes. Our survey results reveal a high level of support (61.6%) for banning flavoured cigarettes. This indicates a recognition of the potential harm and negative impact of flavoured cigarettes on public health. Public opinion aligns with the need for stricter regulations and policy measures to curb the use of these products.

Tobacco taxation is the single most effective single measure to reduce smoking[25]. Our survey results indicate a notable shift in cigarette consumption patterns after the 2023 tax increase, with a substantial rise in the proportion of light smokers and a dramatic decline in heavy smokers. Besides, there was still a strong support for tobacco tax increases in the next year (68.5%) and annual increase (64.6%). Increasing the tobacco tax was found to be effective in reducing the smoking prevalence from an average of 23.4% in 2001 to average of 17.9% in 2015 across all 50 states in the US[26]. Most importantly, their results also suggested that each additional US$0.25 (HK$1.95) increase in the tobacco tax was linked to a 0.67% increase in the percentage of active smokers attempting to quit smoking. Raising the tobacco tax to at least 75% of cigarette retail price, as recommended by the WHO, reduces the affordability of smoking products and encourages smoking cessation[27]. It may also generate substantial revenue that can be used for health programmes and smoking cessation services.

Recently, the Hong Kong Government has proposed 10 tobacco control measures[28], including a fiscal mark on tobacco packages, increasing penalties for illicit cigarette activities, a ban on possession for any purposes of ASPs, a ban on offering smoking products to minors, continuous review of tobacco taxation, a ban on flavoured tobacco, plain packaging, expanding no-smoking areas, banning smoking while queuing, and strengthening smoking cessation services and anti-smoking education. These proposed measures reflect a robust commitment of the Government to tobacco control and public health, aiming to create a healthier, smoke-free environment in Hong Kong. From our survey results, the widespread support for different tobacco control measures among all respondent groups indicates broad public approval of the government's approach to tobacco control.

5. Limitations

All data for the TCPS 2023 were gathered through landline and mobile phone interviews, which enhanced the study's reach. Although this method may not offer the same level of precision as face-to-face interviews, the anonymity secured could lead to more honest responses. Another potential limitation is that the study only included respondents who could speak Cantonese, though they represent over 95% of the population aged 15 year or above. Additionally, as the study was cross-sectional, it was not possible to track changes in opinions on tobacco control policies and smoking patterns from the same respondents over time.

6. Conclusions

Despite existing tobacco control efforts, the decline in smoking prevalence has stagnated, underscoring the need for more effective measures to discourage smoking and reach tobacco endgame. The support for innovative and stringent policies such as a total ban on tobacco sale and use, raising the legal minimum age for the sale of tobacco products to 21 years old as well as annual increase in tobacco tax are high, particularly in never smokers and ex-smokers, making advancing tobacco control measures in Hong Kong feasible. The survey also reveals a high prevalence of flavoured cigarette use among women and young people, suggesting a need for regulatory action to reduce the attractiveness of smoking products.

7. Other results

7.1 Current use of ASPs

- In the past 30 days, the average number of days of HTP use was 13.4 days in current HTP users, while the average number of days of EC use was 19.1 days in current EC users.
- A quarter (24.5%) of current HTP users reduced HTP use while 38.5% of current EC users reduced EC use within the few months before and after the ASP ban was implemented.
- More than one-fifth (21.5%) of current HTP users had an intention to quit HTPs, while 22.2% of current EC users had an intention to quit ECs.

7.2 Smoking hotspot

- Two-thirds (65.0%) of current smokers smoked at smoking hotspots (such as around rubbish bins and back alleys) in the past 7 days, including 12.7% who visited smoking hotspots daily.
- Current smokers visited smoking hotspots on average of 3.2 times per day.

7.3 Quit attempts in current smokers

- In current smokers, 21.1% had ever made a quit attempt, of which 34.6% trying to quit smoking in the past year.
- In the most recent quit attempt, nearly half (47.2%) of current smokers tried to quit mainly unaided, 23.3% mainly used smoking cessation medication and 22.7% mainly used smoking cessation services.
- Stress (32.2%), meeting smoking friends and colleagues (19.5%), killing time (13.5%) and failing to concentrate (13.4%) were the top reasons for relapse in current smokers.

7.4 Smoking cessation in ex-smokers

- On average, ex-smokers had quit smoking for 8.2 years.
- Ex-smokers most commonly quit smoking for their own health (61.6%), to save money (40.1%) and for family's health (37.4%).
- Over half (62.5%) of ex-smokers quit smoking gradually while 31.1% abruptly.
- Ex-smokers facilitated smoking cessation most commonly by meeting smoking friends and colleagues less (46.6%), reducing visits to places with many smokers (44.1%) and reducing visits to places with higher SHS or third-hand smoke (THS) exposure (36.1%).
- One-fifth (20.1%) of ex-smokers quit smoking mainly with smoking cessation medications or services. Of these ex-smokers, 80.7% used nicotine replacement therapy, 35.7% used Chinese food therapy or medicine, 11.0% used smoking cessation medication and 9.3% used acupuncture.

7.5 Secondhand smoke and thirdhand smoke exposure

- Around half (48.7%) of all respondents were exposed to SHS at any place in the past 7 days.
- 37.7% of respondents were exposed to SHS at home in the past 7 days, with 26.3% from inside the home and 28.6% from neighbours.
- Around one-third (34.3%) of employed respondents were exposed to SHS at workplace in the past 7 days.
- In the past 7 days, 40.3% of all respondents were exposed to SHS at locations other than home or workplace.
- In all respondents, 23.2% were exposed to THS at home and 34.5% were exposed to THS in indoor areas outside home in the past 7 days.

7.6 Regulations on cigarette packaging

- Almost all (98.0%) current smokers noticed the PHWs on cigarette packs.
- In current smokers, 19.1% would consider quitting cigarettes if a health warning was printed on each cigarette stick, 17.7% would consider quitting cigarettes if the message "one in two long-term smokers die prematurely due to smoking" was printed on PHWs and 14.0% would consider quitting cigarettes if a card showing the harms of smoking was inserted into cigarette packs.

7.7 Tobacco advertising and promotion

- About three-fourths (76.3%) of respondents were exposed to point-of-sale tobacco product displays in the past 30 days, of which 8.3% perceived the displays attractive and 70.4% supported to ban the displays.

7.8 Tobacco tax

- Around one-third (33.6%) of current smokers would quit smoking or reduce smoking at least by half if the cigarette price increased to HKD $140.1 per pack (median was HKD $100 per pack).

7.9 Extension of statutory no smoking areas

- Extension of statutory no smoking areas were supported by 95.0% of the respondents. For instance, respondents supported to ban smoking in all common areas in housing estates (59.2%), busy streets (58.6%), all public areas with ceilings (47.0%) and outdoor seating areas of restaurants and bars (46.6%)
- Around three-fourths (71.6%) respondents agreed that smoking while walking on streets should be banned.
- Most (84.2%) supported to increase manpower to carry out law enforcement towards individuals who smoke in no-smoking areas.
- Most (73.0%) of respondents agreed that venue managers should be liable to penalty for smoking offences in statutory no-smoking areas.
- Over half (62.1%) of respondents supported to increase the fixed penalty for smoking offences. On average, the suggested fine was HKD $3,268.3 (median was HKD $3,000).

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