Global Adult Tobacco Survey (GATS) Malaysia 2023

Executive Summary

Malaysia, 2023

Disclaimer

The findings and conclusions in this report are those of the author(s) and do not necessarily represent the official position of the U.S. Centers for Disease Control and Prevention.







1. Introduction

Over 8 million people worldwide lose their lives to the tobacco epidemic each year, including an estimated 1.3 million people who do not smoke (1). In the Western Pacific Region, tobacco use kills 3 million people annually (2). The complications from tobacco use claim the lives of approximately 27,000 people yearly in Malaysia (3). These deaths are preventable if more stringent measures are implemented, especially strategies pertaining to smoke-free laws, tobacco price increases and anti-tobacco media campaigns (4). In addressing the tobacco epidemic, Malaysia signed the World Health Organisation Framework Convention on Tobacco Control in 2005 and undertook its first Global Adult Tobacco Survey (GATS) in 2011. Currently, 183 countries are parties to the WHO FCTC treaty, covering more than 90% of the world population (5).

In line with WHO FCTC, Malaysia has also adopted the WHO MPOWER measures to assist in the country-level implementation of effective interventions to reduce the demand for tobacco. The MPOWER package consists of six cost-effective measures for fighting the global tobacco epidemic: (1) monitoring tobacco use and prevention policies; (2) protecting people from smoke; (3) offering help to quit tobacco use; (4) warning about the dangers of tobacco; (5) enforcing bans on tobacco advertising, promotion and sponsorship; and (6) raising taxes on tobacco. MPOWER measures are shown to save lives and reduce costs from averted healthcare expenditures. Hence, a systematic and efficient surveillance system is critical to monitor tobacco products use, and electronic cigarette (e-cigarette) use and evaluate their prevention and control interventions.

The Global Adult Tobacco Survey (GATS) is a nationally representative household survey of people aged 15 years or older that monitors tobacco products use, e-cigarette use, and tracks key tobacco control indicators. The use of a standard questionnaire, sampling methodology, and protocols in GATS makes comparison of survey results possible across countries.

Malaysia first implemented GATS in 2011. The country has since made progress in reducing tobacco products use and e-cigarette use, and adopted many key tobacco control initiatives, including prohibiting smoking in 23 indoor public places; prohibiting tobacco advertising, promotion, and sponsorship; making graphic health warning labels mandatory on all tobacco product packs; and increasing tobacco taxes.

The second round of GATS Malaysia was conducted in 2023 by the Institute for Public Health in collaboration with the Disease Control Division, Ministry of Health Malaysia. Technical assistance was provided by the U.S. Centers for Disease Control and Prevention (CDC), RTI International, and the World Health Organization (WHO). Program support was provided by the CDC Foundation. Funding was provided by the Ministry of Health of Malaysia and the *Bloomberg Initiative to Reduce Tobacco Use* through the CDC Foundation with a grant from Bloomberg Philanthropies.

2. Methods

GATS uses a global standardised methodology to systematically monitor adult tobacco products use, and electronic cigarette use, and track key tobacco control measures. It includes information on respondents' background characteristics, use of tobacco products (including cigarettes, smokeless tobacco products, and heated tobacco products), electronic cigarette use, tobacco cessation, secondhand smoke exposure, economics, media, and knowledge, attitudes, and perceptions towards tobacco use. GATS Malaysia 2023 adopted a similar survey design with the GATS 2011, which was a household survey of persons aged 15 years or older. A multi-stage stratified sample design was used to produce nationally representative data. A total of 5,780 households were sampled, and one individual was randomly selected from each participating household to complete the survey. Survey information was collected electronically using handheld devices. A total of 4,269 individual interviews were completed, yielding an overall response rate of 81.5%.

3. Key findings in 2023

1. Tobacco use

- In 2023, 19.5% (4.8 million) of adults in Malaysia reported current tobacco use in any form (36.2% of men and 1.8% of women). In total, 19.0% of adults currently smoked tobacco¹ (35.7% of men and 1.5% of women).
- In total, 14.6% (3.7 million) of adults currently smoked tobacco daily (27.2 % of men and 1.4% of women). Overall, 16.8% of adults (31.9 % of men and 0.9 % of women) currently smoked cigarettes (manufactured cigarettes, hand-rolled or kretek) (data not shown in table). The average number of cigarettes smoked per day was 13.1 cigarettes among adults who smoked tobacco daily.
- Among adults aged 20–34 years who had ever smoked daily, the mean age of daily smoking initiation was 18.2 years, while 46.4% of adults started smoking before the age of 18 (data not shown in table). An estimated 29.2% of adults who smoked tobacco daily reported first smoking tobacco within 30 minutes of awakening (data not shown in the table).
- Smokeless tobacco products were used by just 0.9% (0.2 million) of adults (1.1% of men and 0.7% of women) (data not shown in the table).

2. Electronic cigarette use

Overall, 68.1% of adults had ever heard of e-cigarettes, 8.9% (10.5% of men and 0.8% of women) had ever used e-cigarettes, and 5.8% of adults currently used e-cigarettes (data described in this paragraph are not shown in the table). An estimated 62.8% of adults who currently used e-cigarettes preferred fruit flavours. The prevalence of adults who used both e-cigarettes and smoked tobacco (dual use) was 3.9%. The percentage of adults who either currently smoked tobacco or currently used e-cigarettes was 21.0%.

¹ Currently smoked tobacco includes manufactured cigarettes, hand-rolled cigarettes, kreteks, pipes, cheroots, cigars, cigarillos, bidis, and shisha/hookah.

3. Smoking cessation

Among adults who currently smoked tobacco, 9.0% planned to quit within the next month, and 13.3% were thinking about quitting smoking within the next 12 months (data not shown in the table). However, 30.5% of adults who currently smoked tobacco were not interested in quitting smoking (data not shown in the table). Among adults who currently smoked tobacco and visited a healthcare provider in the past 12 months, 66.6% were advised to quit smoking.

4. Secondhand smoke exposure

Among adults who worked indoors, 21.0% (1.8 million) were exposed to tobacco smoke in their workplace in the past 30 days. Among adults who did not smoke and worked indoors, 16.9% (1.2 million) were exposed to tobacco smoke in their workplace in the past 30 days (data not shown in the table). Overall, 19.4% (4.8 million) of adults were exposed to tobacco smoke at home. Among adults who did not smoke, 12.1% were exposed to tobacco smoke at home Among adults who visited various public places, 77.6% were exposed to tobacco smoke in restaurants, 67.9% in bars or nightclubs, 29.2% in government buildings, 19.0% on public transportation, and 18.6% in healthcare facilities.

5. Economics

In 2023, the average amount spent on 20 manufactured cigarettes was *Malaysian Ringgit* (RM) 10.82. The average monthly expenditure on manufactured cigarettes was RM 177.73. About 4 in 5 adults (79.9%) who smoked manufactured cigarettes made their last purchase of cigarettes from a grocery store. Among adults who currently used electronic cigarettes, 38.6% spent less than RM 50.00 on e-cigarettes in the past month (data not shown in the table). Most of the adults who currently used e-cigarettes (85.5%) made their last purchase of e-cigarettes at the e-cigarette/vape shop (data not shown in the table).

6. Advertising, promotion, and sponsorship

Among all adults ages 15 years and older, 81.8% noticed anti-cigarette information in any location during the past 30 days. Overall, 52.2% of adults noticed anti-cigarette information on TV, 35.4% noticed it on radio, 59.3% noticed it on the internet, 49.8% noticed it on billboards, and 5.8% noticed it somewhere else in the past 30 days (data not shown in the table). Overall, 18.3% of adults noticed any cigarette advertisements, promotions, or public event sponsorship.

7. Knowledge, attitudes, and perception

Overall, 86.6% of adults believed smoking causes serious illness, and 85.9% of adults believed that breathing other peoples' smoke causes serious illness for those who do not smoke. Furthermore, the majority of adults believed that anti-smoking actions such as increasing no-smoking zones (85.9%), increasing cigarette prices (78.1%), and more quit smoking services (89.5%) could reduce the number of persons who smoke in Malaysia (data not shown in the table).

4. Changes between 2011 and 2023

• Overall, the prevalence of current tobacco use significantly decreased from 24.0% in 2011 to 19.5% in 2023 (from 44.9% to 36.2% among men). This represents an 18.9% relative

percent decline in tobacco use (19.4% significant relative decline for men and no significant change for women).

- Overall, the prevalence of current tobacco smoking significantly decreased from 23.1% in 2011 to 19.0% in 2023 (significant decline from 43.9% to 35.7% among men, and no significant change among women). This represents a 17.7% relative percent decline in tobacco smoking (18.8% relative decline for men).
- The prevalence of current e-cigarette use increased from 0.8% in 2011 to 5.8% in 2023. Additionally, the prevalence of current e-cigarette use among those aged 15 to 24 years increased from 1.1% in 2011 to 8.6% in 2023 (data not shown in the table).
- Smoking cessation and health care seeking behaviour among adults who currently smoked and those who made quit attempts in the last 12 months have remained stagnant. Among adults who smoked tobacco in the past year, 48.6% made a quit attempt in 2011 and 49.3% in 2023. Among adults who smoked tobacco and visited a healthcare provider, 52.6% were advised to quit by a healthcare provider in 2011 compared with 66.6% in 2023.
- Exposure to tobacco smoke in homes, workplaces, and public transportation significantly declined from 2011 to 2023. In homes (at least weekly), exposure to tobacco smoke declined from 38.4% in 2011 to 19.4% in 2023, representing a relative change of 49.5%. In workplaces (in the last 30 days), the exposure to tobacco smoke declined from 39.8% in 2011 to 21.0% in 2023, representing a relative change of 47.3%.
- Among adults who visited various public places, exposure to tobacco smoke significantly declined on public transportation (from 28.2% in 2011 to 19.0% in 2023); however, exposure significantly increased in government buildings (from 20.0% in 2011 to 29.2% in 2023), restaurants (from 71.0% in 2011 to 77.7% in 2023), and in healthcare facilities (from 8.7% in 2011 to 18.6% in 2023).
- The percentage of adults who smoked tobacco and noticed health warning labels on cigarette packages in the past 30 days significantly declined from 92.8% in 2011 to 70.9% in 2023. In addition, the percentage thinking about quitting because of the warning labels significantly declined (45.8% in 2011 vs. 33.2% in 2023) (data not shown in the table).
- The percentage of adults who noticed anti-cigarette smoking information in various places in the last 30 days significantly declined from 94.0% in 2011 to 77.1% in 2023. However, the proportion of adults who noticed anti-cigarette smoking information on the internet significantly increased from 17.7% in 2011 to 59.3% in 2023 (data not shown in the table).
- The percentage of adults who noticed any in-store cigarette advertisements or promotions significantly decreased from 21.7% in 2011 to 8.8% in 2023 (data not shown in the table). In addition, the percentage of adults who noticed any tobacco advertisements, promotion, and sponsorship significantly decreased from 35.6% in 2011 to 18.3% in 2023.

 The average amount spent on 20 manufactured cigarettes significantly decreased from RM 13.19 in 2011² to RM 10.82 in 2023. The average monthly expenditure on manufactured cigarettes significantly decreased from RM 233.98 in 2011² to RM 177.73 in 2023.

5. Conclusion

Although the prevalence of adults who currently smoked tobacco significantly declined from 2011 to 2023, much must be done to tackle other tobacco use related challenges, mainly in the areas of secondhand smoke exposure, the cost of cigarettes, and the increased use of e-cigarettes. Between 2011 and 2023, Malaysia implemented various tobacco control policies, including: regularly monitoring adult and adolescent tobacco use through national surveillance activities; expanding smokefree public places to include open eateries; enhancing smoking cessation programmes at private healthcare facilities, workplaces, and higher education institutions; introducing a new set of 12 pictorial health warnings on cigarette packaging; prohibiting the sale of tobacco products through direct or indirect promotion such as advertisements on billboards, at points of sale, and through the internet; and increasing tobacco excise tax from 28 cents to 40 cents per cigarette stick and increasing the minimum price of 20 sticks of cigarettes and cigars to RM 12.00.

² In adjusted constant 2023 Malaysian Ringgit using the Inflation Rate for Average Consumer Prices from the International Monetary Fund's World Economic

6. Policy implementation and recommendation

Strengthen law and enforcement on the control of tobacco and smoking products.

In December 2023, Malaysia passed the Control of Smoking Products for Public Health Act. This standalone act aims to curb tobacco smoking and e-cigarette use epidemic in Malaysia. Under this new act, all tobacco smoking and e-cigarette use control measures are likely to be strengthened in line with the WHO FCTC, including stricter regulations on tobacco products (smoking and smokeless tobacco products) and e-cigarettes, the expansion of no-smoking zones, and the use of new sets of pictorial health warnings based on tobacco products, and e-cigarettes. Additionally, more enforcement activities should be carried out, especially in the smokefree zones. To conduct these activities, more officers should be authorised by the Minister of Health to other ministries and agencies, including local authorities.

Community empowerment and multisectoral participation (Health in All Policies)

Although smoking tobacco is a public health issue, solving it should not be solely the responsibility of the Ministry of Health. All parties are encouraged to participate in the tobacco control measures through community-based programmes, such as the Malaysian Home without Smoking Environment (MyHOUSE) and smokefree workplaces. Communities can be empowered to advise adults who smoke or use e-cigarettes not to smoke or use these devices in public places. Children can be taught at home about the dangers of using tobacco or e-cigarettes to prevent the initiation of these products. Promoting and advocating programmes towards a tobacco-free generation can be conducted continuously through community and multisectoral collaboration. Health in All policies could be implemented to help Malaysia achieve a smoke- and e-cigarette-free country by 2040.

Empower the Malaysia Quit Smoking Services through smart collaboration with professional bodies, non-governmental organisations (NGOs), and private agencies.

Although the prevalence of tobacco use and tobacco smoking has decreased from 2011 to 2023, the increase in e-cigarette prevalence is a public health concern. Hence, all healthcare providers should advise adults who smoke tobacco or use e-cigarettes to quit using an effective intervention offered by the Ministry of Health. The Malaysia Quit Smoking Services should be promoted nationwide, targeting adults who smoke tobacco or use e-cigarettes. In addition, the ministry should increase smoking cessation service providers and engage NGOs and private agencies through training to encourage adults who smoke tobacco or use e-cigarettes to join www.jomquit.com, a mobile application that offers quit smoking services, especially in rural and remote areas. At the same time, continuous monitoring, surveillance, and regular evaluation of tobacco products, and e-cigarette use, and related morbidity and mortality among adults in Malaysia.

References

- 1. Institute for Health Metrics and Evaluation. *Global Burden of Disease* [database]. Washington, DC: Institute of Health Metrics, 2019. <u>https://www.healthdata.org/gbd</u>.
- 2. Tobacco control in the Western Pacific region. *Lancet Reg Health West Pac*. 2021 May 28;10:100179. doi: 10.1016/j.lanwpc.2021.100179.
- 3. Drope, J.; Schulger, N.; Cahn, Z.; Drope, J.; Hamill, S.; Islami, F.; Liber, A.; Nargis, N.; Stoklosa, M. *The Tobacco Atlas, 6th ed.; American Cancer Society and Vital Strategies*: Atlanta, GA, USA, 2018.
- Perez-Warnisher MT, De Miguel MDPC, Seijo LM. Tobacco Use Worldwide: Legislative Efforts to Curb Consumption. *Ann Glob Health.* 2018 Nov 5;84(4):571-579. doi: 10.9204/aogh.2362.
- 5. WHO Framework Convention on Tobacco Control; Parties: <u>https://fctc.who.int/who-fctc/overview/parties</u> Accessed 1 March 2024.

Indicator	2011			2023		
	Overall	Male	Female	Overall	Male	Female
M: Monitor tobacco use and prevention policies						
Current tobacco use ¹	24.0 (22.0, 26.1)	44.9 (41.5, 48.3)	1.7 (1.2, 2.3)	19.5 (17.5, 21.6)	36.2 (32.5, 40.1)	1.8 (1.0, 3.3)
Current tobacco smoking	23.1 (21.2, 25.2)	43.9 (40.6, 47.3)	1.0 (0.7, 1.6)	19.0 (17.1, 21.1)	35.7 (32.0, 39.5)	1.5 (0.8, 3.1)
Current cigarette smoking	22.9 (21.0, 25.0)	43.6 (40.3, 46.9)	1.0 (0.6, 1.6)	16.8 (15.1, 18.6)	31.9 (28.9, 35.1)	0.9 (0.4, 1.7)
Current manufactured cigarette smoking	20.1 (18.2, 22.0)	38.3 (35.1, 41.7)	0.7 (0.4, 1.2)	15.1 (13.4, 16.8)	28.6 (25.9, 31.6)	0.8 (0.4, 1.6)
Average number of cigarettes smoked per day ²	13.9 (13.1, 14.7)	14.0 (13.2, 14.8)	-	13.1 (11.8, 14.3)	13.2 (11.9, 14.5)	-
Average age at daily smoking initiation ³	17.2 (16.6, 17.8)	17.2 (16.6, 17.8)	-	18.2 (17.3, 19.2)	18.1 (17.1, 19.1)	-
Former smokers among ever daily smokers	9.5 (7.5, 11.9)	9.4 (7.5, 11.9)	10.0 (4.2, 22.4)	8.4 (6.1, 11.4)	8.6 (6.2, 11.7)	-
P: Protect people from tobacco smoke						
Exposure to secondhand smoke at home at least monthly	38.4 (35.9, 41.1)	43.3 (39.9, 46.8)	33.3 (30.2, 36.4)	19.4 (17.3, 21.7)	23.6 (20.1, 27.4)	15.0 (12.9, 17.5)
Exposure to secondhand smoke at home at least monthly among non-smokers	27.9 (25.5, 30.4)	19.5 (16.2, 23.2)	32.8 (29.8, 36.0)	12.1 (10.6, 13.8)	8.8 (7.0, 11.2)	14.3 (12.2, 16.8)
Exposure to secondhand smoke at work [§]	39.8 (35.9, 44.0)	46.2 (41.1, 51.5)	30.1 (24.7, 36.1)	21.0 (17.5, 25.1)	25.8 (20.6, 31.6)	15.1 (11.2, 19.9)
Exposure to second hand smoke in public places: $^{4,\$}$						
Government building/offices	20.0 (16.4, 24.2)	20.1 (16.0, 25.0)	19.8 (14.7, 26.2)	29.2 (23.7, 35.4)	33.3 (25.2, 42.6)	24.2 (17.9, 31.8)
Health care facilities	8.7 (6.9, 10.8)	7.8 (5.4, 11.2)	9.4 (7.1, 12.4)	18.6 (15.2, 22.5)	19.6 (14.5, 26.1)	17.7 (13.7, 22.5)
Restaurants	71.0 (67.7, 74.0)	73.1 (69.2, 76.6)	68.4 (63.8, 72.8)	77.6 (74.3, 80.7)	76.7 (71.9, 81.0)	78.7 (73.6, 83.0)
Bars or nightclubs	n/a	n/a	n/a	67.9 (54.0, 79.1)	77.1 (61.9, 87.5)	51.0 (28.6, 73.0)
Public transportation	28.2 (23.3, 33.5)	32.1 (24.7, 40.6)	25.2 (19.5, 31.9)	19.0 (13.2, 26.5)	22.9 (14.7, 33.9)	15.6 (9.0, 25.6)
O: Offer help to quit tobacco use						
Made a quit attempt in the past 12 months ⁵	48.6 (44.1, 53.2)	48.7 (44.0, 53.4)	45.7 (24.8, 68.3)	49.3 (43.4, 55.2)	49.5 (43.5, 55.4)	46.0 (17.4, 77.5)
Advised to quit smoking by a health care provider ^{5,6}	52.6 (43.8, 61.2)	52.2 (43.2, 61.0)	-	66.6 (54.1, 77.1)	66.8 (53.9, 77.5)	-
Attempted to quit smoking using a specific cessation method: ⁵						
Pharmacotherapy	9.0 (5.7, 13.8)	9.2 (5.9, 14.1)	-	9.5 (4.8, 17.9)	9.9 (5.0, 18.5)	-
Counselling/advice	4.4 (2.8, 7.0)	4.4 (2.7, 6.9)	-	8.3 (5.5, 12.3)	8.6 (5.8, 12.8)	-
Interest in quitting smoking ⁷	70.7 (66.3, 74.7)	70.4 (66.0, 74.5)	82.8 (61.3, 93.6)	59.7 (54.2, 64.9)	59.2 (53.7, 64.4)	77.9 (54.5, 91.2)
W: Warn about the dangers of tobacco						
Belief that smoking tobacco causes serious illness	92.2 (90.9, 93.4)	90.7 (88.5, 92.4)	93.9 (92.5, 95.1)	86.6 (84.4, 88.6)	84.5 (81.2, 87.4)	88.9 (86.2, 91.1)

Appendix F: MPOWER Summary Indicators – GATS Malaysia, 2011 and 2023.

Belief that smoking causes stroke, heart attack, and lung	77.5 (75.3, 79.5)	75.2 (72.2, 77.9)	79.9 (77.3, 82.3)	78.8 (76.5, 81.1)	77.3 (73.7, 80.5)	80.5 (77.7, 83.0)
cancer						
Belief that breathing other peoples' smoke causes	85.8 (84.3, 87.3)	84.1 (81.7, 86.2)	87.7 (85.8, 89.5)	85.9 (83.9, 87.7)	84.9 (82.3, 87.1)	87.0 (84.3, 89.3)
serious illness						
Noticed anti-cigarette smoking information at any location [§]	94.0 (92.7, 95.1)	93.5 (91.5, 95.1)	94.5 (92.9, 95.8)	77.1 (73.9, 79.9)	75.7 (72.1, 79.0)	78.4 (74.5, 81.9)
Thinking of quitting because of health warnings on cigarette packages ^{7,§}	45.8 (41.3, 50.4)	45.7 (41.2, 50.2)	51.7 (30.7, 72.1)	33.2 (28.0, 38.7)	32.9 (27.9, 38.3)	42.9 (19.3, 70.3)
E: Enforce bans on tobacco advertising, promotion, and sponsorship						
Noticed any cigarette advertisement, sponsorship, or promotion ${}^{\$}\!$	35.6 (32.9, 38.5)	39.0 (35.4, 42.7)	32.0 (28.7, 35.5)	18.3 (16.3, 20.5)	18.3 (15.7, 21.3)	18.2 (15.6, 21.2)
R: Raise taxes on tobacco						
Average cigarette expenditure per month (<i>Malaysian Ringgit</i>) ^{8,9}	233.98 (183.74, 284.22)	236.38 (185.30, 287.47)	-	177.73 (156.53, 198.93)	178.82 (157.75, 199.88)	-
Average cost of a pack of manufactured cigarettes	13.19 (10.43,	13.24 (10.45,	-	10.82 (9.72, 11.92)	10.78 (9.68, 11.88)	-
(Malaysian Ringgit) ^{8,9}	15.95)	16.02)			(,,	
Last cigarette purchase was from a store ⁸	79.6 (75.4, 83.3)	79.5 (75.2, 83.2)	-	79.9 (74.6, 84.2)	79.3 (74.1, 83.7)	-

¹ Current tobacco use includes current tobacco smoking, smokeless tobacco use, and/or heated tobacco product use. Heated tobacco product use was included in the 2023 questionnaire but not in 2011.² Among current daily cigarette smokers. ³Among respondents 20-34 years of age who are ever daily tobacco smokers. ⁴ Among those who visited the place in the last 30 days. ⁵ Among past-year tobacco smokers (includes current smokers and those who quit in the past 12 months). ⁶ Among those who visited a health care provider in the past 12 months. ⁷ Among current tobacco smokers. ⁸ Among current smokers of manufactured cigarettes. ⁹ GATS Malaysia 2011 cost data were adjusted for inflation for direct comparison to 2023 using the Inflation Rate for Average Consumer Prices from the International Monetary Fund's World Economic Outlook Database. [§] In the last 30 days. * p<0.05

Results for prevalence estimates / averages and 95% CIs are rounded to the nearest tenth (0.1). The relative changes are calculated using un-rounded prevalence estimates and might be different if calculated using rounded prevalence estimates shown in this table.

- Indicates estimates based on less than 25 unweighted cases and has been suppressed.

n/a – data was not collected in 2011.







