

*Global Adult Tobacco Survey  
: Thailand Report, 2011*



**World Health  
Organization**



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## Foreword



Monitoring tobacco control through a standard mechanism is the cornerstone for understanding the trends in tobacco use, and tobacco control policy and programme effectiveness. Availability of reliable, accurate data at periodic intervals is also the key to determining the interventions and approaches required to improve programme performance and persuade policy-makers to adopt appropriate policy measures. Article 21 of the WHO Framework Convention on Tobacco Control also recommends periodic monitoring and reporting on tobacco control indicators.

The recognition of the need for a standardized survey to monitor adult tobacco use led WHO and its partners, in particular, Centers for Disease Control and Prevention, Atlanta, USA, and Centers for Disease Control and Prevention Foundation, USA, to launch the Global Adult Tobacco Survey (GATS) in 2007 under the Bloomberg Initiative. The survey is designed to produce nationally representative estimates on tobacco control indicators that are comparable over time and across nations using a standard protocol. Thailand implemented the Global Adult Tobacco Survey and measured the impact of tobacco control and prevention initiatives in 2009.

I am pleased to learn that this is the first report of the repeat Global Adult Tobacco Survey 2011–2012 carried out in the world under the Bloomberg Initiative. The report has been able to capture important data on different aspects of the tobacco control programme in Thailand. The standard and efficient design for data collection and management will help in comparing data between 2009 and 2011, and will provide a good opportunity to understand programme gaps. It will also help in further strengthening tobacco control in Thailand.

I would like to congratulate the implementing agencies and all those involved for having completed the survey successfully, which I am sure has contributed substantially to capacity building of the country to conduct large and standardized surveys.

Most importantly, the findings mentioned in this report will be useful for designing and strengthening effective tobacco control interventions in Thailand.

A handwritten signature in black ink that reads "Samlee Plianbangchang". The signature is written in a cursive, flowing style.

Dr Samlee Plianbangchang  
Regional Director



## Foreword

Improving Thai People's health is the main policy of the Ministry of Public Health (MoPH). As is well known, tobacco use is one the major risk factors for noncommunicable diseases (NCDs), which are the current public health problems in Thailand. Tobacco control is considered a very important measure and the most effective tool of the MoPH to reduce the burden of NCDs and other related diseases.

Thailand has signed and ratified the Framework Convention on Tobacco Control of the World Health Organization (WHO FCTC) in 2003 and 2004, respectively. The MoPH has supported implementation of tobacco control according to the FCTC by consolidating a multisectoral national FCTC body, composed of relevant governmental and nongovernmental organizations. Moreover, the MoPH, through the Bureau of Tobacco Control, Department of Disease Control, has developed the National Strategic Plan for Tobacco Control, 2010–2014 for strengthening and developing national capacity in tobacco control. The Global Adult Tobacco Survey (GATS), an important part of the National Strategic Plan for Tobacco Control, is a comprehensive surveillance activity, not only for monitoring the progress and effectiveness of national tobacco control in Thailand but also for implementing FCTC Article 20: Research, surveillance and exchange of information.

I strongly support this tobacco control measure and would like to ensure that the results of this study are used for monitoring, evaluating and further improving the implementation of the National Tobacco Control Plan.

I would like to express my gratitude to the World Health Organization, U.S. Centers for Disease Control and Prevention, Bloomberg Philanthropies, National Statistical Office and Mahidol University for their prompt and magnificent technical support. Specifically, my gratitude to the Bureau of Tobacco Control, Department of Disease Control and all of its related staff who have worked hard to achieve this success and create a record in history by becoming the first country to conduct a repeat GATS survey.



*Wittaya Buranasiri*

Mr Wittaya Buranasiri,  
Minister of Public Health

## Foreword

The prevalence of smoking in Thailand has decreased continuously since 1991, when there were about 12.3 million adults above the age of 15 years who smoked, accounting for about 32.0% of the population. By 2009, the number of adult smokers reduced to about 10.9 million, and comprised 20.7% of the population. This was an 11.3% decrease in smoking prevalence over a period of 18 years. This reduction in Thailand is the result of a very strong commitment to tobacco control over 30 years through collaborative efforts by all sectors, including the government, NGOs and civil society. The National Strategic Plan for Tobacco Control 2010–2014 was developed and approved by the National Committee for Tobacco Consumption Control on 22 April 2010. The mission is to support collaboration among tobacco control networks to conduct surveillance in order to protect Thai citizens from addiction, morbidity, disability and mortality caused by the use of tobacco products.



The Global Adult Tobacco Survey (GATS) aims to systematically monitor adult tobacco use and track key tobacco control indicators in a nationally representative sample, and track implementation of WHO FCTC recommended policies outlined in the MPOWER strategies. Thus, the effort of the GATS Thai team would be very beneficial for the MoPH to monitor and evaluate our tobacco control programme and improve policies to achieve a smoke-free Thailand in the near future.

Dr Porntep Siriwanarungsun  
Director General  
Department of Disease Control

## Foreword



On behalf of the Thai National Statistical Office, I would like to express my sincere appreciation to the Department of Disease Control, Faculty of Public Health, Mahidol University for jointly implementing the 2011 Global Adult Tobacco Survey in Thailand. My special thanks go to the Centers for Disease Control and Prevention (CDC), United States and the World Health Organization for their technical support, and to the Bloomberg Philanthropies, Thai Health Promotion Foundation and the Thai Government for their financial support. The final report has been released.

Data on tobacco consumption, including data on the economics, knowledge and attitudes towards tobacco consumption from this survey are very critical as they can be used in planning and policy formulation for the control and surveillance of tobacco consumption in Thailand. Moreover, since the survey strictly followed international standards in terms of questionnaires and sampling design, including data collection and management procedures, its results can be compared against international contexts. I am so proud that with our hard work, the objectives of the MPOWER policy for tobacco control have been completely met.

Mr Viboondhat Sudhantanakit  
Director General of the National Statistical Office

## Foreword



Thailand, among 14 other initial low- and middle-income countries where more than half of the world's smokers live, conducted the Global Adult Tobacco Survey (GATS) in 2009. Thailand has used the GATS results to strengthen the national tobacco surveillance systems. We have integrated the GATS questionnaire into our national tobacco consumption surveys, which are carried out every three years by the National Statistical Office.

The main topics covered in GATS are the prevalence of tobacco use, exposure to second-hand tobacco smoke, cessation, knowledge, attitudes and perceptions, exposure to the media and economics. These results are an advantage for us in considering our tobacco control strategies such as the MPOWER strategies and interventions in the National Strategic Plan for Tobacco Control, 2010–2014.

I am very thankful to the CDC, WHO and Bloomberg Philanthropies for supporting Thailand in performing the second round of GATS. The results from this survey can be compared with the first GATS and would be of benefit in monitoring our tobacco control policy. I am also thankful to the Thai GATS team for their hard work in completing this excellent survey that reflects our control policy. These results will be necessary for our policy-makers and networks to develop their work effectively.

Professor Dr Prakrit Vathesatogkit  
Executive Secretary of Action on Smoking  
and Health Foundation Thailand (ASH Thailand)

## Foreword

On behalf of the Faculty of Public Health, Mahidol University, we are very pleased to contribute to tobacco control interventions at the national and international levels. The faculty offers instructions on tobacco control in some undergraduate and MPH curriculum. We also provide technical services research related tobacco control.

We continuously appreciate to support and being the partner of the MoPH, nongovernmental organizations and civil society to develop and implement the effective tobacco control programmes, rendering advocate for public policy, social marketing campaigns and public education.

The faculty supports our staff respectively in participating in GATS, both in the first round in 2009 and the second round in 2011. I sincerely hope that our contribution can be one of the important hand that drives the tobacco control policy to achieve the objectives of the National Tobacco Control Plan and, finally, health for all.



Associate Professor Dr Phitaya Charupoonphol  
Dean of Faculty of Public Health, Mahidol University

## Preface

Over two decades, Thailand has strongly advocated for the implementation of various tobacco control strategies to bring about a change in the social norm of smoking. Tobacco use was deemed to be gradually decreasing from 1991 to 2004 with close observation through surveillance every two years. However, up to present, the situation of tobacco use has not improved. Instead, it remained static and, in fact, showed a rising trend. As is well known, tobacco use is one of the top ten risk factors for disease, hence this increasing trend is a matter of concern.

As part of the Global Tobacco Surveillance System (GTSS), the Global Adult Tobacco Survey (GATS) uses a standard protocol that generally provides comprehensive monitoring of the various aspects of tobacco use as well as tracks key tobacco control indicators in Thailand.

This report provides not only the results of the 2011 GATS but also compares the results of the 2009 GATS and 2011 GATS. The contents are divided into ten chapters. Chapter 1: Introduction – provides an overview of the GTSS, the burden of tobacco use in Thailand and the survey objectives, Chapter 2: Methodology – describes the survey methods and provides information on the study population, sampling design, questionnaire, data collection and statistical analysis. Chapter 3: Sample and Population Characteristics – describes the adult Thai population (15 years of age and above).

The next six chapters address key survey findings by the topic areas covered in the survey questionnaire. These include Chapter 4: Tobacco Use, Chapter 5: Cessation and Chapter 6: Second-hand Smoke. Chapter 7: Economics, examines the costs of manufactured cigarettes and shredded tobacco products, Chapter 8: Media, focuses on smoking tobacco, and Chapter 9: Knowledge, Attitudes and Perceptions, discusses these with respect to tobacco use. Each of these chapters is divided into two parts. The first part covers the survey findings of the 2011 GATS and the second compares the findings of the 2009 GATS and 2011 GATS.

Chapter 10: Conclusion and Recommendations – provides an overview of GATS, lessons learnt from the 2009 GATS, and policy recommendations according to the MPOWER strategy. This strategy has six proven tobacco control measures developed by the World Health Organization (WHO). Each recommended strategy consists of important findings, policy goals, recommendations, and possible problems or obstacles in implementing recommendations.

This publication provides opportunities for both national and international tobacco control partners to utilize the survey findings for improving tobacco control surveillance and strategies. We hope that our efforts will energize Thailand's tobacco control partners to make relentless efforts to initiate more effective tobacco control programmes to finally end tobacco use.

*Core staff of the GATS Thailand Working Group  
April 2012*

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## Acknowledgements

Thailand implemented the Global Adult Tobacco Survey (GATS) in 2009 and was chosen as the first country to conduct a repeat GATS in 2011 using standard global protocols. The GATS evaluates current tobacco control measures and policies in order to strengthen tobacco surveillance in Thailand. A comparison between the findings of the 2009 GATS and 2011 GATS indicates the change in tobacco use prevalence and other indicators, which reflect the implementation of Thailand's tobacco control policies.

Our achievements are due to the great dedication and support of our partners. First of all, GATS Thailand would like to thank Bloomberg Philanthropies for initiating this repeat survey through the Centers for Disease Control and Prevention Foundation. Special mention must be made of Mr William Parra and Mr Brandon Tally. We also thank the WHO Regional Office for South-East Asia (SEARO) and WHO Thailand Office, especially Dr Dharendra N Sinha and Dr Chai Krittiyapichatkul, who facilitated the development of the survey proposal and grant procedures, provided consultancy and supported this survey.

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We would like to express our deepest gratitude to the core technical staff team responsible for implementing the survey. This team consisted of researchers and academic officers from the Bureau of Tobacco Control, Department of Disease Control, Ministry of Public Health, National Statistical Office, and the Faculty of Public Health, Mahidol University, who all kindly cooperated in completing this survey. We especially thank the country policy-makers and tobacco control experts from related government and nongovernmental organizations.

We also greatly appreciate the cooperation of the National Statistical Office (NSO), Ministry of Information and Communication Technology, Action on Smoking and Health Foundation (ASH Thailand), Thai Health Promotion Foundation, and Tobacco Control Research and Knowledge Management Center (TRC).

Finally, the most heartfelt acknowledgement goes to the Provincial Technical Officers and Field Interviewers from our Provincial Statistical Offices, and all respondents who participated in producing this successful and effective survey.

*Core staff of the GATS Thailand Working Group  
April 2012*



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## Executive Summary

### *Overview of the survey characteristics*

Thailand implemented the Global Adult Tobacco Survey (GATS) in 2009 and 2011, using a standard global protocol. Findings from GATS assist countries in the formulation, tracking and implementation of effective tobacco control interventions. The findings allow for strong exchange of information following the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) Article 20 – research and surveillance and exchange of information, and Article 21 – reporting and exchange of information. Thailand ratified the WHO FCTC on 8 November 2004. The GATS findings also inform the implementation of the WHO MPOWER, a package of six evidence-based demand reduction measures contained in the WHO. These include: monitor tobacco use and prevention policies, protect people from tobacco smoke, offer help to quit tobacco use, warn about the dangers of tobacco, enforce bans on tobacco advertising, promotion and sponsorship, and raise taxes on tobacco.

GATS is a nationally representative household survey of all non-institutionalized adults (defined in this survey as people aged 15 years and above). The survey used a three-stage stratified cluster sampling and was designed to produce key indicators for the whole country stratified by gender, urban and rural residence, and for each of the five regions of the country – Bangkok metropolis, Central, Northern, Northeastern and Southern – stratified by gender. Data were collected from one selected person in each participating household using an adapted questionnaire administered using an electronic data collection device.

Primary sampling units (PSUs) in the repeat 2011 GATS were from the same enumeration areas as in the 2009 GATS. In the 2011 GATS, new households were selected from previously sampled PSUs. The 2011 GATS provides information on tobacco use, cessation, second-hand smoke (SHS), economics of manufactured cigarettes and shredded tobacco products, media, knowledge, attitudes and perceptions, and pictorial health warnings. In the 2011 GATS, 21 488 households were screened and 20 606 adults aged 15 years and above were interviewed; the overall response rate was 96.3%. Field implementation took three months, from 1 October to 30 December 2011. The average time for each interview was 21.9 minutes per respondent.

Implementing organizations conducting the 2011 GATS were the Bureau of Tobacco Control (BTC), Department of Disease Control, Ministry of Public Health, National Statistical Office (NSO), and Faculty of Public Health, Mahidol University (PH-MU). Technical assistance was provided by WHO and the United States Centers for Disease Control and Prevention (CDC).

This report provides key findings from the 2011 GATS and also provides a comparative summary between the two survey rounds (2009 and 2011 GATS).



## Key findings

### Tobacco use

Overall, 24.0% of adults (13.0 million) currently smoked tobacco in 2011. More men smoked than women (46.6% vs 2.6%). Current smoking was reported more often in rural than in urban areas (25.9% vs 20.3%). The commonly smoked tobacco products were manufactured cigarettes (15.2%, 8.2 million) and hand-rolled cigarettes (14.4%, 7.8 million). The prevalence of manufactured cigarette smoking was high among persons aged 15–24 years (20.1%), those in urban areas (17.0%), and people in the high socioeconomic status (SES, 19.6%). In contrast, the prevalence of current hand-rolled cigarette smoking was high in rural areas (18.9%), among poor people (17.8% of those with low SES\* (fourth quintile of personal monthly income)) and less educated people (22.5% of those with a primary level of education).

Overall, 3.2% (1.7 million people) currently used smokeless tobacco products. Current smokeless tobacco use was more prevalent among women (5.2% for women vs 1.1% for men), those who were aged 60 years and above (13.6%) and those who lived in rural areas (4.2%). The majority of smokeless tobacco users (1.8%) used betel quid with tobacco, followed by oral snuff (1.3%).

Current tobacco use in any form among Thai adults aged 15 years and above was 26.9% (14.6 million), being 47.2% among men and 7.6% among women. Among current tobacco users, 97.7% of men smoked tobacco products only, while almost two out of three women used smokeless tobacco only (65.8%).

Among daily smokers, 57.7% had their first smoke of the day within 30 minutes of waking up.

*Comparison:* The prevalence of current tobacco smoking did not show a statistically significant change between 2009 and 2011 among men (45.6% vs 46.6%, respectively), women (3.1% vs 2.6%, respectively), and overall (23.7% vs 24.0%, respectively).

The prevalence of current manufactured cigarette smoking did not show a statistically significant change between 2009 and 2011 among men (29.6% vs 30.1%, respectively), women (1.1% vs 1.1%, respectively), and overall (15.0% vs 15.2%, respectively). The prevalence of current hand-rolled cigarette smoking also remained at the same level between 2009 and 2011 among men (27.0% vs 28.1%, respectively), women (1.8% vs 1.4%, respectively), and overall (14.1% vs 14.4%, respectively).

Overall, the distribution of the age at initiation of smoking by age groups remained the same from 2009 to 2011. There were no statistically significant changes in the quit ratio between 2009 and 2011 (28.8% vs 27.2%, respectively).

### Cessation

Among those who smoked in the past 12 months (i.e. current smokers and those who quit within the past 12 months), 36.7% made a quit attempt in the past 12 months. The percentage of those who made a quit attempt declined with increasing age, and with decreasing education and SES levels. The percentage of smokers who made a quit attempt did not show a statistically significant difference between men and women (36.5% and 39.4%, respectively), but the percentage of smokers living in urban areas who made a quit attempt was higher than that of smokers living in rural areas (41.3%

\* Socioeconomic status (SES) is defined by personal monthly income quintiles.

and 34.7%, respectively). Among those who smoked in the past 12 months and who visited any health-care facility, 65.3% were asked about their smoking behaviour by the health-care provider (HCP) and 55.8% were advised to quit by the HCP. Among smokers who tried to quit in the past 12 months, a high percentage (90.7%) tried to quit without any assistance at least once in the past 12 months. The percentage of those who tried to quit without any assistance during the past 12 months showed no difference by gender, residence and region.

Among those who used smokeless tobacco in the past 12 months (i.e. current smokeless tobacco users and those who quit within the past 12 months), 16.4% made a quit attempt in the past 12 months. Among those who used smokeless tobacco in the past 12 months and who visited any health-care facility, 25.1% were asked about their use of smokeless tobacco products and 16.3% were advised to quit smokeless tobacco use by the HCP.

*Comparison:* A statistically significant decline was reported between 2009 and 2011 in the percentage of smokers who made a quit attempt during the past 12 months (49.8% vs 36.7%, respectively). The decline was found across all age groups, and by all demographic variables including residence, education level and SES.

Among those who smoked in the past 12 months and who visited any health-care facility, the percentage who were asked about their smoking status by the HCP increased from 2009 to 2011 (60.2% in 2009 and 65.3% in 2011). The same trend was found in urban areas (59.2% and 68.4%, respectively). However, there was no statistically significant change in advice to quit by HCPs between 2009 and 2011 (51.9% vs 55.8%).

## Second-hand smoke

Regarding exposure to second-hand smoke (SHS) in the 30 days preceding the survey, it was found that among workers who usually worked indoors or both indoors and outdoors, 30.5% (4.2 million) were exposed to SHS at their workplaces. Men workers were more likely to be exposed to SHS than women workers (37.1% vs 22.8%). The prevalence of exposure to SHS among workers in rural areas was statistically higher than among those in urban areas (35.2% vs 25.4%).

In the last 30 days preceding the survey, the three most common public places where there was exposure to SHS were markets (68.8%), bars or night clubs (68.4%), and restaurants (46.9%).

About 36.0% (19.5 million people) were exposed to SHS at home at least monthly during the 30 days preceding the survey. A higher prevalence of exposure to SHS at home at least monthly was found among those living in rural areas, those who had secondary school education or less, and those who were in the low and middle level of SES.

*Comparison:* The prevalence of exposure to SHS at home at least monthly showed a statistically significant increase from 2009 to 2011 (from 33.2% in 2009 to 36.0% in 2011). The prevalence of exposure to SHS at indoor workplaces did not show a statistically significant change between 2009 and 2011 (27.2% vs 30.5%, respectively). Public places where the prevalence of exposure to SHS showed a statistically significant increase from 2009 to 2011 were health-care facilities (4.8% vs 7.3%, respectively) and public transportation (21.6% vs 25.6%, respectively). The prevalence of exposure to SHS in markets did not show a statistically significant change (69.3% vs 68.8%, respectively) during this period.

## Economics

Among current smokers of manufactured cigarettes, 47.3% purchased their last cigarettes as individual sticks. Of the top five cigarette brands, two were inexpensive brands (approximately 30–45 Thai Baht [THB]/pack) of the Thailand Tobacco Monopoly (TTM), accounting for 35.3% of purchased brands.

The median amount spent on 20 manufactured cigarettes was THB 58.0, while the median monthly cigarette expenditure was THB 585.5, accounting for 9.7% of monthly personal income. Expenditure on shredded tobacco products (THB 37.5 per month) was considerably lower than that on manufactured cigarettes. Most cigarette smokers (88.3%) bought cigarettes from grocery stores. Among current smokers of manufactured cigarette, 4.8% reported that the last cigarette pack they purchased did not exhibit pictorial health warnings (PHWs). This percentage was highest in the Southern region (18.5%), suggesting an increased occurrence of tax avoidance in that region.

*Comparison:* The median price paid per 20 manufactured cigarettes increased from THB 45.0 in 2009 to THB 58.0 in 2011. The affordability decreased slightly since the relative income price (price paid per 2000 cigarettes as a fraction of annual per capita gross domestic product [GDP]) slightly increased from 3.4% to 3.6%. The percentage of youth aged 15–17 years who bought manufactured cigarettes as individual sticks remained high (84.3% in 2009 vs 88.3% in 2011).

TTM responded to the 2009 increase in cigarette excise taxes by introducing a new inexpensive cigarette brand (approximately THB 30 per pack) after 2009. Consequently, the percentage of smokers who purchased inexpensive TTM cigarette brands increased from 20.0% in 2009 to 35.3% in 2011 among the top five most popular brands. Furthermore, it was found that the percentage of cigarette packs purchased without PHWs statistically significantly increased from 2.6% in 2009 to 4.8% in 2011. This suggests that tax avoidance may have intensified after the 2009 tax increase.

## Media

Anti-smoking information was noticed by 81.2% of people in the past 30 days, mostly on television (68.1%), whereas 25.7% of people noticed any tobacco advertisement, promotion and sponsorship (TAPS). For TAPS, differences were observed by gender (28.5% of men and 23.1% of women), residence (29.4% of urban areas and 23.7% of rural areas), and age group (34.2% of those aged 15–24 years and 23.7% of those aged 25 years and above). Advertisements were noticed mainly in stores where cigarettes are sold (18.2%). Among current smokers, 94.6% noticed pictorial health warnings (PHWs) on cigarette packages, and 62.6% of those who noticed PHWs thought about quitting smoking because of the PHWs. Among shredded tobacco users, 75.2% noticed black and white PHWs on shredded tobacco packages and 49.5% of those who noticed the PHWs thought about quitting smoking because of the PHWs.

*Comparison:* Current smokers who noticed anti-smoking information in any location decreased statistically significantly from 86.9% in 2009 to 81.2% in 2011. In contrast, those who were exposed to any TAP increased statistically significantly from 17.8% to 25.7%. There was also a statistically significant increase in those who noticed advertisements in stores where cigarettes are sold (from 6.7% in 2009 to 18.2% in 2011).

The percentage of current smokers who noticed health warnings on cigarette packets did not show a change (93.0% in 2009 and 94.6% in 2011). However, those who thought about quitting smoking because of the PHWs decreased statistically significantly from 67.0% in 2009 to 62.6% in 2011.

### **K**nowledge, attitudes and perceptions

Of all adults, 97.0% believed that smoking causes serious illness. For each specific disease, the percentage of adults who believed that smoking causes lung cancer was the highest (97.8%) and bladder cancer was the lowest (48.1%). In addition, 94.2% of adults believed that exposure to SHS causes serious illness; the percentage of those who believed that SHS causes lung cancer was the highest (91.2%) and premature birth was the lowest (58.6%). About one third (34.3%) believed that smoking hand-rolled cigarettes was less harmful than smoking manufactured cigarettes.

*Comparison:* The percentage of adults who believed that smoking causes serious illness remained high (98.6% in 2009 and 97.0% in 2011). Similarly, the percentage of people who believed that exposure to SHS causes serious illness also remained high (94.9% and 94.2%, respectively). Those who thought that smoking hand-rolled cigarettes was less harmful than smoking manufactured cigarettes decreased statistically significantly from 2009 to 2011 (38.1% to 34.3%, respectively).

### *Policy implications*

The findings of the 2011 GATS and comparison of the findings of the two surveys (2009 and 2011) have provided critical information on key indicators of tobacco control by selected demographic characteristics. This creates an opportunity for policy-makers and the public health community to modify interventions, and scale up and accelerate implementation of tobacco control programmes and policies at the national, regional and local levels. The following are a set of recommendations based on the WHO MPOWER strategies:

- M:* Monitor tobacco use and preventive and protective policies. The policy goal is to decrease the prevalence of tobacco use by the following means:
- Seek and intensify cooperation and commitment of all offices and organizations working for children and youth in the community to limit their accessibility to tobacco.
  - Systematically develop the process of monitoring violations of the tobacco control legislation and acts, and interference by the tobacco industry at the national and local levels through active participation of civil society.
  - Launch campaigns to create awareness consistently and continuously through social and community networking.
  - Continue systematic monitoring of tobacco use and key tobacco control measures through national surveys and also integrate standard questions on tobacco into ongoing surveys.

**P:** Protect people from tobacco smoke. The policy goal is to decrease exposure to SHS in workplaces and public places, which shall be smoke free by law:

- a. Strengthen the existing policy and its compliance through amendments in the Non-Smoker's Health Protection Act, 1992. This can be done by including standard compliance measures such as a clear demarcation of the roles and responsibilities of law enforcers and penalty adjustments for effective law enforcement, imposing fines at progressive rates, including other legal punishment, and waiving licenses for opening a restaurant, business, entertainment complex, etc.
- b. Strengthen the education, training and communication programme to raise public awareness of exposure to tobacco smoke and compliance with smoke-free laws, especially among rural populations, disadvantaged groups, owners/managers of public places and workplaces.

**O:** Offer help to quit tobacco use. The policy goal is to increase the number of quitters through the following:

- a. Improve the systematic tobacco use cessation service:
  - Regularly build the capacity of HCPs at different levels of health-care facilities to provide cessation services.
  - Integrate effective cessation approaches with routine work in primary health-care services, particularly 100% use of at least 2As (ask and advise).
  - Increase the outreach capacity of the national "Quitline 1600" to serve the maximum number of people who desire to quit.
  - Set up an effective referral system for smoking cessation.
- b. Increase media campaigns to make people realize the value of a smoke-free life, especially for younger smokers.

**W:** Warn about the dangers of tobacco. The policy goal is to increase the effectiveness of pictorial health warnings (PHWs) by doing the following:

- a. Revise the Tobacco Control Product Act, 1992 to conform to the following requirements for PHWs:
  - Extend colour PHWs to other tobacco products and all forms of tobacco products, especially shredded tobacco used for hand-rolled cigarettes and smokeless tobacco.
  - Update and refresh the PHWs every two years with the aim of sustaining the impact of the health warning message.
  - Use clear, simple, direct warnings and well-defined pictures. These need to be recognizable and easily identifiable.
  - Use simple language in the text to influence readability, help understanding and lessen confusion.
  - Increase the size of the PHWs to promote visibility and noticeability, and consider adopting plain packaging instead of the PHWs to restrict or prohibit the use of logos, colours and brand images on packaging.
- b. Integrate pack imagery for use in other media (e.g. TV and social media). It would reinforce the warnings and heighten the impact in general.

*E* Enforce bans on tobacco advertising, promotion and sponsorship (TAPS). The policy goal is to decrease exposure to TAPS by the following means:

- a. Amend the Tobacco Control Product Act, 1992 according to the international guideline of the WHO FCTC 13 and ensure comprehensive tobacco control legislation.
- b. Develop systematic monitoring on interference by the tobacco industry to determine the magnitude of interference.
- c. Ensure effective and vigorous law enforcement to eliminate advertising by the tobacco industry.

*R* Raise taxes on tobacco. The policy goal is to decrease the accessibility of tobacco products, especially among minors, by the following methods:

- a. Advocate to authorized organizations and the Ministry of Finance to effectively implement taxes on all kinds of tobacco products.
- b. Formulate effective strategies to prohibit the sale of cigarettes in loose form nationwide. For example, increase the level of public concern about selling cigarettes in loose form to minors and strictly enforce the law on any store that sells cigarettes in loose form. Strengthen and generate awareness among the community to monitor stores where cigarettes are sold to ensure that minors cannot access tobacco products.
- c. Strengthen public policy and advocacy among political leaders and decision-makers to obtain strong commitment to supporting tobacco control policies such as tax measures for increasing the price of tobacco products and eliminating the sale of illicit cigarettes.
- d. Increase the tax on all kinds of tobacco products, especially shredded tobacco products.





# ***1. Introduction***

## 1. Introduction

One of the essential components of a comprehensive tobacco control programme is an efficient and systematic surveillance mechanism to monitor the tobacco epidemic. The Global Adult Tobacco Survey (GATS) is a component of the ongoing Global Tobacco Surveillance System (GTSS) whose other components are the Global Youth Tobacco Survey (GYTS) and the Global Health Professional Students' Survey (GHPSS). GATS is a standard global survey of households, which produces data on tobacco use by adults.<sup>†</sup> These data can be compared across countries and provide evidence for evaluating tobacco control policies, especially the MPOWER strategies developed by the World Health Organization (WHO), which focus on monitoring and reducing tobacco use.

GATS is a nationally representative household survey that was launched in February 2007. It enables countries to collect data among the adult population aged 15 years and above on tobacco use and key tobacco control measures. GATS uses a standard protocol developed through a participatory approach, which enhances the country's capacity to monitor tobacco use.

Thailand, along with 14 other countries, conducted a GATS survey in 2009. A repeat survey was conducted in 2011 for tracking the situation of tobacco use and observing trends. Comparison of the findings of the 2009 and 2011 GATS will assist the country in identifying weak areas of programme implementation. The findings can also be used for improving planning as well as for tracking implementation of effective tobacco control interventions. Conducting the survey and disseminating the findings are essential components of the WHO Framework Convention on Tobacco Control (FCTC) Article 20: Research and surveillance and exchange of information, and Article 21: Reporting and exchanging information.

This chapter covers the Thailand country profile, the burden of tobacco use, tobacco production and revised tobacco control policies following the MPOWER strategies during the past two years.

### 1.1 Thailand country profile

Thailand is situated in South-East Asia, covering an area of 514 000 sq. km. The official language is Thai. Most of the Thai people are Buddhists (94.5%). The currency is Baht (THB).<sup>1</sup> The exchange rate is US\$ 1 equals THB 30.85 (29 March 2012).<sup>2</sup> Thailand is a democratic country, with a constitutional monarchy since 1932. His Majesty the King's governance covers three independent functions – legislative, administrative and judicial.

According to the World Economic Outlook (WEO), in September 2011<sup>3</sup> the per capita gross domestic product (GDP) of Thailand was equivalent to US\$ 5281.5. Over the past five years, the GDP per capita growth was unstable, and varied from 4.7% in 2007, 2.0% in 2008, -2.6% in 2009, 7.2% in 2010 and 2.9% in 2011. The inflation rate stood at 2.3%, 5.5%, -0.9%, 3.3% and 4% during the same period.<sup>4</sup>

During 2005–2010, women had a life expectancy at birth of 77.5 years as against 70.6 years for men.<sup>5</sup> The literacy rate among Thai adults aged 15 years and above increased from 94.1% in 2007 to 97.0% in 2010.<sup>6</sup>

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<sup>†</sup> In this document, the term "adult" includes people 15 years of age and above.

The Ministry of Public Health (MoPH) is responsible for laying down public health policy and providing health-care services for the population. The main objectives are to keep Thai people healthy, both physically and mentally; to help them maintain a good quality of life; and to develop appropriate social relationships and serve as valuable resources for the country. The MoPH allocates almost 60% of its assets for regional administration. In 2009, at the regional level (apart from Bangkok metropolis), there were six medical school hospitals, 25 regional hospitals and 47 specialized hospitals. For the provinces, there were 69 general hospitals covering all provincial areas, 734 community hospitals covering 83.6% of all districts and 9 768 sub-district health promotion hospitals covering 100% of all sub-districts.<sup>7</sup>

## 1.2 Burden of tobacco use in Thailand

Thailand has established a tool for monitoring tobacco use since the past 30 years, using national survey data provided by the National Statistics Office (NSO). Data on smoking among the adult population aged 15 years and above are also available through the Health and Welfare Survey (HWS) and the Cigarette Smoking and Alcohol Drinking Behavior Survey, which are conducted every two years and three years, respectively. These provide data on the various aspects of the burden of tobacco use, such as tobacco users' status, patterns of tobacco use and economic impact of tobacco use.<sup>8,9</sup>

The latest survey on Cigarette Smoking and Alcohol Drinking Behavior was conducted during February–April 2011. The survey adopted a two-stage stratified cluster sampling and integrated the standard tobacco questions for surveys (TQS) of the 2009 GATS.<sup>10</sup>

### 1.2.1 Adult tobacco users

From 1991 to 2011, the percentage of current tobacco smokers decreased from 32.0% to 21.4%, a 33.1% decrease. Men have a 20 times' higher prevalence than women (41.7% vs 2.1%, respectively, in 2012). From 2006 to the present, the prevalence of current tobacco smoking has gradually increased by 37% among young respondents, from 6.7% in 2006 to 9.2% in 2011 for adults aged 15–18 years, and by 12.2%, from 19.7% in 2006 to 22.1% in 2011 among adults aged 19–24 years.

Undergraduates had the lowest prevalence of current tobacco smoking compared with persons with lesser levels of education in both the surveys. Persons with a junior education (grades 7–9) had the highest prevalence of current tobacco smoking, and this further increased from 20.9% to 22.9% (9.6% increase) from 2009 to 2011, as seen in the two surveys. Although the prevalence of current tobacco smoking in rural areas was higher than that in urban areas in both the surveys, the percentage change in urban areas was twice as high as in rural areas between 2009 and 2011. The increase was 7.8% in urban areas (16.0% in 2009 to 17.3% in 2011) and 3.1% in rural areas (22.8% in 2009 to 23.5% in 2011).

Since 2004, people in the Southern region have had the highest prevalence of current tobacco smoking as compared to other regions, including Bangkok metropolis. From 2009 to 2011, the percentage change among those living in Bangkok metropolis was the highest, with a 28.0% increase (12.0% in 2009 to 15.4% in 2011). Among women, the highest prevalence of current tobacco smoking over the past 20 years has been found in the Northern region (12.5% in 1991 and 4.7% in 2011); this is two to four fold higher than the prevalence among women in other regions.

### 1.2.2 Tobacco consumption patterns and trends

In the past two decades (1991–2011), the average number of overall tobacco products smoked per day by current smokers (including manufactured cigarettes, hand-rolled cigarettes, cigars, pipes and other smoking products) decreased from an equivalent of 12 cigarette sticks per day in 1991 to 10 cigarette sticks per day in 2011. The number of overall tobacco products smoked by men decreased from 12 to 10 cigarette sticks per day. Conversely, the number of overall tobacco products smoked by women increased from 7 to 9 cigarette sticks per day during the same period.

As classified by smoked tobacco products, the majority of current tobacco smokers who smoked manufactured cigarettes lived in urban areas (including Bangkok metropolis), were in the age group of 15–18 years, and had a university level of education. Conversely, the majority of those who smoked hand-rolled cigarettes lived in the rural areas, in the Northern and Northeastern regions, were elderly (aged 60 years and above) and had no or primary levels of education.

### 1.2.3 Economic impact of tobacco use

Considering the average expenditure on smoked tobacco products in the latest survey conducted by NSO in 2011, the average expenditure on all kinds of smoked tobacco products among current adult smokers aged 15 years and above is THB 357.3 per month. By type of smoked tobacco product, the average expenditure for smokers of manufactured cigarettes is THB 613.2 per month, which is five times higher than that for those who smoke hand-rolled cigarettes (THB 95.1 per month). The average expenditure of those who smoke other smoked tobacco products, such as pipe, cigar and water pipe is THB 385.1 per month.

When examining the prevalence of current tobacco smoking by socioeconomic status (SES), it was observed that the greatest economic impact of smoking was faced by those in the lowest SES. As per the first GATS survey in 2009, those in the lowest SES spent 21.5% of their monthly income on smoking while those in the highest SES level spent only 4.1%.<sup>11</sup>

In 2006, the out-of-pocket expenditures for treatment of tobacco-related illnesses were THB 368.5 million for lung cancer, THB 7 714.9 million for chronic obstructive pulmonary disease (COPD), and THB 1 773.7 million for coronary heart disease (CHD). Total smoking attributable out of pocket costs for medical care amounted to THB 9 857 million, or 0.48% of the GDP.<sup>12</sup>

### 1.2.4 Health impact of tobacco use

The burden of mortality attributable to tobacco use for Thailand was reported in the *Global report on mortality attributable to tobacco* in 2012. The report indicated that the three leading causes of death due to tobacco use were cancers of the trachea, bronchus and lung (32 per 100 000 adults aged 30 years and above), COPD (44 per 100 000 adults aged 30 years and above) and respiratory disease (51 per 100 000 adults aged 30 years and above). The percentages of deaths attributable to tobacco use for these diseases were 80%, 70% and 52%, respectively.<sup>13</sup> An assessment of the burden of disease in terms of disability-adjusted life years (DALYs) lost due to tobacco use by the Burden of Diseases Project, Thailand in 2004 revealed that tobacco use among men and women ranked third and seventh in burden, accounting for an estimated 9% and 2% of the total burden (9.7 million DALYs) for men and women, respectively.<sup>14</sup>

### 1.3 Tobacco production in Thailand

Domestic manufactured cigarettes are produced by Thailand Tobacco Monopoly (TTM), established in 1939. The government allowed the import of foreign cigarettes for the first time in 1991. Foreign cigarette companies have been prohibited from setting up factories, so all international cigarette brands sold in the Kingdom are imported. Although the market share of domestic manufactured cigarettes was higher than that of imported cigarettes, the proportion of imported cigarettes has gradually increased from 0.6% in 1991 to 23.5% in 2010.<sup>15,16</sup> Factors affecting TTM were not only the slowing economy that decreased purchasing power but also the increase in cigarette prices because of increase in cigarette excise tax, anti-smoking campaigns and the promulgation of a law. To maintain its market share of not less than 75% and overall cigarette sale, TTM approved the launch SHOOT and SMS in 2009. These are cheap brands that can be bought by low-income customers who are impacted by the economic slowdown and increase in the price of TTM's original brand, and are in competition with the cheap brand of imported cigarettes. Therefore, in 2010, the overall cigarette sales of TTM decreased only 0.09% as compared with the previous year, 2009.<sup>15</sup>

### 1.4 Current tobacco control policies in Thailand

Thailand has a long history of anti-smoking movements. Since 1986, Thailand has developed and implemented a tobacco control programme. Two comprehensive national tobacco control acts were enacted in 1992.<sup>16</sup> In subsequent years, several ministerial notifications were issued to improve the implementation of tobacco control policies. Existing laws in Thailand cover most of the provisions of the WHO Framework Convention on Tobacco Control (WHO FCTC), which Thailand signed and ratified on 20 June 2003 and 08 November 2004, respectively.<sup>17</sup>

#### 1.4.1 Status of national legislation

Two tobacco control acts, the Tobacco Products Control Act, 1992 and the Non-Smokers' Health Protection Act, 1992 are authorized under the MoPH. The major contents of these two tobacco control acts are given below.

The Tobacco Products Control Act, 1992 has the following important elements:

- Banning all types of tobacco advertisements, direct and indirect, including the display of trademarks
- Prohibiting all forms of sales promotion
- Prohibiting cigarette vending machines
- Banning cigarette sales to minors below 18 years of age
- Requiring the disclosure of cigarette product ingredients to the MoPH
- Requiring ten legible pictorial health warnings (PHWs) and warning labels, with ten different messages, to be placed on the front of cigarette packets.

The Non-smokers' Health Protection Act, 1992 was drafted with the principal purpose of protecting non-smokers' health by prohibiting smoking in public places, and includes a decree of punishment for violators. A Ministerial Notification No. 19 under this Act was enacted on 28 June 2010, which repealed Notification No. 17 enacted on 24 August 2006 and Notification No. 18 enacted in November 2007.

After the 2009 GATS was completed, several ministerial notifications under the Tobacco Products Control Act, 1992 and the Non-Smokers' Health Protection Act, 1992 have been revised according to the MPOWER strategies as follows:

MPOWER	Activities undertaken
M: Monitor	National periodic surveys on smoking are being conducted by the NSO every three years. The standard tobacco questions for surveys (TQS) <sup>10</sup> were integrated in the Cigarette Smoking and Alcohol Drinking Behavior Survey in 2011.
P: Protect	<p>Notification No. 19 of the MoPH was revised and enacted on 28 June 2010, designating names, types and boundaries of public places where non-smokers' health is under protection; and designating zones or areas of such places to be smoking or non-smoking areas pursuant to the Non-Smoker's Health Protection Act, 1992.<sup>18</sup> Most partial smoke-free areas were upgraded to totally smoke-free areas. For example, smoking is not allowed in private rooms of government buildings, health-care facilities, indoor workplaces, etc.</p> <p>According to the new notifications, indoor workplaces and public places have been divided into two groups:</p> <ul style="list-style-type: none"> <li>- Totally smoke-free areas; these are divided into five sub-groups as follows: <ul style="list-style-type: none"> <li>a) Health service and health promotion facilities</li> <li>b) Educational institutes</li> <li>c) Public places – both indoor and outdoor areas, used by the general public or serving as workplaces</li> <li>d) Public vehicles and stations</li> <li>e) Religious places or places for performing religious rites of all religions and sects.</li> </ul> </li> <li>- Totally smoke-free indoor workplaces; a smoking area may be specifically provided apart from the built-up or structured areas. These include: <ul style="list-style-type: none"> <li>a) Higher educational institutes</li> <li>b) Petrol or gas service stations</li> <li>c) Workplaces of state agencies, state enterprises or any other governmental agencies.</li> </ul> </li> </ul> <p>Meanwhile, international airports may have designated smoking areas based on Notification No. 9 of 1997 of the MoPH – Condition and Appearance of Smoking Areas, in accordance with the Non-Smokers' Health Protection Act, 1992.</p>
O: Offer help	A notification of the MoPH – Criteria, Procedures and Conditions for Displaying Labels and Statements on Labels of Cigarettes, 2009 –was enacted on 29 March 2010. <sup>19</sup> This new regulation on PHWs on cigarette packs requires the addition of a national quit-line number (1600) for communication by smokers who desire to quit. It encourages health professionals at different levels to integrate cessation guideline 2A (ask and advice) at the very least into routine work and support setting up cessation clinics at all levels of health-care offices.



MPOWER	Activities undertaken
W: Warn	<p>The revised notification of the MoPH – Criteria, Procedures and Conditions for Displaying Labels and Statements on Labels of Cigarettes, 2009 – enacted on 29 March 2010<sup>19</sup> makes the following changes regarding warnings:</p> <ul style="list-style-type: none"> <li>○ The number of PHWs on cigarette packs has been changed from nine to 10 pictures. These include two new PHWs “Smoking causes foot gangrene” and “Cigarette smoke causes 10 types of cancer”.</li> <li>○ The area to be covered by PHWs has been increased from 50% to 55% on both sides of cigarette packs and cartons.</li> </ul> <p>The finding of the GATS 2009 that the three PHWs have the strongest impact on the desire to quit among smokers and influence continued abstinence among non-smokers remains the same for GATS 2011.</p>
	<p>Draft notifications of the MoPH on Criteria, Procedures and Conditions for Displaying Labels and Statements on Labels of Shredded Tobacco Packs, which will come into force soon, stipulate the following:</p> <ul style="list-style-type: none"> <li>○ PHWs on shredded tobacco packs will be changed from two black and white pictures to four colour pictures.</li> <li>○ A national quit-line number (1600) and web site for quitting (<a href="http://www.thailandquitline.or.th">www.thailandquitline.or.th</a>) will be printed along with the PHWs.</li> </ul>
	<p>Notification No. 15 of the MoPH issued on 21 December 2011<sup>20</sup> pertains to providing labels on packages, boxes, containers or covers of cigarettes, cigars, shredded tobacco or blended shredded tobacco, including imported products. This says that producers shall not include words or statements to persuade the consumer.</p> <p>The prohibited words not only cover words or statements indicating less dangerous or less toxic, but also include any words or statements indicating scent or flavour and quality of tobacco products, as follows:</p> <ul style="list-style-type: none"> <li>○ Words or statements indicating that the product is less dangerous or less toxic such as “mild”, “medium”, “light”, “ultra light” or “low tar”</li> <li>○ Words or statements indicating scent or flavour such as “cool”, “ice”, “frost”, “crisp”, “fresh”, “mint”, “mellow”, “rich”, “strong” or “extra strong”</li> <li>○ Words or statements indicating the quality of tobacco products such as “smooth”, “natural”, “special”, “genuine”, “luminous”, “extra”, “premium”, “finest” or “best quality”.</li> </ul>
	<p>Notification No. 16 of the MoPH<sup>21</sup> regarding Criteria, Procedures and Conditions for Displaying Statements about toxic or carcinogenic substances on cigarette labels pursuant to the Tobacco Products Control Act, 1992 was enacted on 26 January 2012.</p> <p>The new notification replaced notification No. 10 and directs printing 10 assorted statements about toxic and carcinogenic substances on both sides of the cigarette pack, box, carton or paper wrap. Moreover, the printed area has been increased from less than 50% to 60% of the area of each side.</p>



MPOWER	Activities undertaken
E: Enforce	Improve the enforcement mechanism dealing with complaints on violation of the Tobacco Products Control Act, 1992 and the Non-Smoker's Health Protection Act, 1992 through annual plans: <ul style="list-style-type: none"> <li>○ Yearly capacity building of law enforcers and tobacco control networks for law enforcement by government organizations</li> <li>○ Monthly monitoring by law enforcers and tobacco control networks</li> </ul>
R: Raise taxes on tobacco	Excise tax on cigarettes was increased from 80% to 85% of the ex-factory price since 15 May 2009, which equates to 68% of the retail price. <sup>22</sup> A notification has been drafted on an increase in the excise tax on shredded tobacco. In the meantime, the Customs and Excise Tax Department has been made aware of the proliferation of illicit cigarettes.

#### 1.4.2 Ongoing tobacco control initiatives

In 2008, the Bureau of Tobacco Control (BTC) in the Department of Disease Control (DDC), MoPH, which is the national focal point for tobacco control, initiated the process of developing the National Strategic Plan for Tobacco Control 2010–2014 by coordinating with all national smoking control partners. The national strategic plan contains the vision, mission, ultimate goals and eight strategic areas, as follows:<sup>23</sup>

*Vision:* Efficient national tobacco control that continuously adapts to changes

*Mission:* Support collaboration among tobacco control networks to conduct surveillance in order to protect Thai citizens from addiction, morbidity, disability and mortality caused by tobacco products.

*Ultimate goals:*

- To reduce the prevalence of tobacco consumption among the Thai population
- To reduce tobacco consumption per capita
- To establish smoke-free environments to protect the health of Thai citizens

*Eight strategies:*

- a) Preventing initiation of new smokers
- b) Promoting cessation and reduction of tobacco use among tobacco consumers
- c) Reducing the harm caused by tobacco products
- d) Developing smoke-free environments
- e) Strengthening and developing national capacity for tobacco control operations
- f) Controlling the trade in illicit tobacco products
- g) Applying tax measures for tobacco control
- h) Conducting surveillance and impeding interference by the tobacco industry.

These strategies have been designed for effective implementation of tobacco control, in accordance with the WHO FCTC guidelines and MPOWER strategies by tobacco control partners including the MoPH and other ministries/departments such as the Excise Department and Customs Department, Ministry of Finance, Ministry of Education, National Police Office, nongovernmental organizations (NGOs) and civil societies.

Since 2009, apart from the BTC, various government organizations and several NGOs have been mobilized to actively participate in tobacco control programmes. These have been fully supported by the Thai Health Promotion Foundation (THPF). For example, the Thai Health Professional Alliance Against Tobacco (THPAAT) focuses on capacity building of health personnel to encourage quitting and urges incorporation of cessation services in primary health care under the national health security system. The Teachers Alliance Against Tobacco (TAAT) focuses on preventing initiation of smoking among youth in schools. The Thailand National Quit line focuses on phone counselling. Civil society networks and the “Stop Drinking” networks have actively participated in monitoring non-compliance with the tobacco control acts in their local areas. Meanwhile, other organizations such as the Action on Smoking or Health (ASH) Foundation established in 1986 and the Tobacco Control Research and Knowledge Management Centre (TRC) established in 2004 are continuously making active efforts to reduce the use of tobacco.<sup>16</sup>

Presently, the Excise Department and Customs Department, Ministry of Finance and partners are working together to devise effective approaches to the tobacco tax structure and administration, not only for excise tax on cigarettes but also on all kinds of tobacco products. As revealed in a study on the role of tobacco control policies in reducing smoking through a simulation model in Thailand in 2006,<sup>24</sup> a 29% decline in the smoking rate was predicted by the model for men, from 59.4% in 1991 to 41.7% in 2006, which was because of the effect of a tobacco tax of 61%. It has been realized that imposing tax is the strongest measure to reduce the number of smokers in Thailand, particularly among the youth.<sup>25,26</sup>

Over the past year, the working group on legal development, BTC, MoPH has rigorously updated the tobacco control acts in accordance with the FCTC, in the country's context. For example, amendments to Article 6-8 of the Tobacco Products Control Act, 1992 were made in accordance with Article 13 of the WHO FCTC, which calls for a comprehensive ban on tobacco advertising, promotion and sponsorship (TAPS). Regarding Article 11 of the WHO FCTC, Thailand conducted a feasibility study pertaining to conflicts of law and public opinion on applying plain packaging to improve the effectiveness of PHWs, desire and intention to quit smoking among current smokers, and continued abstinence among non-smokers. The roles and responsibilities of law enforcers are being revised to make law enforcement more effective.

## 1.5 Survey objectives

The general and specific objectives of the GATS in Thailand are as follows:

- **General objective**

Obtain sufficiently reliable estimates of the prevalence of tobacco use and related indicators in Thailand at the national level, and by gender, residence and regions of Thailand.

- **Specific objectives**

1. Determine the prevalence of tobacco use among Thai adults aged 15 years and above by selected demographic characteristics in the 2011 GATS.
2. Study the profile of tobacco use in Thailand, including cessation, exposure to second-hand smoke (SHS), economic aspects, media exposure, knowledge, attitudes and perceptions, and impact of PHWs in the 2011 GATS.
3. Compare the data from the 2009 GATS and 2011 GATS and evaluate any change in the prevalence of tobacco use and indicators for tobacco control.



## ***2. Methodology***

## 2. Methodology

The GATS carried out in 2011 in Thailand was a repeat cross-sectional household survey aimed at obtaining the national- and regional-level estimates as a whole, and comparing the results with those of the GATS 2009. The design aimed to produce estimates stratified by gender and place of residence at the national level, and by gender at the regional level. This chapter focuses on the survey methodology, including study population, eligibility criteria, sampling design, questionnaire, and application program for data recording, recruitment and training procedures, data collection and statistical analysis.

### 2.1 Study population

The target population for the 2011 GATS included all non-institutionalized adult Thai residents (aged 15 years and above), living in their usual place of residence. Adults who were institutionalized, such as those who lived in military barracks, prisons or hospitals, were not included.

### 2.2 Eligibility criteria

Eligible respondents were all non-institutionalized adults aged 15 years and above who were residing in the country and who agreed to participate in the survey. For respondents aged between 15 and 17 years, the interviewer was required to obtain a parent's or guardian's consent before interviewing the respondent.

Respondents were excluded if (a) their usual place of residence was in a military base or group quarters, and (b) they were institutionalized, such as those residing in hospitals, prisons or nursing homes. Moreover, a respondent was excluded if the interviewer found out later that he/she was less than 15 years of age and/or was incapacitated. Eligible respondents could withdraw from the study at any time. They also had a right to refuse to answer any question without providing any reason for the refusal.

### 2.3 Sampling criteria

The sampling design used in the 2011 GATS was the same as that used in the 2009 GATS, a three-stage stratified cluster sampling design. The details are described in Appendix B. In general, the target population was first partitioned by region, namely, Bangkok metropolitan area and the Central, Northern, Northeastern and Southern regions. Each of the four regions was further stratified into urban and rural areas to create nine strata in all. At the first stage, the primary sampling units (PSUs), which were the same enumeration areas (EAs) used as PSUs in the 2009 GATS, were used in the 2011 GATS. The sampling frame for selection of PSUs was derived from the 2000 Population and Housing Census (PHC) conducted by the National Statistical Office (NSO) of Thailand. However, this information frame is updated every year by the staff of the Provincial Statistical Offices (PSOs). In 2010, the NSO had conducted a fresh PHC, which resulted in modification of the earlier sampling frame based on the 2000 PHC. This updated information was used for the 2011 GATS. In the updated procedure, if an EA had more than 300 households, it was divided into more than one EA with 150 households each; and if an EA had less than 70 households, it was combined with the adjacent one.

At the second stage, 18, 16 and 28 households were selected, using systematic random sampling from the selected EAs in Bangkok, urban areas excluding Bangkok, and rural areas, respectively.

Mapping and listing were performed to update the existing sampling frame of households. At the last stage, one individual was randomly chosen from each selected household by simple random sampling.

## 2.4 Questionnaire

The questionnaire for the 2011 GATS was based on the GATS Core Questionnaire with Optional Questions, version 2.0, November 2010<sup>27</sup> developed by the GATS Thailand working group and experts. The questionnaire was translated into the Thai language, back-translated and pretested. It was approved by the GATS Questionnaire Review Committee (QRC) of the US Centers for Disease Control and Prevention (CDC) on 30 September 2011. The adapted GATS questionnaire had two major parts, the household questionnaire and the individual questionnaire.

### 2.4.1 Household questionnaire

This part included information from the selected household on the household members at their primary place of residence where the household member had spent at least three months in the past 12 months. This also quantified the number of adult household members (15 years of age and older) eligible for the interview. The respondents for the household questionnaire had to be 18 years of age or above living in the household. The interviewer had to consider which respondent would be able to provide accurate information about the household members. The questionnaire included questions on the number of household members and the required information on age, gender and the current status of tobacco use. Elementary randomized sampling was also provided in the pocket personal computers (PCs, HP hx2490c) to select individual respondents for interviewing.

### 2.4.2 Individual questionnaire

This part included information on the eligible respondents. It consisted of 10 sections, as follows:

- Section A *Background characteristics*: Gender, age, working status, education level, personal income, marital status and household items possessed
- Section B *Tobacco smoking*: Patterns of smoked tobacco use, former tobacco consumption, number of cigarettes smoked per day, age at initiation of smoking, time since quitting smoking, time to first use of tobacco on awakening
- Section C *Smokeless tobacco use*: Patterns of smokeless tobacco use, former smokeless tobacco use, number of times used per day, age at initiation of smokeless tobacco use, time since quitting, consumption of different types of smokeless tobacco products (snuff by mouth or nose, chewing tobacco, betel quid with tobacco, etc.)
- Section D *Cessation*: Quit smoking attempts in the past 12 months, queries on quitting smoking and advice on quitting by health-care providers, use of cessation aids by smokers, level of interest in quitting smoking
- Section E *Second-hand smoke*: Exposure to SHS in the past 30 days at work, at home and in various public places such as health-care facilities, restaurants, public transportation, etc.; the belief that serious illness can occur due to exposure to SHS

Section F	<i>Economics</i> : The number of manufactured cigarettes bought, price paid, brand bought, and place where the last purchase was made
Section G	<i>Media</i> : Awareness of anti-cigarette smoking information, cigarette advertising, cigarette company sponsorship and cigarette promotions in the past 30 days
Section H	<i>Knowledge, attitudes and perceptions</i> : Beliefs about the dangers of tobacco smoking and specific diseases caused by smoking
Section I	<i>Pictorial Health warnings</i> : The impact of pictorial health warnings (PHWs) on the desire to quit among current smokers as well as their influence on intention to continue abstinence from smoking among non-smokers
Section J	<i>Economics</i> : The quantity of shredded tobacco products bought and price paid during the last purchase.

## 2.5 Application program for data recording

The Thailand NSO developed an application program for data collection for the 2011 GATS using Microsoft Visual Studio NET 2003 software, for use on desktop PCs. The completed program was then pretested among 126 respondents in July 2011 to validate it. The program worked well during the field implementation period of the 2011 GATS. During the field implementation, each provincial supervisor gathered data from field interviewers, synchronized the data from a secure digital (SD) card to a desktop PC, and then transferred the output data in the form of a text file and an XML file to the information and communications technology (ICT) centre of the NSO. The output data were then aggregated. The correctness and completeness of data as well as data back-up and response rate were checked every week. The completed data were subjected to validation checks across variables within and across the household and individual questionnaires.

## 2.6 Recruitment and training procedures

### 2.6.1 Recruitment

NSO was the implementing agency. Field staff were grouped into three levels – field interviewers (FIs), provincial technical officers (PTOs, to function as provincial supervisors) and central field supervisors (FSs). A total of 111 FIs, 79 PTOs and 10 FSs were recruited for the 2011 GATS. FIs and PTOs were from the permanent staff of the PSO with an average working experience in the PSO of 8.4 years and 10.1 years, respectively. Each province had between one and three FIs and one PTO assigned to it. In addition, each FS was assigned 7 to 12 PTOs per province, except Bangkok metropolis, where 16 FIs, 3 PTOs and 1 FS were assigned.

The key criterion for inclusion of each group of persons was prior experience in the 2009 GATS. The other criteria were experience in collecting any household survey data; familiarity with the use of the iPAQ; and prior experience of surveys on tobacco use at the national level. As a result, 66.7% of FIs, 64.5% of PTOs and 60.0% of FSs who were recruited for the repeat survey had participated in the earlier survey.

### 2.6.2 Training procedure

In order to ensure the quality of data, the training objectives were capacity building of FIs and PTOs to improve their knowledge of the GATS adapted questionnaire, procedures for mapping and listing, criteria for selecting households and eligible respondents, knowledge of interview



codes as well as skills for conducting interviews, and using the interview device HP iPAQ hx2490c.

A similar training programme as that for the 2009 GATS was made out, duly modified in light of the lessons learned from the training for the 2009 GATS and pre-testing for the 2011 GATS. A two-day refresher programme was organized for field staff with experience of the 2009 GATS. For new field staff, a three-day training programme was planned for both PTOs and FIs. To standardize the training and make it consistent, all survey staff members were trained by the same trainers' team as that of the 2009 GATS.

The additions in the three-day programme as compared to the two-day programme were provision of question-by-question (QxQ) instructions in detail, instructions on the use of the pocket PCs and demonstrations on applying the software program questionnaire for data collection.

Training methods used were: (a) lectures, (b) demonstration of various kinds of tobacco products related to the GATS questionnaire, (c) role-play under mock conditions and in real situations to gain skills in interviewing and using the interview device, i.e. pocket PC (HP iPAQ hx2490c), (d) close monitoring and prompt feedback by FSs and core teams, (e) relaxation activities, games and exercises within the dynamic group, and (f) pre- and post-test evaluation processes.

## **2.7 Data collection**

The fieldwork was spread over three months, from 1 October to 30 December 2011. Several strategies were applied to monitor field implementation for ensuring the quality of data, including regularly following up the progress of data collection through the monitoring software program developed by the NSO, regular telephone and e-mail follow up, field visits and short verification interviews. A total of 1 253 sampled respondents in 77 provinces were selected for verification. The kappa ( $\kappa$ ) coefficient indicated that the data from both sources (FIs and PTOs) had almost perfect consistency. The value of  $\kappa$  was 0.98 for gender, 0.97 for age group, 0.95 for tobacco smoking status and 0.96 for smokeless tobacco use status. These steps greatly improved data quality and reduced non-sampling errors.

All data files were saved on an SD card for the HP iPAQ hx2490c. Household and individual data were saved as text (.txt) files and eXtensible Markup Language (.XML) files, respectively. The data from the SD card were synchronized weekly on the PSOs' desktops and transmitted to the NSO ICT Centre in Bangkok by the PTOs. The IT expert at the NSO ICT Centre then aggregated and checked output data (.txt files and .XML files) received from the 77 provinces. Data processing was done every week using commands on Microsoft Windows XP (Version 5.1.2.2600). After field work was completed in mid-March 2012, the data of the entire Kingdom were completely checked for accuracy. The weighting and analysis processes were also completed.

The most common interview language used was the central Thai language (52.8%), followed by the northeastern dialect (29.1%), the southern dialect (8.5%), the northern dialect (6.8%), the Pattani Malay dialect (2.1%) and other languages (0.7%). The majority of Thai people are able to read and understand Thai. When other dialects were used, interviewers still read in Thai with different accents.

The Institutional Review Board (IRB) is formally designated to protect the rights of research subjects. The protocols of the repeat GATS survey were approved by the Ethics Committee of the Faculty of Public Health, Mahidol University vide certificate of approval (COA) No. MUPH 2011-205, on 13 September 2011. During the data collection, the GATS protocol did not allow FIs to interview persons aged less than 17 years without formal permission from either their parents or guardians and the respondents themselves. For all respondents aged 18 years and above, FIs could not conduct the interview without verbal permission from the respondent. FIs were required to respect the confidentiality of the data collected and sign the consent form, which included the GATS statement on confidentiality.

## 2.8 Statistical analysis

Complex survey data analysis was performed to obtain population estimates and their 95% confidence intervals (CIs). The sample weights were developed by NSO. For each respondent, a sample weight was computed using a weighting process (*see details* in Appendix B) that included the following three main steps: (1) creation of the base weight or design weight, calculated from all steps of random selection in the sample design, (2) an adjustment for non-response by sample households and sample individuals eligible for the survey, and (3) a post-stratification calibration adjustment of sample totals to projection of the population aged 15 years and above by region, area, gender and age group. The final weights attached to each respondent were computed as the product of the base weights, the non-response adjustment and post-stratification calibration adjustment. The final weights were used in all analyses to produce estimates of population parameters and their CIs. All weighting computations were carried out using the SAS 9.1 program, and all computational estimates and their CIs were calculated using the SPSS 17 complex samples module.

## 2.9 Data interpretation

A 95 percent confidence interval (95% CI) was used to indicate the precision of the estimate. The CIs are closely related to statistical significance testing. When comparing two parameter estimates, a non-overlap of the 95% CI means that the results are statistically significantly different and if they have overlapping CIs, it means that they are not significantly different. Two-sample *t*-test was also used to indicate the statistical significance of the estimates for comparison between the 2009 and 2011 data. The significance level for the estimates were denoted as \*\* if  $P < 0.05$ .



### ***3. Sample and population characteristics***

## 3. Sample and population characteristics

This chapter describes data on the sample and population characteristics of the 2009 GATS and compares these with the 2011 GATS. The population estimates are based on the projected population of Thailand in November 2011 by the office of the National Economic and Social Development Board (NESDB)<sup>28</sup> in order to present a true value of population characteristics at any given time.

### 3.1 Household- and person-level response rate

**Table 3.1** presents the number of households and persons interviewed, and the response rate by residence and region. Of the 21 488 sampled households, 20 922 households completed the household interviews (household response rate 97.7%). In urban areas, 12 706 households completed the household interviews (household response rate 96.6%), while in rural areas, 8 216 households completed the household interviews (household response rate 99.4%). The household response rate in Bangkok and the four regions varied from 94.1% (Bangkok metropolis) to 99.8% (Northeastern region).

Of the 20 922 sampled persons from households that had completed screening, 20 606 completed the individual interviews, with a person-level response rate of 98.5%. In urban areas, 12 484 sampled persons completed the individual interviews, with a person-level response rate of 98.3%, while in rural areas, 8 122 completed the individual interviews, with a person-level response rate of 98.9%. The person-level response rate in Bangkok and the four regions varied from 97.3% (Bangkok metropolis) to 99.7% (Northeastern region).

The overall response rate was 96.3%, which was computed as the product of the household response rate and the person-level response rate. By residence, the overall response rate in urban and rural areas was 95.0% and 98.3%, respectively. By region, overall response rates were higher than 95% in all regions except Bangkok metropolis (91.6%).

### 3.2 Sample and population characteristics

**Table 3.2** presents the unweighted sample size and weighted population estimates by selected demographic characteristics. Overall, 20 606 sampled persons completed the interviews. The estimated total number of Thai adults aged 15 years and above was 54.2 million in 2011. Classifying sample distribution by gender, the survey enumerated a total of 8 781 men and 11 825 women. These sample counts yielded a *de facto* population estimate of 26.3 million men and 27.9 million women. The proportion of men and women in the population was 48.6% and 51.4%, respectively. The number of unweighted samples in urban areas was higher than that in rural areas (12 484 and 8 122 samples, respectively).

However, the weighted population in rural areas was higher than that in urban areas, with a ratio of 7:3. The majority of the population reported completion of education till the secondary school level (33.8%). The Northeastern region represented the largest proportion of the population (33.5%) whereas Bangkok metropolis represented the smallest (10.4%). The question on income was used as a proxy for socioeconomic status (SES). Average monthly income from various sources was used to compute the quintile distribution, and was classified into five exclusive SES categories: lowest, low, middle, high and highest. According to these categories, 65.6% of the population was in the lowest to middle SES.

**Table 3.3** presents a comparison of the unweighted sample size and population estimates by selected demographic characteristics between the 2009 GATS and 2011 GATS. For estimated population total, distribution of age, gender, education and region, the findings are similar between the two surveys. The population estimates of adults with a high SES in 2011 (18.7%) was significantly higher than that in 2009 (15.7%). By residence, the percentage of the population living in urban and rural areas was significantly different between 2009 and 2011 (31.1% in 2009 and 34.7% in 2011 for urban, 68.9% in 2009 and 65.3% in 2011 for rural).

**Table 3.1:** Number and percentage of households and persons interviewed and response rate by residence (unweighted) – GATS Thailand, 2011

	Residence		Region					Total
	Urban	Rural	Bangkok	Central	Northern	Northeastern	Southern	
<b>Selected household</b>								
Completed	12 706	8 216	4 474	4 066	4 111	4 162	4 109	20 922
Completed, none eligible for interview	0	0	0	0	0	0	0	0
Incomplete	0	0	0	0	0	0	0	0
No screening respondent	8	2	0	2	8	0	0	10
Refused	368	26	242	77	15	7	53	394
Unoccupied	46	25	0	28	19	12	12	71
Address not a dwelling	6	1	0	2	3	0	2	7
Other	7	5	0	1	9	0	2	12
Nobody home	59	13	36	8	19	3	6	72
<b>Total households selected</b>	<b>13 200</b>	<b>8 288</b>	<b>4 752</b>	<b>4 184</b>	<b>4 184</b>	<b>4 184</b>	<b>4 184</b>	<b>21 488</b>
<b>Household response rate<sup>1</sup></b>	<b>96.6%</b>	<b>99.4%</b>	<b>94.1%</b>	<b>97.9%</b>	<b>98.8%</b>	<b>99.8%</b>	<b>98.5%</b>	<b>97.7%</b>
<b>Selected person</b>								
Completed	12 484	8 122	4 352	3 980	4 086	4 149	4 039	20 606
Incomplete	0	0	0	0	0	0	0	0
Not eligible	2	0	2	0	0	0	0	2
Not at home	93	57	49	54	3	6	38	150
Incapacitated	18	25	3	11	8	5	16	43
Refusal	108	12	68	20	14	2	16	120
Other	1	0	0	1	0	0	0	1
<b>Total eligible persons</b>	<b>12 706</b>	<b>8 216</b>	<b>4 474</b>	<b>4 066</b>	<b>4 111</b>	<b>4 162</b>	<b>4 109</b>	<b>20 922</b>
<b>Person-level response rate<sup>2</sup></b>	<b>98.3%</b>	<b>98.9%</b>	<b>97.3%</b>	<b>97.9%</b>	<b>99.4%</b>	<b>99.7%</b>	<b>98.3%</b>	<b>98.5%</b>
<b>Total response rate<sup>3</sup></b>	<b>95.0%</b>	<b>98.3%</b>	<b>91.6%</b>	<b>95.8%</b>	<b>98.2%</b>	<b>99.4%</b>	<b>96.9%</b>	<b>96.3%</b>

<sup>1</sup> Calculate household response rate (HRR) by:

$$\frac{\text{No. complete HH} \times 100}{\text{[No. complete HH + No. none eligible for interview + No. incomplete + No. screening respondent + No. refused HH + No. other]}}$$

<sup>2</sup> Calculate person-level response rate (IRR) by:

$$\frac{\text{No. complete person} \times 100}{\text{[No. completed + No. incomplete + No. not at home + No. refused HH + No. incapacitated + No. other]}}$$

<sup>3</sup> Calculate total response rate (TRR) by (HRR × IRR)/100

**Table 3.2:** Unweighted sample counts and weighted population estimates by demographic characteristics – GATS Thailand, 2011

Characteristic	Unweighted count	Weighted population estimates	
		Number	Percentage (95% CI <sup>1</sup> )
<b>Overall</b>	20 606	54 195 391	100
<b>Age (years)</b>			
15–24	2 213	10 360 559	19.1 (18.0, 20.2)
25–44	7 141	21 617 249	39.9 (38.7, 41.1)
45–59	6 223	13 317 846	24.6 (23.7, 25.4)
60+	5 029	8 899 737	16.4 (15.7, 17.2)
<b>Gender</b>			
Men	8 781	26 332 511	48.6 (47.4, 49.8)
Women	11 825	27 862 880	51.4 (50.2, 52.6)
<b>Residence</b>			
Urban	12 484	18 779 720	34.7 (33.6, 35.7)
Rural	8 122	35 415 671	65.3 (64.3, 66.4)
<b>Education level</b>			
Less than primary	7 888	17 290 586	31.9 (30.8, 33.1)
Primary	3 436	11 259 294	20.8 (19.8, 21.8)
Secondary	5 829	18 306 088	33.8 (32.7, 34.9)
University	3 437	7 319 413	13.5 (12.6, 14.5)
<b>Region</b>			
Bangkok	4 352	5 613 047	10.4 (9.8, 10.9)
Central	3 980	13 058 885	24.1 (23.0, 25.2)
Northern	4 086	10 061 861	18.6 (17.6, 19.6)
Northeastern	4 149	18 159 526	33.5 (32.3, 34.8)
Southern	4 039	7 302 072	13.5 (12.7, 14.3)
<b>Socioeconomic status</b>			
Lowest	4 280	13 528 595	25.0 (23.5, 26.5)
Low	4 064	11 421 620	21.1 (19.9, 22.3)
Middle	3 961	10 587 618	19.5 (18.5, 20.6)
High	4 174	10 160 230	18.7 (17.7, 19.8)
Highest	4 126	8 495 616	15.7 (14.7, 16.7)

Note: Sixteen cases had missing information on education attained

<sup>1</sup> 95% confidence interval

**Table 3.3:** Unweighted sample counts and weighted population estimates by demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	2009			2011		
	Unweighted count	Weighted population estimates Number	Percentage (95% CI) <sup>1</sup>	Unweighted count	Weighted population estimates Number	Percentage (95% CI) <sup>1</sup>
<b>Overall</b>	20 566	52 621 493	100	20 606	54 195 391	100
<b>Age (years)</b>						
15–24	2 072	10 506 741	20.0 (18.8, 21.2)	2 213	10 360 559	19.1 (18.0, 20.2)
25–44	8 145	21 783 015	41.4 (40.2, 42.7)	7 141	21 617 249	39.9 (38.7, 41.1)
45–59	6 210	12 318 324	23.4 (22.6, 24.3)	6 223	13 317 846	24.6 (23.7, 25.4)
60+	4 138	8 011 918	15.2 (14.5, 16.0)	5 029	8 899 737	16.4 (15.7, 17.2)
<b>Gender</b>						
Men	10 052	25 577 110	48.6 (47.9, 49.3)	8 781	26 332 511	48.6 (47.4, 49.8)
Women	10 514	27 044 383	51.4 (50.7, 52.1)	11 825	27 862 880	51.4 (50.2, 52.6)
<b>Residence</b>						
Urban	12 346	16 346 377	31.1 (30.1, 32.0)	12 484	18 779 720	34.7 (33.6, 35.7)
Rural	8 220	36 275 116	68.9 (68.0, 69.9)	8 122	35 415 671	65.3 (64.3, 66.4)
<b>Education level</b>						
Less than primary	7 810	17 722 454	33.7 (32.4, 35.0)	7 888	17 290 586	31.9 (30.8, 33.1)
Primary	3 645	11 049 767	21.0 (20.0, 22.1)	3 436	11 259 294	20.8 (19.8, 21.8)
Secondary	5 863	17 334 225	33.0 (31.8, 34.2)	5 829	18 306 088	33.8 (32.7, 34.9)
University	3 207	6 450 544	12.3 (11.4, 13.2)	3 437	7 319 413	13.5 (12.6, 14.5)
<b>Region</b>						
Bangkok	4 028	5 582 072	10.6 (10.1, 11.1)	4 352	5 613 047	10.4 (9.8, 10.9)
Central	4 182	12 661 351	24.1 (22.9, 25.3)	3 980	13 058 885	24.1 (23.0, 25.2)
Northern	4 119	9 808 864	18.6 (17.8, 19.5)	4 086	10 061 861	18.6 (17.6, 19.6)
Northeastern	4 121	17 595 058	33.4 (32.2, 34.7)	4 149	18 159 526	33.5 (32.3, 34.8)
South	4 116	6 974 148	13.3 (12.5, 14.0)	4 039	7 302 072	13.5 (12.7, 14.3)
<b>Socioeconomic status</b>						
Lowest	3 986	12 766 016	24.3 (22.7, 25.9)	4 280	13 528 595	25.0 (23.5, 26.5)
Low	4 235	12 566 402	23.9 (22.5, 25.3)	4 064	11 421 620	21.1 (19.9, 22.3)
Middle	4 392	10 810 512	20.6 (19.5, 21.6)	3 961	10 587 618	19.5 (18.5, 20.6)
High	3 654	8 272 711	15.7 (14.9, 16.6)	4 174	10 160 230	18.7 (17.7, 19.8)
Highest	4 286	8 178 440	15.6 (14.5, 16.7)	4 126	8 495 616	15.7 (14.7, 16.7)

Note: The following observations were missing in 2009: 1 for age, 0 for gender, 0 for residence, 41 for education, 0 for region, and 13 for socioeconomic status and in 2011: 16 for education.

<sup>1</sup> 95 % Confidence interval





## *4. Tobacco use*











## 4. Tobacco use

This chapter divides the findings of tobacco use into two main sections: the findings from the 2011 GATS and a comparison of the findings of the 2009 GATS and the 2011 GATS. The 2011 GATS findings show the pattern of tobacco use among adults aged 15 years and above in 2011 in two parts. The first part presents data on the status of tobacco use for both smoked tobacco products and smokeless tobacco products. The second part presents patterns of tobacco use, number of daily tobacco products used, age at initiation of smoking, time of quitting smoking and tobacco dependence.

**Key findings in 2011**

- o 24.0% of adults (13 million) currently smoked tobacco and 3.2% of adults (1.7 million) currently used smokeless tobacco products.
- o 31.7% of daily smokers of manufactured cigarettes smoked an average of 10–14 cigarettes per day.
- o 36.1% of ever daily smokers 20–34 years old started smoking daily at the age of 17–19 years.
- o 27.2% of those who have ever smoked on a daily basis have quit smoking.
- o 57.7% of daily smokers have their first cigarette of the day within 30 minutes of waking up.

In Thailand, tobacco products are commonly divided into two types: smoked tobacco products and smokeless tobacco products. Smoked tobacco products include manufactured cigarettes, hand-rolled cigarettes, pipes, cigars and water pipes. Smokeless tobacco products include snuff by nose/mouth, chewing tobacco and betel quid with tobacco.

Tobacco products in Thailand					
Cigarettes		Others			
Smoked tobacco products	Manufactured	Hand-rolled	Pipes	Cigars	Water pipes
Smoked tobacco products					
Snuff by mouth & Chewing tobacco		Snuff by nose	Betel quid with tobacco		
Smokeless tobacco products					

## 4.1 Tobacco use in 2011

### 4.1.1 Tobacco use

#### 4.1.1.1 Smoked tobacco use status

Figure 4.1 and Table 4.1 present the smoked tobacco use status. The overall prevalence of current smoking among adults was 24.0% (13 million). It was especially high among men – 18 times higher than among women (46.6% vs 2.6%). Current tobacco smokers were categorized into “daily smokers” and “occasional smokers”. Non-smokers were categorized into “former daily smokers” and “never daily smokers”. Among Thai adult population, 21.5% were daily smokers and 2.5% were occasional smokers. The daily smoking prevalence rate among men was 20 times higher than that among women (42.0% vs 2.1%). The prevalence rate of occasional smoking among men was nine times higher than among women (4.5% vs 0.5%). Non-smokers accounted for 76.0% of the surveyed population (41.2 million); 8.4% were former daily smokers and 67.7% were never daily smokers; and 65.6% had never smoked in their lifetime and 2.1% were former occasional smokers.

Figure 4.1: Percentages of adults aged 15 years and above by smoking status and gender –GATS Thailand, 2011

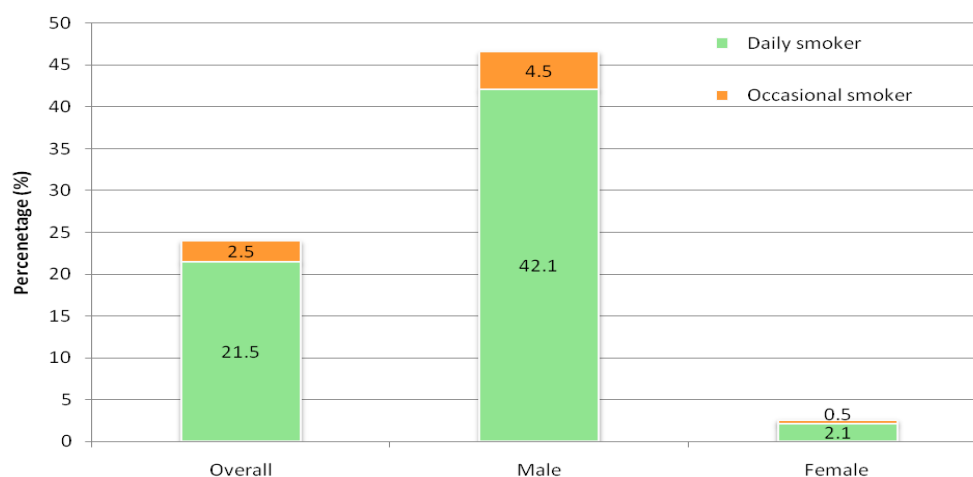


Table 4.1: Number (in thousands) and percentage of adults aged 15 years and above by detailed smoking status and gender – GATS Thailand, 2011

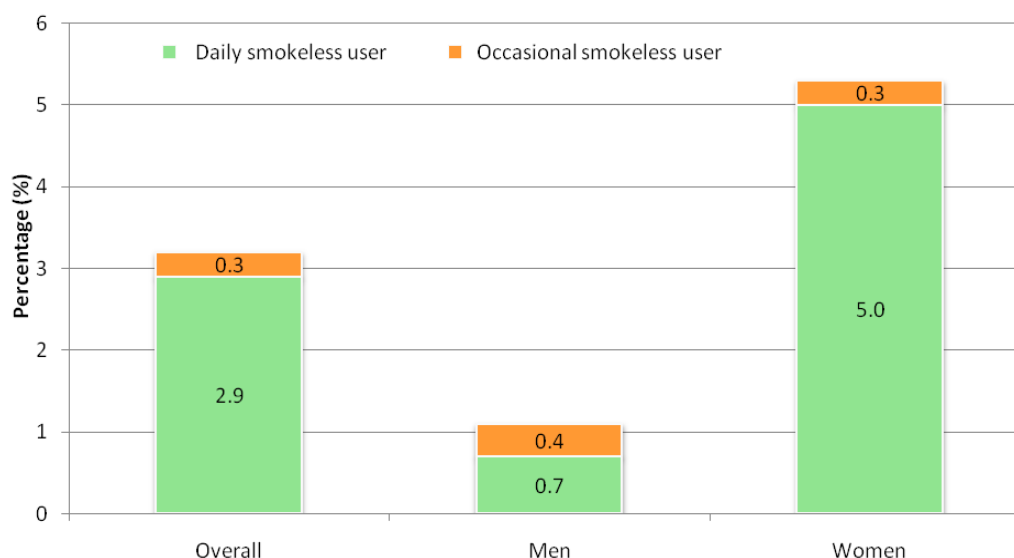
Smoking status	Overall		Men		Women	
	N	% (95% CI)	N	% (95% CI)	N	% (95% CI)
<b>Current tobacco smoker</b>	12 987.1	24.0 (22.8, 25.1)	12 258.8	46.6 (44.7, 48.4)	728.2	2.6 (2.2, 3.1)
Daily smoker	11 657.0	21.5 (20.4, 22.6)	11 069.8	42.0 (40.2, 43.9)	587.1	2.1 (1.8, 2.5)
Occasional smoker	1 330.1	2.5 (2.1, 2.9)	1 189.0	4.5 (3.8, 5.3)	141.1	0.5 (0.3, 0.7)
<i>Occasional smoker, formerly daily</i>	458.6	0.8 (0.7, 1.1)	395.4	1.5 (1.1, 2.0)	63.3	0.2 (0.1, 0.4)
<i>Occasional smoker, never daily</i>	871.5	1.6 (1.3, 2.0)	793.6	3.0 (2.4, 3.8)	77.8	0.3 (0.2, 0.4)
<b>Non-smoker</b>	41 208.3	76.0 (74.9, 77.2)	14 073.7	53.4 (51.6, 55.3)	27 134.6	97.4 (96.9, 97.8)
Former daily smoker	4 537.8	8.4 (7.8, 9.0)	4 205.8	16.0 (14.9, 17.1)	332.1	1.2 (1.0, 1.4)
Never daily smoker	36 670.5	67.7 (66.4, 68.9)	9 867.9	37.5 (35.7, 39.2)	26 802.6	96.2 (95.7, 96.7)
<i>Former occasional smoker</i>	1 143.5	2.1 (1.8, 2.4)	939.3	3.6 (3.0, 4.2)	204.2	0.7 (0.6, 1.0)
<i>Never smoker</i>	35 527.0	65.6 (64.4, 66.7)	8 928.6	33.9 (32.3, 35.6)	26 598.4	95.5 (94.9, 96.0)

Note: Current use includes both daily and occasional (less than daily) use.

#### 4.1.1.2 Smokeless tobacco use status

**Figure 4.2 and Table 4.2** present the status of smokeless tobacco use. The overall prevalence rate of current smokeless tobacco use was 3.2% (1.7 million). In contrast to smoked tobacco use, the prevalence of smokeless tobacco use among women was five times higher than among men (5.2% vs 1.1%). Among Thai adult population, 2.9% were daily smokeless tobacco users and 0.3% were occasional smokeless tobacco users. The prevalence of daily smokeless tobacco use among women was seven times higher than among men (5.0% vs 0.7%). The prevalence of occasional smokeless tobacco use was almost equal among men and women (0.4% and 0.3%). Non-users of smokeless tobacco accounted for 96.8% of the surveyed population (52.4 million). Former daily smokeless tobacco users were few, with an overall prevalence of 0.6% (0.5% of men and 0.7% of women). Most had never used smokeless tobacco in their lifetime (95.9%) and only 0.3% were former occasional smokeless tobacco users.

**Figure 4.2:** Percentage of adults aged 15 years and above by smokeless tobacco use and gender –GATS Thailand, 2011



**Table 4.2:** Number (in thousands) and percentage of adults aged 15 years and above by detailed status of smokeless tobacco use and gender – GATS Thailand, 2011

Smokeless tobacco use status	Overall		Men		Women	
	N	% (95% CI)	N	% (95% CI)	N	% (95% CI)
<b>Current smokeless tobacco user</b>	1 747.1	3.2 (2.8, 3.7)	286.3	1.1 (0.8, 1.5)	1 460.7	5.2 (4.5, 6.1)
Daily smokeless user	1 572.9	2.9 (2.5, 3.4)	191.0	0.7 (0.5, 1.0)	1 381.9	5.0 (4.3, 5.8)
Occasional smokeless user	174.2	0.3 (0.2, 0.4)	95.3	0.4 (0.2, 0.6)	78.9	0.3 (0.2, 0.4)
<i>Occasional smokeless user, formerly daily</i>	42.4	0.1 (0.0, 0.1)	18.8	0.1 (0.0, 0.2)	23.5	0.1 (0.0, 0.2)
<i>Occasional smokeless user, never daily</i>	131.8	0.2 (0.2, 0.4)	76.5	0.3 (0.2, 0.5)	55.3	0.2 (0.1, 0.3)
<b>Non-smokeless tobacco user</b>	52 448.3	96.8 (96.3, 97.2)	26 046.2	98.9 (98.5, 99.2)	26 402.1	94.8 (93.9, 95.5)
Former daily smokeless user	314.5	0.6 (0.4, 0.8)	124.8	0.5 (0.3, 0.8)	189.7	0.7 (0.5, 0.9)
Never daily smokeless user	52 133.8	96.2 (95.7, 96.7)	25 921.3	98.4 (97.9, 98.8)	26 212.5	94.1 (93.2, 94.8)
<i>Former occasional smokeless user</i>	178.4	0.3 (0.2, 0.5)	124.2	0.5 (0.3, 0.7)	54.2	0.2 (0.1, 0.3)
<i>Never smokeless user</i>	51 955.4	95.9 (95.3, 96.4)	25 797.1	98.0 (97.4, 98.4)	26 158.3	93.9 (93.0, 94.6)

#### 4.1.2 Pattern of smoked tobacco use

##### 4.1.2.1 Prevalence of current smoking by type of smoked tobacco products

**Table 4.3** presents the prevalence of smoked tobacco products and **Table 4.3a** (provided in **Appendix D** based on **Table 4.3**) presents the estimated number of current smokers who smoked various types of smoked tobacco products. The overall percentage of current smokers who used any smoked tobacco product was 24.0%. Use of manufactured/hand-rolled cigarettes was significantly higher than that of other smoked tobacco products (23.8% vs 0.2%). No significant difference in prevalence was found between the use of manufactured cigarettes and hand-rolled cigarettes (15.2% vs 14.4%).

There was a 17-fold higher prevalence of current smoking of any smoked tobacco product among men as compared to women (46.6% vs 2.6%). Among men, no significant difference was found in the prevalence of smoking manufactured cigarettes and hand-rolled cigarettes (30.1% vs 28.1%). The prevalence was minimal in the case of women (1.1% for manufactured cigarettes and 1.4% for hand-rolled cigarettes).

By age group, no significant difference was found in the smoking prevalence among the age groups of 15–24 years, 25–44 years and 45–59 years. As compared to these three age groups, the prevalence of any cigarette smoking was observed to be less among the 60+ years age group (18.7%). The prevalence of smoking manufactured cigarettes and hand-rolled cigarettes differed across age groups; the prevalence of smoking manufactured cigarettes decreased among the older age groups (**Figure 4.3a**).

There were more current cigarette smokers in rural areas than in urban areas (25.7% vs 20.3%). The prevalence of smoking manufactured cigarettes was higher in urban areas than in rural areas (17.0% vs 14.3%). In contrast, the prevalence of smoking hand-rolled cigarettes in urban areas was much lower than in rural areas (5.9% vs 18.9%), **Figure 4.3b**.

By education, those with a primary- and university-level education had the highest and lowest prevalence of current cigarette smoking (31.8% and 13.1%, respectively). There were contrasting patterns of use of manufactured cigarettes and hand-rolled cigarettes by levels of education. The survey found that adults with a less-than-primary level education tended to use hand-rolled cigarettes more often (19.1% vs 1.7%), while adults with a university level education tended to use manufactured cigarettes more often (12.5% vs 7.8%).

By region, Bangkok metropolis had the lowest prevalence of current manufactured cigarette smoking as well as current hand-rolled cigarette smoking as compared to the other regions (18.1% and 3.3%). Use of manufactured cigarettes was lowest in the Northern region (11.3%), **Figure 4.3c**. There was no significant difference in the prevalence of current cigarette smoking among adults of different SES. However, the survey found that adults in the lowest SES tended to use hand-rolled cigarettes while those in the highest SES tended to use manufactured cigarettes.

**Table 4.3:** Percentage of adults aged 15 years and above who were current smokers of various smoked tobacco products, by selected demographic characteristics – GATS Thailand, 2011

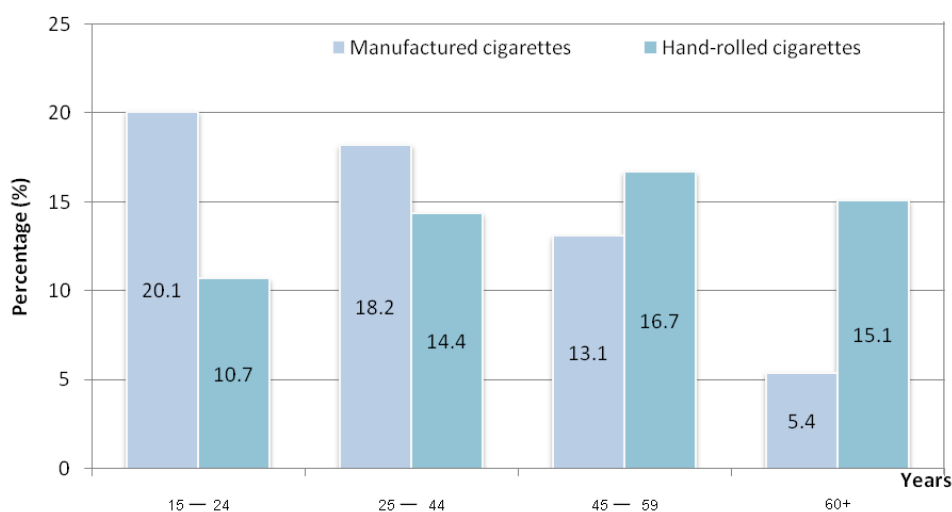
Characteristic	Any smoked tobacco product	Any cigarette <sup>1</sup>	Type of cigarette		Other smoked tobacco products <sup>2</sup>
			Manufactured	Hand-rolled	
			<i>Percentage (95% CI)</i>		
<b>Overall</b>	24.0 (22.8, 25.1)	23.8 (22.7, 25.0)	15.2 (14.3, 16.2)	14.4 (13.3, 15.6)	0.2 (0.1, 0.5)
<b>Gender</b>					
Men	46.6 (44.7, 48.4)	46.5 (44.6, 48.3)	30.1 (28.4, 31.9)	28.1 (26.1, 30.2)	0.2 (0.1, 0.5)
Women	2.6 (2.2, 3.1)	2.4 (2.1, 2.8)	1.1 (0.9, 1.4)	1.4 (1.1, 1.8)	0.2 (0.1, 0.6)
<b>Age group (years)</b>					
15–24	21.7 (19.0, 24.6)	21.7 (19.0, 24.6)	20.1 (17.5, 23.0)	10.7 (8.6, 13.3)	0.1 (0.0, 0.2)
25–44	26.2 (24.5, 28.0)	26.1 (24.4, 28.0)	18.2 (16.7, 19.8)	14.4 (12.8, 16.2)	0.1 (0.1, 0.3)
45–59	25.4 (23.9, 27.0)	25.1 (23.6, 26.7)	13.1 (12.0, 14.3)	16.7 (15.2, 18.2)	0.4 (0.2, 0.9)
60+	19.0 (17.4, 20.6)	18.7 (17.2, 20.4)	5.4 (4.6, 6.3)	15.1 (13.6, 16.7)	0.3 (0.1, 1.1)
<b>Residence</b>					
Urban	20.3 (19.3, 21.3)	20.3 (19.3, 21.3)	17.0 (16.1, 18.0)	5.9 (5.3, 6.5)	0.2 (0.1, 0.3)
Rural	25.9 (24.3, 27.6)	25.7 (24.1, 27.4)	14.3 (12.9, 15.7)	18.9 (17.2, 20.7)	0.2 (0.1, 0.6)
<b>Education level</b>					
Less than primary	23.4 (21.8, 25.0)	23.0 (21.6, 24.5)	7.8 (7.0, 8.7)	19.1 (17.7, 20.6)	0.5 (0.2, 1.2)
Primary	31.8 (29.2, 34.6)	31.8 (29.1, 34.6)	20.0 (17.5, 22.7)	22.5 (19.9, 25.2)	0.1 (0.0, 0.5)
Secondary	24.0 (22.2, 25.9)	24.0 (22.2, 25.9)	20.3 (18.6, 22.1)	10.0 (8.6, 11.6)	0.1 (0.0, 0.1)
University	13.1 (11.5, 14.9)	13.1 (11.5, 14.9)	12.5 (11.0, 14.3)	1.7 (1.3, 2.4)	0.2 (0.1, 0.4)
<b>Region</b>					
Bangkok	18.1 (16.5, 19.9)	18.1 (16.4, 19.8)	16.6 (15.1, 18.3)	3.3 (2.5, 4.2)	0.4 (0.2, 0.7)
Central	23.4 (21.6, 25.3)	23.4 (21.6, 25.3)	16.7 (15.0, 18.5)	10.8 (9.1, 12.8)	0.0 (0.0, 0.1)
Northern	21.7 (19.4, 24.2)	20.9 (18.8, 23.2)	11.3 (9.6, 13.3)	13.5 (11.5, 15.8)	0.7 (0.3, 2.2)
Northeastern	25.1 (22.5, 27.8)	25.1 (22.5, 27.8)	14.0 (12.0, 16.2)	17.7 (15.1, 20.5)	0.1 (0.0, 0.2)
Southern	29.9 (27.5, 32.5)	29.9 (27.5, 32.5)	20.0 (17.9, 22.3)	22.3 (19.9, 25.0)	0.2 (0.1, 0.3)
<b>Socioeconomic status</b>					
Lowest	20.3 (18.0, 22.8)	20.0 (17.7, 22.5)	10.8 (8.8, 13.1)	15.0 (12.9, 17.3)	0.4 (0.2, 0.8)
Low	24.5 (22.2, 26.9)	24.2 (21.9, 26.6)	13.1 (11.1, 15.5)	17.8 (15.7, 20.2)	0.3 (0.1, 0.9)
Middle	28.3 (26.1, 30.7)	28.3 (26.1, 30.6)	17.4 (15.4, 19.7)	17.2 (15.3, 19.3)	0.1 (0.0, 0.3)
High	26.4 (24.4, 28.4)	26.4 (24.4, 28.4)	19.6 (17.8, 21.4)	12.7 (11.0, 14.6)	0.1 (0.0, 0.2)
Highest	20.8 (19.0, 22.7)	20.7 (19.0, 22.6)	17.1 (15.6, 18.8)	7.3 (6.1, 8.8)	0.2 (0.1, 0.4)

Note: Current use includes both daily and occasional (less than daily) use

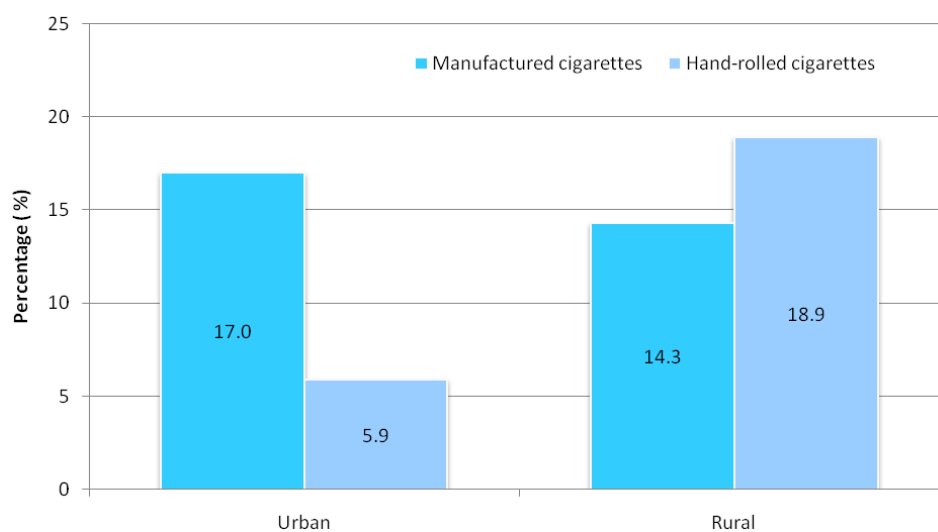
<sup>1</sup>Includes manufactured cigarettes and hand-rolled cigarettes

<sup>2</sup>Includes pipes, cigars and water pipes

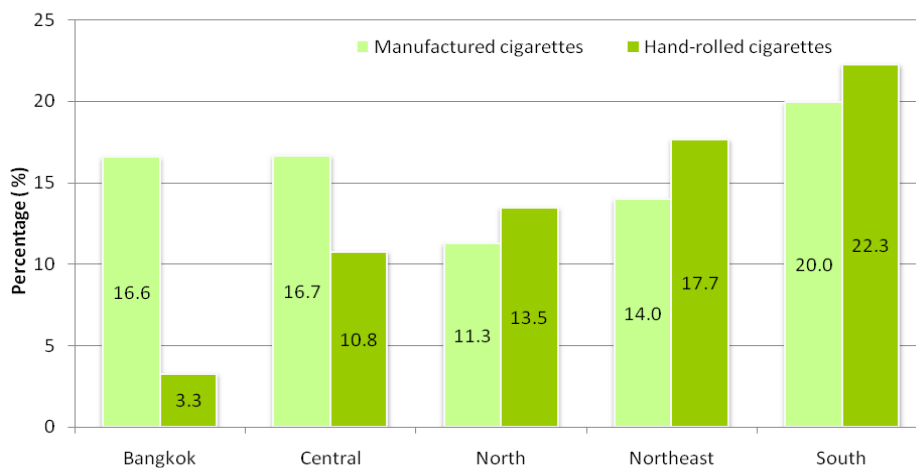
**Figure 4.3a:** Percentage of adults aged 15 years and above who currently smoked manufactured cigarettes and hand-rolled cigarettes by age group – GATS Thailand, 2011



**Figure 4.3b:** Percentage of adults aged 15 years and above who currently smoked manufactured cigarettes and hand-rolled cigarettes, by residence – GATS Thailand, 2011



**Figure 4.3c:** Percentage of adults 15 years and above who currently smoked manufactured cigarettes and hand-rolled cigarettes, by region – GATS Thailand, 2011





#### 4.1.2.2 Smoking frequency

**Table 4.4** provides the smoking frequency in three categories – “daily smokers”, “occasional smokers” and “non-smokers”.

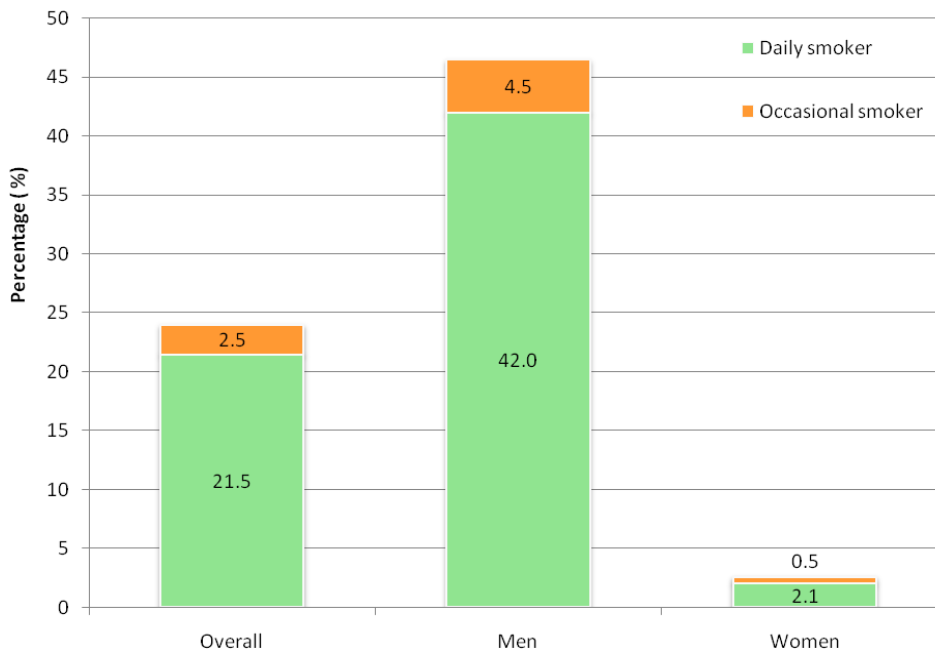
The smoking frequency among adults aged 15 years and above who were daily smokers, occasional smokers and non-smokers was 21.5%, 2.5% and 76.0%, respectively. Among men, 42.0% were daily smokers and among women, 2.1% were daily smokers. The prevalence of occasional smoking among men was nine times higher than among women (4.5% vs 0.5%, respectively), shown in **Figure 4.4a**. By age group, the highest prevalence of daily smoking was found in the age groups of 25–44 years and 45–59 years (23.2% and 23.5%, respectively). The lowest prevalence of occasional smoking was found in the 60+ years age group (1.3%).

**Table 4.4:** Percentage distribution of adults aged 15 years and above who were daily smokers, occasional smokers and non-smokers, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Smoking frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
	<i>Percentage (95% CI)</i>			
<b>Overall</b>	21.5 (20.4, 22.6)	2.5 (2.1, 2.9)	76.0 (74.9, 77.2)	100
<b>Gender</b>				
Men	42.0 (40.2, 43.9)	4.5 (3.8, 5.3)	53.4 (51.6, 55.3)	100
Women	2.1 (1.8, 2.5)	0.5 (0.3, 0.7)	97.4 (96.9, 97.8)	100
<b>Age (years)</b>				
15–24	18.7 (16.1, 21.5)	3.0 (2.1, 4.3)	78.3 (75.4, 81.0)	100
25–44	23.2 (21.6, 24.9)	3.0 (2.4, 3.8)	73.8 (72.0, 75.5)	100
45–59	23.5 (22.0, 25.1)	1.9 (1.5, 2.4)	74.6 (73.0, 76.1)	100
60+	17.6 (16.1, 19.3)	1.3 (0.9, 1.9)	81.0 (79.4, 82.6)	100
<b>Residence</b>				
Urban	17.8 (16.9, 18.8)	2.5 (2.1, 2.9)	79.7 (78.7, 80.7)	100
Rural	23.5 (21.9, 25.1)	2.4 (1.9, 3.1)	74.1 (72.4, 75.7)	100
<b>Education level</b>				
Less than primary	22.1 (20.5, 23.7)	1.3 (1.0, 1.7)	76.6 (75.0, 78.2)	100
Primary	29.2 (26.6, 31.9)	2.7 (1.9, 3.7)	68.2 (65.4, 70.8)	100
Secondary	20.5 (18.8, 22.3)	3.5 (2.7, 4.5)	76.0 (74.1, 77.8)	100
University	11.0 (9.5, 12.6)	2.2 (1.5, 3.2)	86.9 (85.1, 88.5)	100
<b>Region</b>				
Bangkok	15.5 (14.1, 17.1)	2.6 (2.0, 3.3)	81.9 (80.1, 83.5)	100
Central	20.4 (18.7, 22.2)	3.0 (2.3, 3.9)	76.6 (74.7, 78.4)	100
Northern	19.5 (17.2, 22.1)	2.1 (1.5, 2.9)	78.3 (75.8, 80.6)	100
Northeastern	22.8 (20.4, 25.4)	2.3 (1.6, 3.3)	74.9 (72.2, 77.5)	100
Southern	27.6 (25.3, 30.0)	2.3 (1.7, 3.2)	70.1 (67.5, 72.5)	100
<b>Socioeconomic status</b>				
Lowest	17.8 (15.6, 20.2)	2.5 (1.8, 3.6)	79.7 (77.2, 82.0)	100
Low	22.9 (20.7, 25.3)	1.5 (1.1, 2.1)	75.5 (73.1, 77.8)	100
Middle	25.7 (23.5, 28.0)	2.6 (2.0, 3.4)	71.7 (69.3, 73.9)	100
High	23.5 (21.6, 25.5)	2.9 (2.1, 3.9)	73.6 (71.6, 75.6)	100
Highest	17.9 (16.2, 19.7)	2.9 (2.1, 3.8)	79.2 (77.3, 81.0)	100

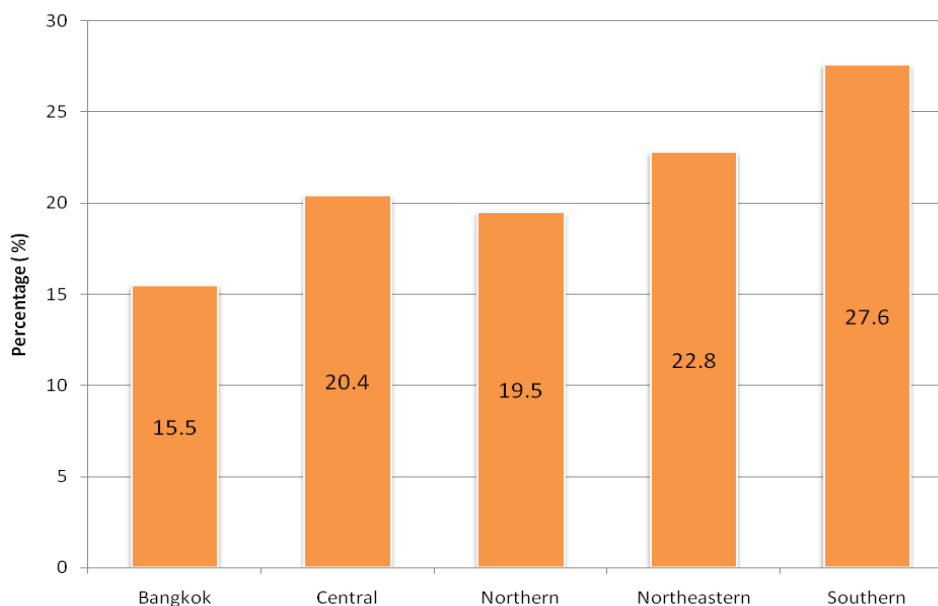
<sup>1</sup>“Occasional” refers to less than daily use

**Figure 4.4a:** Percentage of daily smokers and occasional smokers aged 15 years and above, by gender – GATS Thailand, 2011



By residence, the proportion of daily smokers in rural areas was significantly higher than in urban areas (23.5% vs 17.8%) but there was no difference for occasional smoking (rural 2.4%, urban 2.5%). By education level, the prevalence of daily smoking was significantly higher among those with a primary level of education (29.2%). The prevalence of occasional smoking among people with different education levels was similar. By region, the prevalence of daily smoking was highest in the Southern region (27.6%) while there was no significant difference for occasional smoking (**Figure 4.4b**). By SES, the prevalence of daily smoking was not significantly different, varying from 22.9% in the low SES category to 25.7% in the middle SES category. This pattern was similar for occasional smoking by different SES categories.

**Figure 4.4b:** Percentage of daily smokers aged 15 years and above, by region – GATS Thailand, 2011

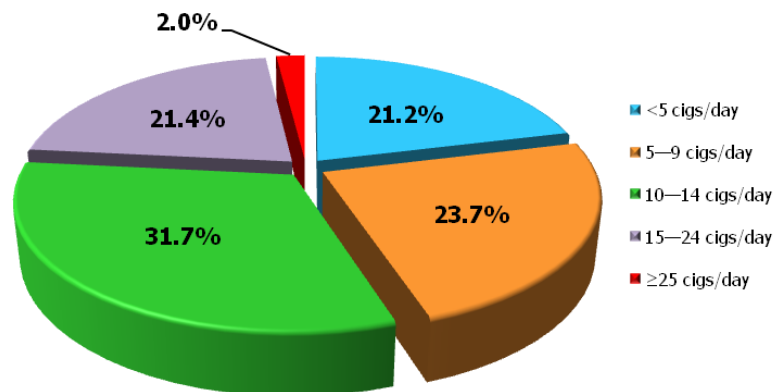


#### 4.1.2.3 Number of cigarettes smoked per day

##### Manufactured cigarettes smoked daily

**Table 4.5** shows the distribution of manufactured cigarettes smoked per day among daily smokers. The proportion of those who smoked 10–14 cigarettes/day (cigs/day) was the highest among all the categories (31.7%). The average of number cigarettes smoked per day by all categories was 10.0/day (**Figure 4.5**).

**Figure 4.5:** Percentage distribution of manufactured cigarettes smoked per day among daily smokers of manufactured cigarettes aged 15 years and above  
– GATS Thailand, 2011



**Table 4.5** shows the average number of manufactured cigarettes smoked per day among daily smokers of manufactured cigarette aged 15 years and above, in five categories – <5, 5–9, 10–14, 15–24, and ≥25 cigs/day. By gender, a significantly higher proportion of men were in the 10–14 cigs/day category (31.7%). Among women, there was no significant difference in the prevalence of smoking among the first three categories, but prevalence in the 15–24 cigs/day and ≥25 cigs/day categories was lower than among men. No significant difference in the average number of manufactured cigarettes smoked per day was noted by gender (10.0 cigs/day among men and 9.3 cigs/day among women).

By age group, the highest prevalence of smoking 5–9 cigs/day was among the 15–24 years age group (32.0%); and for smoking 10–14 cigs/day it was 33.8% among the 25–44 years age group; 34.5% among the 45–59 years age group, and 30.1% among the 60+ years age group. The average number of manufactured cigarettes smoked per day was the highest among the 45–59 years age group (11.8 cigs/day). By residence, the largest proportion of both urban and rural smokers was in the 10–14 cigs/day category (34.4% and 29.7%, respectively). The average number of manufactured cigarettes smoked per day was higher among those in urban areas than those in rural areas.

By education level, in all groups, the largest proportion smoked 10–14 cigs/day. No difference in the average number of manufactured cigarettes smoked per day was observed among those with different education levels. By region, the largest proportion smoked an average of 10–14 cigs/day in all regions. By SES, all SES categories had a large proportion of smokers who smoked 10–14 cigs/day, except those in the low SES category. Comparing the lowest and highest SES, the average number of manufactured cigarettes smoked per day by those in the highest SES was more than those in the lowest SES (11.7 cigs/day vs 9.1 cigs/day).

**Table 4.5:** Percentage distribution of manufactured cigarettes smoked per day among daily smokers of manufactured cigarettes aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2011

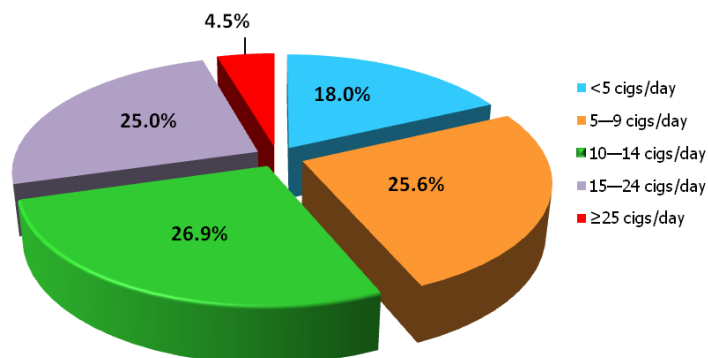
Characteristic	Number of manufactured cigarettes smoked on average per day <sup>1</sup>					Total	Mean (95% CI)
	<5	5–9	10–14	15–24	≥25		
	<i>Percentage (95% CI)</i>						
<b>Overall</b>	21.2(18.4, 24.2)	23.8(21.1, 26.8)	31.7(28.6, 34.9)	21.4(19.0, 24.0)	2.0(1.5, 2.7)	100	10.0(9.6, 10.4)
<b>Gender</b>							
Men	21.0(18.2, 24.2)	23.7(20.9, 26.8)	31.7(28.6, 35.0)	21.6(19.1, 24.3)	2.0(1.4, 2.7)	100	10.0(9.6, 10.4)
Women	25.6(17.5, 35.6)	26.5(18.4, 36.6)	30.4(22.4, 39.7)	14.7(8.5, 24.3)	2.9(0.8, 10.3)	100	9.3(7.6, 10.9)
<b>Age (years)</b>							
15–24	30.4(23.0, 39.1)	32.0(24.7, 40.3)	25.6(18.7, 33.9)	12.0(7.4, 18.9)	0.0	100	7.6(6.8, 8.4)
25–44	17.5(14.3, 21.3)	22.6(19.4, 26.1)	33.8(29.9, 38.0)	24.2(20.8, 28.0)	1.8(1.2, 2.9)	100	10.5(9.9, 11.0)
45–59	16.4(13.0, 20.4)	17.6(14.3, 21.5)	34.5(29.9, 39.4)	27.1(23.3, 31.4)	4.4(2.8, 6.9)	100	11.8(11.0, 12.6)
60+	27.6(19.5, 37.6)	21.1(14.1, 30.4)	30.1(22.8, 38.6)	18.2(12.7, 25.4)	3.0(1.1, 7.7)	100	9.4(8.2, 10.6)
<b>Residence</b>							
Urban	15.7(13.5, 18.1)	24.7(22.1, 27.5)	34.4(31.5, 37.6)	22.4(19.9, 25.2)	2.7(1.9, 3.9)	100	10.6(10.2, 11.0)
Rural	25.0(20.7, 29.9)	23.2(19.0, 27.9)	29.7(25.2, 34.8)	20.6(17.1, 24.7)	1.5(0.9, 2.5)	100	9.5(8.9, 10.1)
<b>Education level</b>							
Less than primary	22.4(17.7, 28.0)	21.1(16.9, 26.0)	29.4(24.6, 34.7)	22.2(18.1, 27.0)	4.8(2.8, 8.1)	100	10.8(9.8, 11.8)
Primary	19.5(14.6, 25.5)	21.7(16.2, 28.4)	33.4(27.2, 40.3)	24.8(19.5, 31.1)	0.5(0.2, 1.3)	100	10.1(9.3, 10.8)
Secondary	24.0(19.5, 29.0)	25.7(21.7, 30.2)	31.0(26.4, 36.0)	18.0(14.5, 22.2)	1.4(0.8, 2.3)	100	9.3(8.7, 9.8)
University	12.6(9.1, 17.3)	25.2(18.6, 33.1)	33.4(27.5, 39.9)	25.0(19.8, 30.9)	3.8(2.0, 7.2)	100	11.4(10.4, 12.4)
<b>Region</b>							
Bangkok	14.4(11.1, 18.3)	18.6(15.2, 22.6)	39.7(34.8, 44.7)	24.0(19.7, 28.9)	3.4(2.0, 5.5)	100	11.2(10.5, 11.9)
Central	16.5(12.9, 20.8)	21.2(17.3, 25.8)	31.8(26.4, 37.7)	28.1(23.2, 33.5)	2.4(1.3, 4.3)	100	11.1(10.3, 11.8)
Northern	20.6(14.8, 27.9)	30.2(23.7, 37.6)	30.4(23.4, 38.5)	17.0(11.6, 24.1)	1.7(0.6, 4.8)	100	9.4(8.4, 10.5)
Northeastern	25.1(18.2, 33.6)	25.7(18.9, 34.0)	31.8(24.8, 39.8)	16.0(11.5, 21.9)	1.3(0.7, 2.6)	100	9.0(8.1, 9.8)
Southern	26.9(21.3, 33.2)	23.3(19.0, 28.3)	26.9(22.0, 32.4)	21.3(16.7, 26.7)	1.7(0.8, 3.4)	100	9.5(8.7, 10.2)
<b>Socioeconomic status</b>							
Lowest	23.2(14.8, 34.3)	27.6(18.5, 39.1)	29.1(19.3, 41.4)	18.9(12.0, 28.4)	1.2(0.5, 3.1)	100	9.1(8.0, 10.3)
Low	28.2(20.9, 36.8)	22.9(17.0, 30.0)	26.1(20.0, 33.3)	20.8(14.4, 29.2)	2.0(0.8, 4.9)	100	9.5(8.4, 10.6)
Middle	21.7(16.7, 27.7)	26.5(21.4, 32.3)	32.6(27.4, 38.4)	18.2(14.4, 22.8)	1.0(0.4, 2.4)	100	9.5(8.7, 10.2)
High	20.1(15.7, 25.5)	22.5(18.5, 27.0)	34.4(29.7, 39.4)	20.7(16.5, 25.6)	2.3(1.3, 4.1)	100	10.1(9.4, 10.9)
Highest	13.4(9.8, 17.9)	19.7(15.8, 24.3)	34.3(29.0, 40.1)	29.2(24.1, 34.8)	3.4(2.1, 5.5)	100	11.7(10.9, 12.4)

<sup>1</sup> Among daily smokers of manufactured cigarettes

### Hand-rolled cigarettes smoked daily

**Table 4.6** shows the average number of hand-rolled cigarettes smoked per day divided in five categories. Overall, 26.9% smoked 10–14 cigs/day followed by 25.6% who smoked 5–9 cigs/day. Only 4.5% smoked ≥25 cigs/day. The overall mean number of hand-rolled cigarettes smoked per day was 10.8 (**Figure 4.6**).

**Figure 4.6:** Percentage distribution of hand-rolled cigarettes smoked per day among daily smokers of hand-rolled cigarettes aged 15 years and above – GATS Thailand, 2011



By gender, the largest proportion of men smoked an average of 10–14 hand-rolled cigs/day (27.3%). The largest proportion of women smoked an average of 5–9 hand-rolled cigs/day (29.4%).

Among different age groups, the lowest average number of hand-rolled cigarettes smoked per day (7.6 cigs/day) was among the 15–24 years age group.

By residence, most urban and rural smokers smoked 10–14 cigs/day (27.2% and 26.8%, respectively). No significant difference in the average number of hand-rolled cigarettes smoked per day was noted by residence. By education level, the difference in the average number of hand-rolled cigarettes smoked per day was not significant.

The Northern and Northeastern regions had a large proportion of adults who smoked 5–9 cigs/day (28.8% and 30.2%, respectively). Bangkok metropolis and the Southern region had a large proportion of adults who smoked 10–14 cigs/days (30.5% and 31.7%, respectively). The Central region had a large proportion of persons who smoked 15–24 cigs/day (26.8%). By SES, the difference in the average number of hand-rolled cigarettes smoked per day was not significant across different SES.

**Table 4.6:** Percentage distribution of hand-rolled cigarettes smoked per day among daily hand-rolled cigarette smokers aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2011

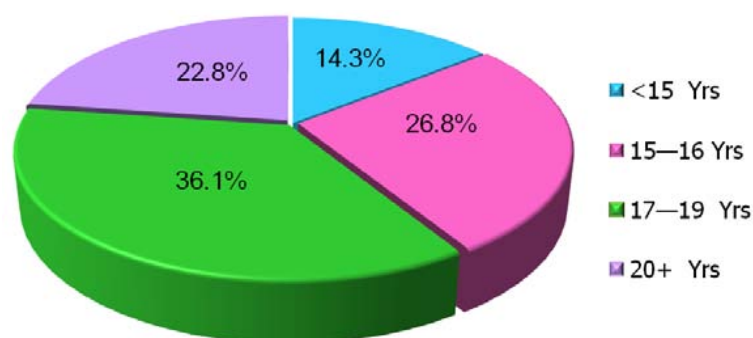
Characteristic	Number of hand-rolled cigarettes smoked on an average per day <sup>1</sup>					Total	Mean (95% CI)
	<5	5–9	10–14	15–24	≥25		
	<i>Percentage (95% CI)</i>						
<b>Overall</b>	18.0 (15.3, 21.0)	25.6 (22.8, 28.7)	26.9 (24.3, 29.6)	25.0 (22.0, 28.4)	4.5 (3.2, 6.3)	100	10.8 (10.2, 11.3)
<b>Gender</b>							
Men	17.4 (14.7, 20.5)	25.4 (22.5, 28.6)	27.3 (24.5, 30.2)	25.3 (22.2, 28.8)	4.6 (3.2, 6.5)	100	10.9 (10.3, 11.4)
Women	29.2 (20.7, 39.3)	29.4 (20.6, 39.9)	18.6 (11.9, 27.9)	19.1 (12.4, 28.3)	3.7 (1.5, 9.2)	100	8.7 (7.4, 10.1)
<b>Age (years)</b>							
15–24	36.1 (25.5, 48.2)	27.7 (18.4, 39.4)	20.1 (13.5, 28.9)	14.8 (7.2, 27.8)	1.4 (0.3, 6.3)	100	7.6 (6.1, 9.1)
25–44	16.1 (12.7, 20.2)	25.1 (20.2, 30.8)	27.1 (22.4, 32.3)	27.2 (22.4, 32.6)	4.5 (2.5, 8.0)	100	11.0 (10.2, 11.9)
45–59	11.7 (8.9, 15.3)	22.8 (18.9, 27.1)	29.8 (25.2, 34.8)	29.9 (25.3, 35.0)	5.8 (3.9, 8.5)	100	12.2 (11.4, 13.0)
60+	18.9 (14.9, 23.6)	30.0 (25.2, 35.2)	26.6 (22.1, 31.6)	19.8 (15.9, 24.4)	4.8 (3.1, 7.3)	100	10.1 (9.4, 10.8)
<b>Residence</b>							
Urban	23.2 (19.5, 27.3)	23.3 (19.5, 27.5)	27.2 (23.3, 31.4)	22.3 (18.2, 26.9)	4.1 (2.6, 6.4)	100	10.0 (9.2, 10.7)
Rural	17.1 (14.1, 20.6)	26.0 (22.8, 29.5)	26.8 (23.9, 30.0)	25.5 (22.0, 29.3)	4.6 (3.1, 6.7)	100	10.9 (10.2, 11.5)
<b>Education level</b>							
Less than primary	15.5 (12.8, 18.6)	25.6 (22.3, 29.3)	27.1 (23.7, 30.7)	26.3 (23.0, 30.0)	5.5 (3.9, 7.6)	100	11.3 (10.7, 12.0)
Primary	17.7 (13.4, 22.9)	26.2 (20.8, 32.5)	28.7 (23.5, 34.7)	24.1 (18.8, 30.4)	3.3 (1.6, 6.5)	100	10.3 (9.4, 11.3)
Secondary	22.9 (16.4, 31.1)	25.1 (18.7, 33.0)	23.9 (19.0, 29.7)	23.3 (17.3, 30.6)	4.7 (2.5, 8.6)	100	10.3 (9.1, 11.6)
University	23.2 (10.4, 43.8)	20.4 (9.6, 38.3)	23.9 (13.0, 39.9)	32.5 (19.1, 49.6)	0.0	100	10.0 (7.7, 12.3)
<b>Region</b>							
Bangkok	22.8 (15.2, 32.6)	24.8 (17.7, 33.7)	30.5 (21.0, 42.1)	16.5 (9.6, 26.9)	5.4 (1.9, 14.7)	100	10.1 (8.0, 12.1)
Central	12.7 (8.7, 18.1)	23.5 (17.8, 30.2)	25.7 (21.2, 30.8)	26.8 (21.6, 32.8)	11.3 (6.0, 20.2)	100	12.6 (11.0, 14.2)
Northern	25.8 (19.9, 32.8)	28.8 (23.4, 35.0)	21.7 (16.9, 27.5)	22.0 (16.8, 28.4)	1.6 (0.6, 4.5)	100	9.3 (8.2, 10.4)
Northeastern	17.1 (12.2, 23.5)	30.2 (24.7, 36.4)	26.9 (21.9, 32.6)	23.7 (17.8, 30.8)	2.1 (1.0, 4.4)	100	10.0 (9.1, 10.9)
Southern	17.0 (13.5, 21.1)	15.8 (12.8, 19.4)	31.7 (28.0, 35.6)	29.6 (25.4, 34.3)	5.9 (4.2, 8.2)	100	11.9 (11.0, 12.8)
<b>Socioeconomic status</b>							
Lowest	24.6 (18.8, 31.5)	26.7 (21.1, 33.2)	26.3 (21.5, 31.7)	19.5 (14.3, 26.1)	2.9 (1.6, 5.2)	100	9.5 (8.5, 10.5)
Low	17.9 (13.2, 23.7)	28.4 (22.7, 34.9)	24.0 (19.2, 29.5)	26.5 (20.8, 33.2)	3.2 (1.7, 6.0)	100	10.5 (9.5, 11.4)
Middle	14.6 (10.6, 19.6)	23.6 (18.5, 29.6)	29.1 (23.8, 34.9)	28.0 (22.6, 34.2)	4.8 (2.8, 7.8)	100	11.3 (10.4, 12.1)
High	13.1 (9.1, 18.4)	24.3 (18.0, 32.0)	27.7 (22.2, 33.9)	26.1 (20.5, 32.6)	8.9 (5.1, 15.0)	100	12.3 (10.9, 13.7)
Highest	16.6 (10.8, 24.6)	20.9 (14.0, 30.0)	30.8 (23.3, 39.6)	27.1 (19.9, 35.7)	4.6 (2.4, 8.7)	100	11.3 (9.9, 12.7)

<sup>1</sup> Among daily smokers of hand-rolled cigarettes

#### 4.1.2.4 Age at smoking initiation

Figure 4.7 and Table 4.7 give the age distribution at initiation of smoking among ever daily smokers aged 20–34 years. The largest proportion of these smokers initiated their daily smoking habit at 17–19 years of age (36.1%), while 14.3% started their daily smoking habit at less than 15 years of age. The majority of men ever daily smokers initiated daily smoking at 17–19 years (36.3%), while most women started at 20+ years (44.5%). The mean age at smoking initiation among men was 17.3 years versus 19.0 years among women.

**Figure 4.7:** Percentage distribution of age at smoking initiation (years) among ever daily smokers aged 20–34 years – GATS Thailand, 2011



By residence, in both urban and rural areas, a large proportion of daily smokers initiated their daily smoking habit while in the age group of 17–19 years (35.2% and 36.5%, respectively). In all regions except Bangkok metropolis, the majority of ever daily smokers reported their age at smoking initiation as 17–19 years, while smokers in Bangkok metropolis started at 20+ years. Irrespective of the SES, the largest proportion was 20+ years at initiation of smoking. Considering the average age at smoking initiation, no significant difference was noted by residence, region or SES.

**Table 4.7:** Percentage distribution of age at initiation among ever daily smokers aged 20–34 years, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Age at smoking initiation (years) <sup>1</sup>				Total	Mean (95% CI)
	<15	15–16	17–19	20+		
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	14.3 (10.7, 18.7)	26.8 (22.8, 31.3)	36.1 (31.3, 41.1)	22.8 (19.5, 26.5)	100	17.4 (17.1, 17.7)
<b>Gender</b>						
Men	14.3 (10.7, 18.9)	27.2 (23.0, 31.8)	36.3 (31.4, 41.4)	22.3 (18.9, 26.0)	100	17.3 (17.0, 17.7)
Women	12.8 (5.9, 25.8)	13.7 (6.5, 26.3)	29.0 (15.7, 47.1)	44.5 (30.6, 59.4)	100	19.0 (17.7, 20.2)
<b>Residence</b>						
Urban	11.5 (8.9, 14.7)	23.1 (19.2, 27.5)	35.2 (30.8, 39.8)	30.3 (25.9, 35.0)	100	17.8 (17.5, 18.1)
Rural	15.7 (10.7, 22.5)	28.8 (23.0, 35.3)	36.5 (29.8, 43.8)	18.9 (14.7, 24.0)	100	17.2 (16.7, 17.6)
<b>Region</b>						
Bangkok	11.6 (7.2, 18.1)	24.4 (18.7, 31.3)	31.2 (24.6, 38.7)	32.7 (24.7, 41.9)	100	17.8 (17.3, 18.4)
Central	8.8 (5.4, 14.0)	28.6 (21.9, 36.3)	37.6 (29.8, 46.0)	25.1 (19.7, 31.4)	100	17.7 (17.2, 18.2)
Northern	18.7 (11.3, 29.3)	24.1 (16.9, 33.1)	39.2 (29.7, 49.7)	17.9 (12.6, 24.8)	100	17.0 (16.4, 17.6)
Northeastern	16.6 (9.1, 28.3)	29.1 (20.5, 39.7)	33.1 (23.1, 44.9)	21.2 (14.4, 30.0)	100	17.1 (16.4, 17.9)
Southern	15.4 (10.2, 22.7)	22.7 (16.2, 30.9)	40.1 (33.1, 47.5)	21.8 (17.2, 27.2)	100	17.6 (17.1, 18.1)
<b>Socioeconomic status</b>						
Lowest	14.3 (6.8, 27.6)	28.0 (15.0, 46.0)	47.2 (30.5, 64.6)	10.6 (4.8, 21.8)	100	16.6 (16.0, 17.3)
Low	17.2 (9.0, 30.5)	32.8 (22.0, 45.7)	38.1 (27.0, 50.7)	11.9 (6.6, 20.4)	100	16.7 (16.1, 17.3)
Middle	15.1 (9.0, 24.2)	27.1 (20.4, 35.2)	32.3 (24.9, 40.7)	25.5 (18.5, 33.9)	100	17.5 (16.8, 18.2)
High	13.0 (8.5, 19.2)	23.3 (17.5, 30.4)	33.9 (27.2, 41.3)	29.8 (23.2, 37.4)	100	17.9 (17.3, 18.5)
Highest	10.7 (5.6, 19.7)	23.3 (16.2, 32.3)	33.0 (24.5, 42.8)	33.0 (24.3, 43.0)	100	18.0 (17.3, 18.8)

<sup>1</sup>Among respondents 20–34 years of age who were ever daily smokers



#### 4.1.2.5 Prevalence of former daily smoking and quit ratio

**Table 4.8** presents the prevalence of former daily smokers among all adults 15 years and above and the quit ratio among ever daily smokers. Quit ratio is the percentage of ever daily tobacco smokers who currently do not smoke tobacco. This indicator indicates the success of efforts to encourage cessation among established tobacco smokers. The prevalence of former daily smoking among adults 15 years and above was 8.4% and the quit ratio was 27.2%. By selected demographic status, the prevalence of former daily smoking among men was 13 times higher than women (16.0% vs 1.2%). Women ever daily smokers had a significantly higher quit ratio than men ever daily smokers (33.8% vs 26.8%).

**Table 4.8:** Number (in thousands) and percentage of adults and ever daily smokers aged 15 years and above who were former daily smokers,<sup>1</sup> by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Former daily smokers (among all people) <sup>1</sup>		Former daily smokers (among ever daily smokers) <sup>2</sup>	
	Number (in thousands)	% (95% CI)	Number (in thousands)	% (95% CI)
<b>Overall</b>	4 537.8	8.4 (7.8, 9.0)	4 537.8	27.2 (25.5, 29.1)
<b>Gender</b>				
Men	4 205.8	16.0 (14.9, 17.1)	4 205.8	26.8 (25.0, 28.8)
Women	332.1	1.2 (1.0, 1.4)	332.1	33.8 (29.2, 38.7)
<b>Age (years)</b>				
15–24	46.8	0.5 (0.3, 0.7)	46.8	2.2 (1.4, 3.7)
25–44	1 272.5	5.9 (5.1, 6.8)	1 272.5	19.7 (17.2, 22.5)
45–59	1 592.0	12.0 (10.8, 13.2)	1 592.0	32.9 (30.1, 35.8)
60+	1 626.5	18.3 (16.8, 19.8)	1 626.5	49.9 (46.6, 53.1)
<b>Residence</b>				
Urban	1 560.9	8.3 (7.7, 9.0)	1 560.9	30.7 (28.7, 32.8)
Rural	2 976.9	8.4 (7.6, 9.3)	2 976.9	25.7 (23.4, 28.2)
<b>Education level</b>				
Less than primary	2 235.2	12.9 (11.9, 14.0)	2 235.2	36.3 (33.7, 39.1)
Primary	728.0	6.5 (5.3, 7.8)	728.0	17.6 (14.4, 21.3)
Secondary	1 157.5	6.3 (5.5, 7.2)	1 157.5	22.7 (19.9, 25.8)
University	417.1	5.7 (4.8, 6.8)	417.1	33.0 (28.2, 38.3)
<b>Region</b>				
Bangkok	510.3	9.1 (8.0, 10.3)	510.3	35.5 (31.6, 39.5)
Central	905.3	6.9 (6.0, 8.0)	905.3	24.5 (21.4, 27.9)
Northern	1 079.7	10.7 (9.5, 12.1)	1 079.7	34.7 (30.9, 38.8)
Northeastern	1 602.1	8.8 (7.6, 10.2)	1 602.1	27.2 (23.4, 31.3)
Southern	440.4	6.0 (5.2, 7.0)	440.4	17.5 (14.9, 20.5)
<b>Socioeconomic status</b>				
Lowest	893.3	6.6 (5.7, 7.6)	893.3	26.0 (22.3, 30.2)
Low	922.6	8.1 (7.1, 9.2)	922.6	25.5 (22.3, 29.1)
Middle	836.3	7.9 (6.7, 9.3)	836.3	22.8 (19.5, 26.4)
High	972.3	9.6 (8.2, 11.1)	972.3	28.3 (24.7, 32.2)
Highest	913.3	10.8 (9.3, 12.4)	913.3	36.6 (32.3, 41.1)

<sup>1</sup> Current non-smokers

<sup>2</sup> Also known as the quit ratio for daily smokers

According to **Table 4.8**, by age group, a significantly higher prevalence of former daily smokers was observed in the older age groups. The quit ratio was also the highest among the 60+ years age group (2.2% among the 15–24 years age group and 49.9% among the 60+ years age group).

There was no significant difference in the prevalence of former daily smokers in rural and urban areas (8.3% and 8.4%, respectively). Not much difference was noted in the quit ratio by residence (30.7% in urban areas and 25.7% in rural areas). A higher prevalence of former daily smokers was found among those with a lower education level. The quit ratio among daily smokers was significantly higher among those with lowest and highest education levels (36.3% and 33.0%, respectively).

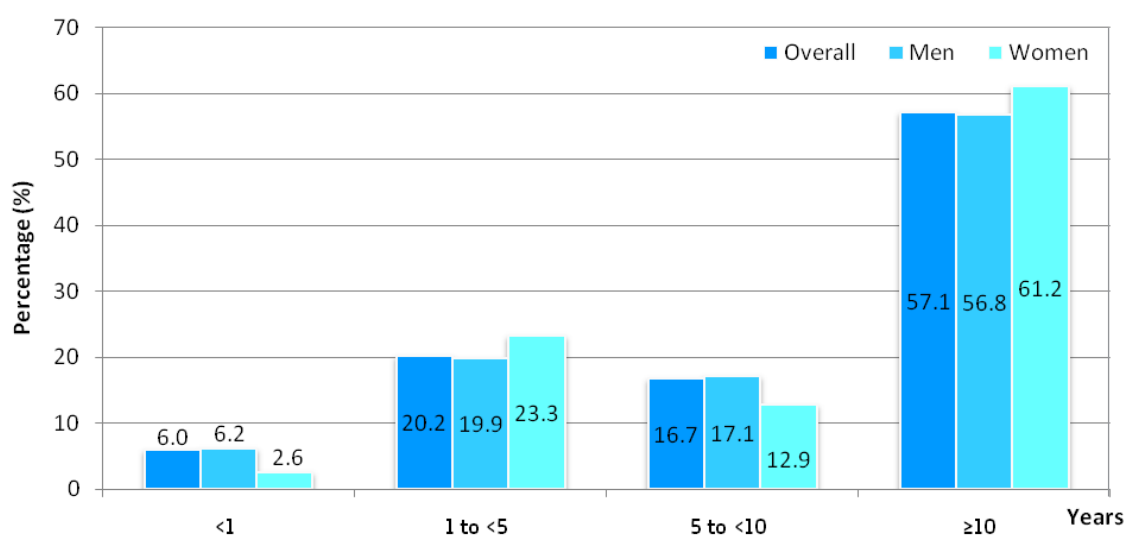
By SES, ever daily smokers in the highest SES category had a significantly higher quit ratio as compared to those in the other SES categories.

#### 4.1.2.6 Time since quitting smoking

**Figure 4.8** and **Table 4.9** present the time since quitting among former daily smokers aged 15 years and above, classified into four categories according to the time since they quit smoking – less than 1 year, 1 to less than 5 years, 5 to less than 10 years, and 10 years or more. Among these categories, the majority was in the group who had quit for 10 years or more (57.1%). Considering the average number of years since quitting smoking, no significant difference was noted by gender (13.3 years among men and 15.7 years among women).

By age group, among former daily smokers, most age groups reported quitting smoking for more than 10 years, except those in the 15–24 years and 25–44 years age groups. No significant difference in the average number of years since quitting smoking was noted by residence, education level or region. The two lowest SES recorded the longest number of years since quitting smoking.

**Figure 4.8:** Percentage distribution of time since quitting among former daily smokers aged 15 years and above – GATS Thailand, 2011



**Table 4.9:** Percentage distribution of time since quitting among former daily smokers aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Time since quitting smoking (years) <sup>1</sup>				Total	Mean (95% CI)
	<1	1 to <5	5 to <10	≥10		
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	6.0 (4.5, 7.9)	20.2 (17.6, 23.0)	16.7 (14.2, 19.6)	57.1 (53.6, 60.6)	100	13.5 (12.8, 14.2)
<b>Gender</b>						
Men	6.2 (4.6, 8.3)	19.9 (17.2, 22.9)	17.1 (14.4, 20.0)	56.8 (53.1, 60.4)	100	13.3 (12.6, 14.0)
Women	2.6 (1.1, 6.4)	23.3 (16.4, 31.9)	12.9 (7.7, 20.6)	61.2 (52.1, 69.6)	100	15.7 (13.4, 18.0)
<b>Age (years)</b>						
15–24	9.1 (3.3, 22.4)	85.0 (68.9, 93.5)	5.9 (1.6, 19.6)	0.0	100	1.6 (1.2, 2.1)
25–44	10.1 (6.3, 15.8)	25.4 (20.2, 31.4)	24.0 (18.4, 30.7)	40.6 (33.4, 48.1)	100	7.9 (6.9, 8.8)
45–59	4.2 (2.3, 7.3)	20.0 (16.0, 24.8)	16.8 (12.8, 21.7)	59.0 (53.3, 64.5)	100	13.4 (12.3, 14.5)
60+	4.4 (2.9, 6.5)	14.3 (11.5, 17.6)	11.4 (8.9, 14.4)	69.9 (65.6, 73.9)	100	18.3 (17.1, 19.5)
<b>Residence</b>						
Urban	4.8 (3.3, 6.8)	19.8 (17.2, 22.8)	15.7 (13.0, 18.8)	59.7 (56.0, 63.3)	100	14.2 (13.3, 15.0)
Rural	6.6 (4.5, 9.4)	20.3 (16.8, 24.4)	17.3 (13.9, 21.4)	55.8 (50.8, 60.7)	100	13.1 (12.2, 14.1)
<b>Education level</b>						
Less than primary	4.1 (2.8, 6.1)	17.9 (15.0, 21.3)	15.5 (12.3, 19.3)	62.5 (58.1, 66.6)	100	15.8 (14.7, 16.8)
Primary	6.1 (2.8, 12.8)	23.1 (16.5, 31.3)	17.2 (11.3, 25.3)	53.6 (44.9, 62.0)	100	11.1 (9.7, 12.5)
Secondary	9.1 (5.5, 14.8)	22.7 (17.8, 28.6)	20.7 (15.5, 27.0)	47.5 (40.4, 54.6)	100	10.7 (9.6, 11.9)
University	6.6 (3.1, 13.4)	19.8 (14.4, 26.5)	12.0 (7.8, 18.0)	61.6 (53.3, 69.3)	100	13.2 (11.6, 14.8)
<b>Region</b>						
Bangkok	2.1 (1.0, 4.4)	22.4 (17.8, 27.9)	14.5 (10.8, 19.3)	61.0 (55.1, 66.6)	100	14.6 (13.2, 16.0)
Central	6.4 (3.7, 10.8)	22.3 (17.0, 28.7)	17.6 (12.5, 24.3)	53.7 (46.3, 60.8)	100	13.0 (11.7, 14.3)
Northern	4.9 (2.8, 8.6)	17.6 (12.6, 24.1)	16.1 (11.8, 21.5)	61.4 (54.9, 67.6)	100	14.1 (12.7, 15.6)
Northeastern	7.1 (4.1, 11.9)	18.8 (14.1, 24.6)	17.9 (13.0, 24.2)	56.2 (48.6, 63.5)	100	13.4 (11.9, 14.9)
Southern	7.9 (5.1, 12.2)	24.3 (18.7, 31.0)	14.9 (9.9, 21.9)	52.8 (45.8, 59.7)	100	11.9 (10.4, 13.4)
<b>Socioeconomic status</b>						
Lowest	4.1 (1.8, 9.0)	17.4 (12.9, 23.1)	14.5 (10.5, 19.7)	63.9 (57.0, 70.3)	100	16.0 (14.3, 17.7)
Low	2.9 (1.5, 5.6)	17.1 (12.8, 22.6)	16.8 (12.0, 23.1)	63.1 (56.3, 69.5)	100	15.0 (13.6, 16.5)
Middle	7.6 (4.6, 12.3)	24.0 (17.2, 32.6)	15.9 (10.7, 23.0)	52.5 (45.0, 59.8)	100	11.8 (10.3, 13.3)
High	7.5 (4.5, 12.2)	25.1 (18.9, 32.5)	18.1 (13.2, 24.2)	49.3 (41.4, 57.3)	100	11.7 (10.3, 13.2)
Highest	7.6 (4.0, 14.2)	17.1 (12.9, 22.3)	18.2 (12.8, 25.3)	57.0 (49.1, 64.6)	100	12.9 (11.5, 14.2)

<sup>1</sup>Among former daily smokers (current non-smokers)

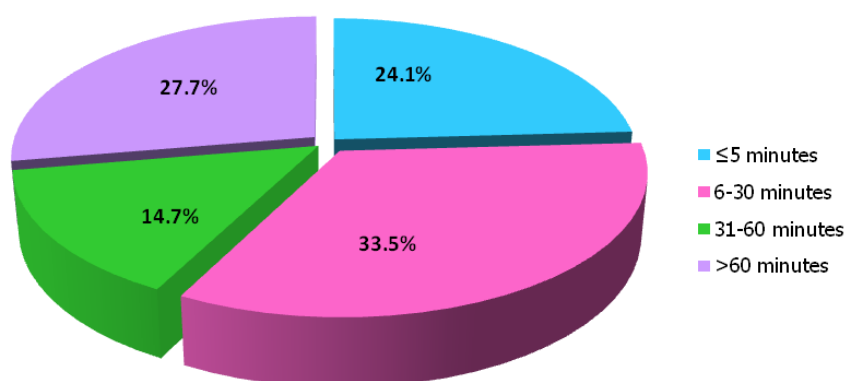
#### 4.1.2.7 Nicotine dependence from smoking

**Figure 4.9** and **Table 4.10** show the indicator of nicotine dependence, which is the time to first smoke of the day upon waking. The survey found that most daily smokers had their first smoke of the day between 6 and 30 minutes after waking up, by all selected demographic characteristics – gender, age group, residence, education level, region and SES.

57.7% of daily smokers (57.8% men and 55.2% women) first smoked within 30 minutes after waking up. By selected demographic characteristics, nicotine dependence was not different in any of the categories.

The mean percentage of daily smokers who smoked within five minutes after waking was 24.2%. There was no significant variance from this mean figure when considered by various demographic characteristics.

**Figure 4.9:** Percentage distribution of time to first smoke among daily smokers aged 15 years and above – GATS Thailand, 2011



**Table 4.10:** Percentage distribution of time to first smoke among daily smokers aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Time to first smoke				Total
	≤5 minutes	6–30 minutes	31–60 minutes	>60 minutes	
	<i>Percentage (95% CI)</i>				
<b>Overall</b>	24.2 (21.8, 26.8)	33.5 (30.8, 36.2)	14.7 (12.7, 16.9)	27.7 (25.2, 30.3)	100
<b>Gender</b>					
Men	24.3 (21.8, 27.0)	33.5 (30.7, 36.3)	14.4 (12.4, 16.7)	27.8 (25.2, 30.5)	100
Women	21.8 (16.5, 28.2)	33.4 (26.6, 41.0)	18.8 (12.8, 26.9)	26.0 (20.1, 33.0)	100
<b>Age (years)</b>					
15–24	20.7 (14.7, 28.3)	32.2 (24.7, 40.7)	16.2 (11.0, 23.1)	31.0 (23.8, 39.3)	100
25–44	23.6 (20.1, 27.4)	32.4 (28.6, 36.3)	14.5 (12.0, 17.5)	29.5 (25.6, 33.8)	100
45–59	27.6 (24.0, 31.5)	35.7 (32.0, 39.6)	14.4 (11.8, 17.5)	22.3 (19.1, 25.8)	100
60+	23.7 (19.7, 28.2)	34.0 (29.4, 39.0)	13.7 (10.4, 17.7)	28.6 (24.5, 33.2)	100
<b>Residence</b>					
Urban	25.6 (22.9, 28.5)	31.6 (28.8, 34.6)	14.0 (12.2, 16.2)	28.7 (26.1, 31.6)	100
Rural	23.6 (20.4, 27.2)	34.2 (30.7, 37.9)	14.9 (12.3, 17.9)	27.3 (24.0, 30.8)	100
<b>Education level</b>					
Less than primary	26.6 (23.4, 30.2)	34.0 (30.5, 37.7)	15.3 (12.7, 18.2)	24.1 (20.9, 27.6)	100
Primary	24.7 (20.3, 29.6)	37.6 (32.2, 43.3)	14.7 (11.2, 19.2)	23.0 (18.8, 27.9)	100
Secondary	22.1 (18.2, 26.7)	29.7 (25.8, 34.0)	14.1 (11.3, 17.6)	34.0 (29.8, 38.4)	100
University	20.4 (15.5, 26.4)	31.4 (25.8, 37.6)	13.7 (10.0, 18.5)	34.5 (27.6, 42.1)	100
<b>Region</b>					
Bangkok	30.0 (25.1, 35.5)	32.0 (27.3, 36.9)	11.7 (8.9, 15.3)	26.3 (22.0, 31.1)	100
Central	29.2 (24.5, 34.4)	33.7 (28.6, 39.1)	13.9 (10.3, 18.4)	23.3 (18.7, 28.5)	100
Northern	25.8 (20.8, 31.6)	34.8 (29.2, 40.9)	12.1 (8.5, 16.8)	27.3 (22.2, 33.2)	100
Northeastern	21.0 (16.1, 26.9)	30.1 (25.0, 35.7)	14.7 (10.8, 19.6)	34.3 (29.0, 40.0)	100
Southern	20.1 (16.4, 24.5)	39.5 (34.4, 44.8)	19.5 (15.7, 23.9)	20.9 (17.2, 25.2)	100
<b>Socioeconomic status</b>					
Lowest	27.6 (22.0, 34.0)	33.1 (26.9, 39.9)	10.1 (7.0, 14.2)	29.3 (23.9, 35.3)	100
Low	18.4 (14.9, 22.4)	36.6 (31.2, 42.4)	16.9 (12.7, 22.1)	28.2 (23.1, 33.8)	100
Middle	25.0 (20.6, 30.0)	31.2 (26.5, 36.3)	14.9 (11.7, 18.7)	28.9 (24.1, 34.4)	100
High	25.8 (21.9, 30.2)	32.3 (28.2, 36.8)	15.5 (12.3, 19.4)	26.3 (22.3, 30.9)	100
Highest	24.9 (20.6, 29.9)	34.4 (29.7, 39.4)	16.4 (12.6, 20.9)	24.3 (20.2, 28.9)	100

### 4.1.3 Pattern of smokeless tobacco use

#### 4.1.3.1 Prevalence of current smokeless tobacco users by smokeless tobacco product

**Table 4.11** presents the estimated prevalence of current users of various smokeless tobacco products. The overall prevalence of current users who used any smokeless tobacco product was 3.2%. There was a significant difference in the prevalence among men (1.1%) and women (5.2%) (**Figure 4.10a**). Differences in the prevalence of use of any smokeless tobacco product were also noted by age group, residence, education level, region and SES (**Figure 4.10b–f**). The use in rural areas was thrice that in urban areas (4.2% vs 1.4%). The highest prevalence was among those with the lowest education level and in the lowest SES (9.3% and 7.2%, respectively). Those living in the Northern, Northeastern and Southern regions had a higher prevalence than those living in Bangkok metropolis and in the Central region.

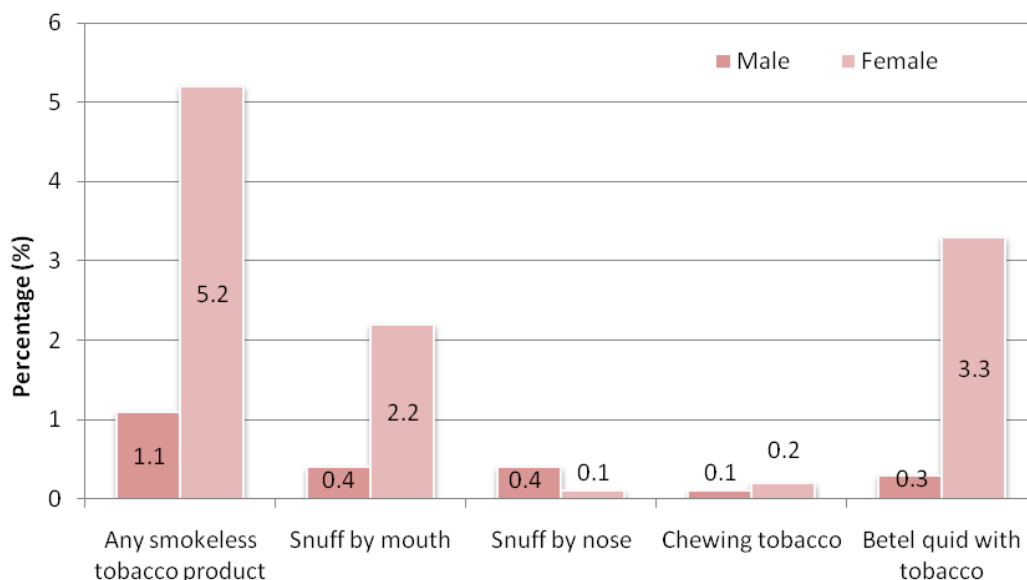
By type of smokeless tobacco product, the majority of users used betel quid with tobacco (1.8%), followed by snuff by mouth (1.3%).

**Table 4.11:** Percentage of adults aged 15 years or above who were current users of various smokeless tobacco products, by selected demographic characteristics – GATS Thailand, 2011

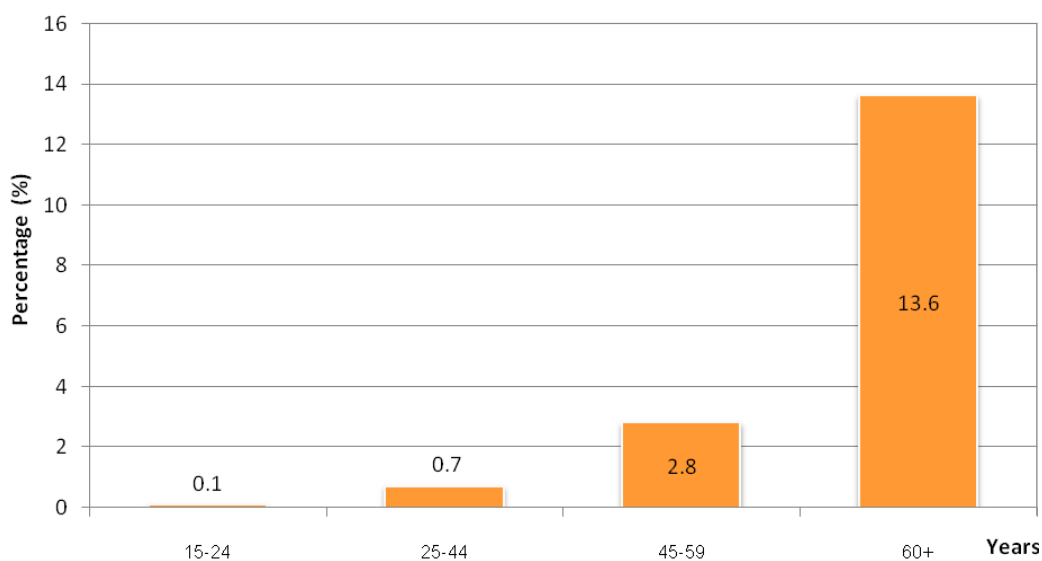
Characteristic	Any smokeless tobacco product	Type of smokeless tobacco product			
		Snuff by mouth	Snuff by nose	Chewing tobacco	Betel quid with tobacco
		<i>Percentage (95% CI)</i>			
<b>Overall</b>	3.2 (2.8, 3.7)	1.3 (1.0, 1.7)	0.2 (0.2, 0.3)	0.2 (0.1, 0.2)	1.8 (1.5, 2.2)
<b>Gender</b>					
Men	1.1 (0.8, 1.5)	0.4 (0.2, 0.7)	0.4 (0.3, 0.5)	0.1 (0.0, 0.1)	0.3 (0.2, 0.6)
Women	5.2 (4.5, 6.1)	2.2 (1.6, 2.9)	0.1 (0.1, 0.2)	0.2 (0.1, 0.4)	3.3 (2.7, 3.9)
<b>Age (years)</b>					
15–24	0.1 (0.0, 0.6)	0.0	0.0	0.0	0.1 (0.0, 0.6)
25–44	0.7 (0.4, 1.1)	0.2 (0.1, 0.5)	0.0 (0.0, 0.1)	0.0 (0.0, 0.1)	0.4 (0.2, 0.8)
45–59	2.8 (2.0, 4.0)	1.3 (0.7, 2.5)	0.3 (0.2, 0.6)	0.1 (0.0, 0.2)	1.2 (0.8, 1.9)
60+	13.6 (12.0, 15.4)	5.4 (4.3, 6.8)	0.9 (0.7, 1.3)	0.8 (0.5, 1.2)	8.2 (6.8, 9.8)
<b>Residence</b>					
Urban	1.4 (1.2, 1.7)	0.6 (0.4, 0.7)	0.3 (0.2, 0.4)	0.1 (0.1, 0.2)	0.7 (0.5, 0.9)
Rural	4.2 (3.5, 4.9)	1.7 (1.2, 2.3)	0.2 (0.2, 0.3)	0.2 (0.1, 0.3)	2.4 (2.0, 3.0)
<b>Education level</b>					
Less than primary	9.3 (8.1, 10.6)	3.7 (2.9, 4.9)	0.6 (0.5, 0.9)	0.5 (0.3, 0.7)	5.3 (4.5, 6.4)
Primary	0.9 (0.5, 1.5)	0.3 (0.1, 0.8)	0.1 (0.1, 0.3)	0.0	0.4 (0.2, 0.9)
Secondary	0.2 (0.1, 0.4)	0.1 (0.0, 0.2)	0.0 (0.0, 0.1)	0.0 (0.0, 0.0)	0.1 (0.0, 0.3)
University	0.1 (0.0, 0.2)	0.1 (0.0, 0.2)	0.0	0.0	0.0
<b>Region</b>					
Bangkok	0.8 (0.4, 1.3)	0.4 (0.2, 0.8)	0.2 (0.1, 0.6)	0.0	0.2 (0.1, 0.4)
Central	1.8 (1.4, 2.3)	0.4 (0.3, 0.7)	0.4 (0.2, 0.6)	0.2 (0.1, 0.4)	1.0 (0.7, 1.5)
Northern	4.1 (2.9, 5.7)	0.6 (0.3, 1.2)	0.1 (0.1, 0.3)	0.2 (0.1, 0.5)	3.5 (2.4, 4.9)
Northeastern	4.7 (3.8, 5.9)	2.4 (1.5, 3.6)	0.1 (0.1, 0.3)	0.1 (0.0, 0.3)	2.5 (1.9, 3.4)
Southern	2.8 (2.2, 3.7)	1.8 (1.3, 2.5)	0.4 (0.2, 0.7)	0.2 (0.1, 0.5)	0.5 (0.3, 1.1)
<b>Socioeconomic status</b>					
Lowest	7.2 (6.1, 8.4)	2.9 (2.1, 4.2)	0.3 (0.2, 0.5)	0.3 (0.2, 0.6)	4.4 (3.5, 5.4)
Low	3.8 (3.0, 4.7)	1.2 (0.8, 1.8)	0.2 (0.1, 0.4)	0.2 (0.1, 0.4)	2.3 (1.8, 3.1)
Middle	1.9 (1.5, 2.5)	0.9 (0.6, 1.3)	0.4 (0.2, 0.7)	0.1 (0.0, 0.2)	0.7 (0.4, 1.1)
High	1.0 (0.6, 1.5)	0.3 (0.2, 0.6)	0.1 (0.1, 0.4)	0.1 (0.0, 0.2)	0.5 (0.2, 1.0)
Highest	0.6 (0.3, 1.0)	0.4 (0.2, 0.7)	0.1 (0.0, 0.2)	0.0 (0.0, 0.3)	0.1 (0.0, 0.4)

Note: Current use includes both daily and occasional (less than daily) use.

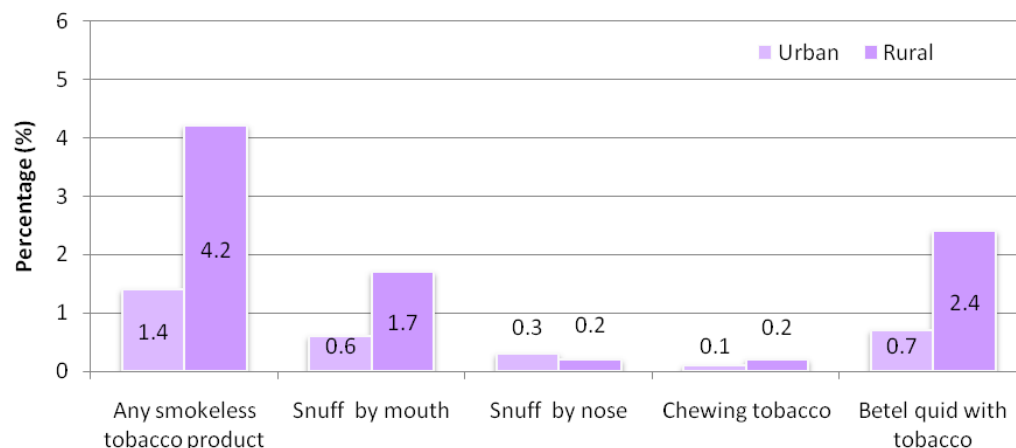
**Figure 4.10a:** Percentage of adults aged 15 years or above who were current users of various smokeless tobacco products by gender – GATS Thailand, 2011



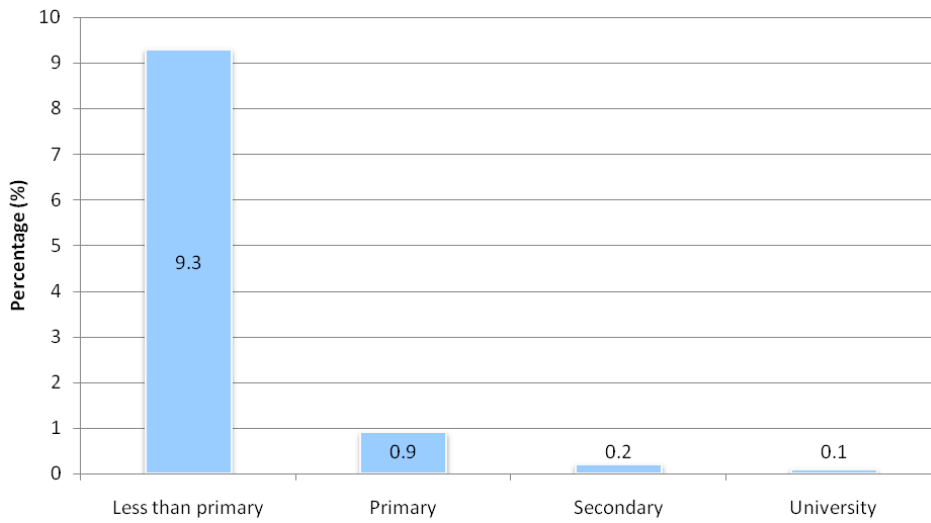
**Figure 4.10b:** Percentage of adults aged 15 years or above who were current users of any smokeless tobacco product by age group – GATS Thailand, 2011



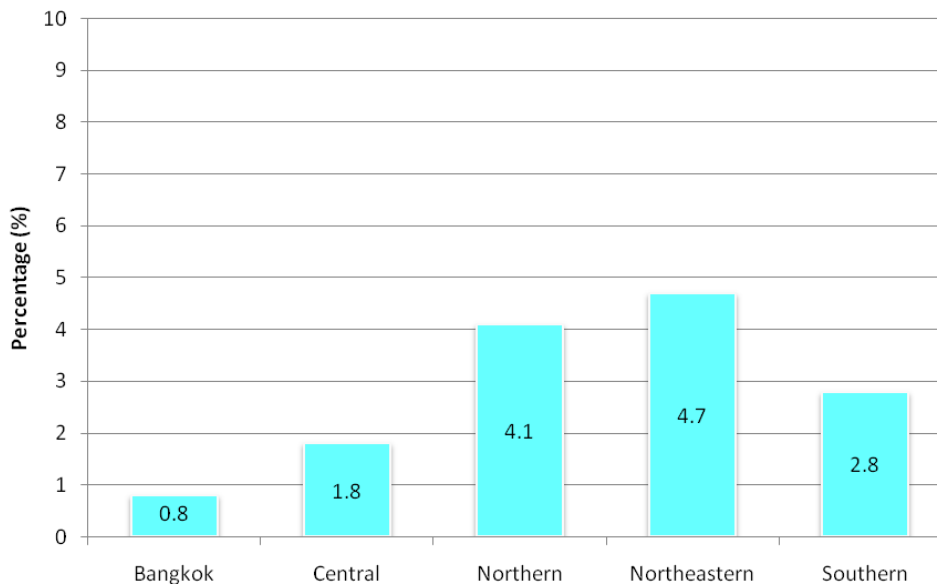
**Figure 4.10c:** Percentage of adults aged 15 years and above who were current users of various smokeless tobacco products, by residence – GATS Thailand, 2011



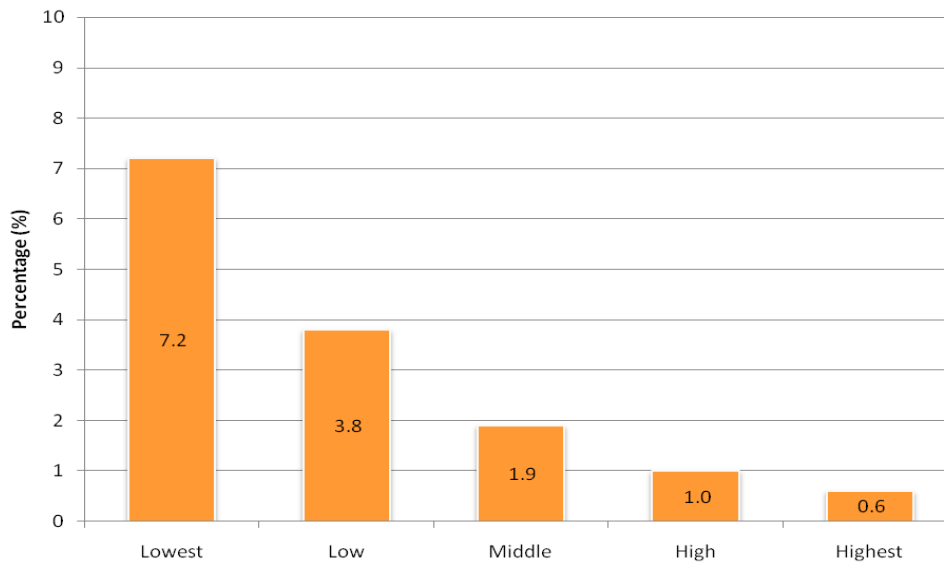
**Figure 4.10d:** Percentage of adults aged 15 years and above who were current users of any smokeless tobacco product, by education level – GATS Thailand, 2011



**Figure 4.10e:** Percentage of adults aged 15 years and above who were current users of any smokeless tobacco product, by region – GATS Thailand, 2011



**Figure 4.10f:** Percentage of adults aged 15 years and above who were current users any smokeless tobacco product, by socioeconomic status – GATS Thailand, 2011





#### 4.1.3.2 Frequency of smokeless tobacco use

**Table 4.12** gives the frequency of smokeless tobacco use under three standard categories – “daily users”, “occasional users” and “non-users”. The prevalence among adults aged 15 years and above of daily users, occasional users and non-users was 2.9%, 0.3% and 96.8%, respectively. The daily use rate among women was seven times that of men (5.0% for women and 0.7% for men).

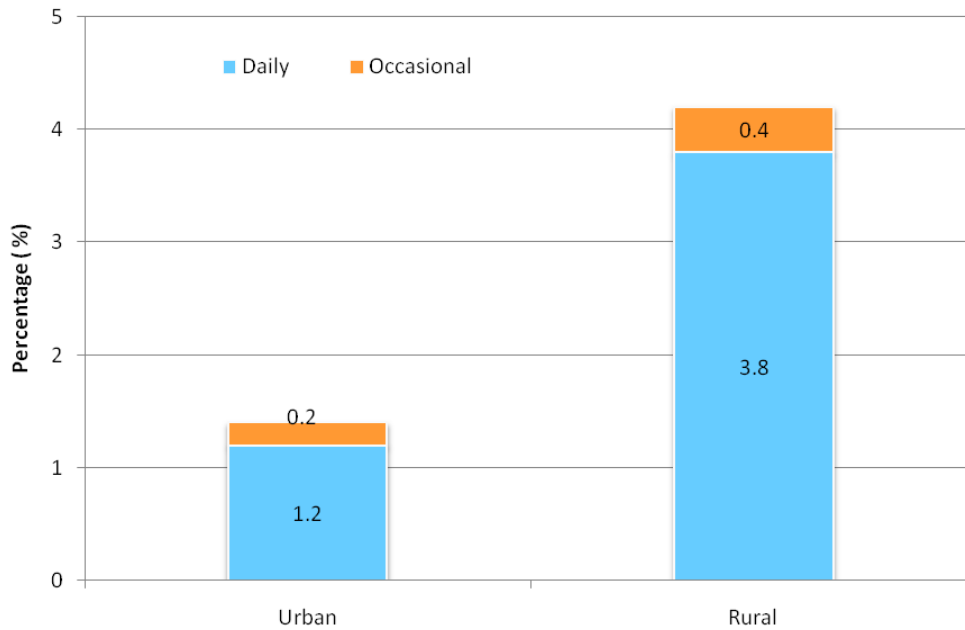
By selected demographic characteristics, a higher prevalence of daily use was found among the older age groups, with the highest being among the 60+ years age group (12.4%). Those with the lowest education level and those in the lowest SES had the highest prevalence (8.5% and 6.6%, respectively). The daily use rate among rural adults was thrice that of urban users (3.8% vs 1.2%), **Figure 4.11**. Usage by those living in the Northern and Northeastern regions was higher as compared to the other regions.

**Table 4.12:** Percentage distribution of smokeless tobacco users aged 15 years and above who were daily, occasional or non-users, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Frequency of smokeless tobacco use			Total
	Daily	Occasional <sup>1</sup>	Non-users	
	<i>Percentage (95% CI)</i>			
<b>Overall</b>	2.9 (2.5, 3.4)	0.3 (0.2, 0.4)	96.8 (96.3, 97.2)	100
<b>Gender</b>				
Men	0.7 (0.5, 1.0)	0.4 (0.2, 0.6)	98.9 (98.5, 99.2)	100
Women	5.0 (4.3, 5.8)	0.3 (0.2, 0.4)	94.8 (93.9, 95.5)	100
<b>Age (years)</b>				
15–24	0.1 (0.0, 0.7)	0.0 (0.0, 0.1)	99.9 (99.4, 100.0)	100
25–44	0.6 (0.3, 0.9)	0.1 (0.0, 0.3)	99.3 (98.9, 99.6)	100
45–59	2.5 (1.7, 3.7)	0.3 (0.2, 0.6)	97.2 (96.0, 98.0)	100
60+	12.4 (10.9, 14.1)	1.2 (0.8, 1.7)	86.4 (84.6, 88.0)	100
<b>Residence</b>				
Urban	1.2 (1.0, 1.5)	0.2 (0.1, 0.3)	98.6 (98.3, 98.8)	100
Rural	3.8 (3.2, 4.5)	0.4 (0.3, 0.6)	95.8 (95.1, 96.5)	100
<b>Education level</b>				
Less than primary	8.5 (7.4, 9.7)	0.8 (0.6, 1.2)	90.7 (89.4, 91.9)	100
Primary	0.6 (0.3, 1.1)	0.3 (0.1, 0.6)	99.1 (98.5, 99.5)	100
Secondary	0.2 (0.1, 0.4)	0.0 (0.0, 0.1)	99.8 (99.6, 99.9)	100
University	0.1 (0.0, 0.2)	0.0	99.9 (99.8, 100.0)	100
<b>Region</b>				
Bangkok	0.6 (0.4, 1.0)	0.1 (0.0, 0.5)	99.2 (98.7, 99.6)	100
Central	1.6 (1.2, 2.1)	0.2 (0.1, 0.4)	98.2 (97.7, 98.6)	100
Northern	3.5 (2.5, 4.8)	0.6 (0.3, 1.2)	95.9 (94.3, 97.1)	100
Northeastern	4.4 (3.5, 5.6)	0.3 (0.2, 0.5)	95.3 (94.1, 96.2)	100
Southern	2.4 (1.8, 3.2)	0.4 (0.3, 0.7)	97.2 (96.3, 97.8)	100
<b>Socioeconomic status</b>				
Lowest	6.6 (5.6, 7.9)	0.5 (0.3, 0.9)	92.8 (91.6, 93.9)	100
Low	3.4 (2.7, 4.3)	0.4 (0.2, 0.6)	96.2 (95.3, 97.0)	100
Middle	1.5 (1.1, 2.1)	0.4 (0.2, 0.7)	98.1 (97.5, 98.5)	100
High	0.8 (0.5, 1.3)	0.2 (0.1, 0.3)	99.0 (98.5, 99.4)	100
Highest	0.5 (0.3, 0.9)	0.1 (0.0, 0.2)	99.4 (99.0, 99.7)	100

<sup>1</sup> “Occasional” refers to less than daily use.

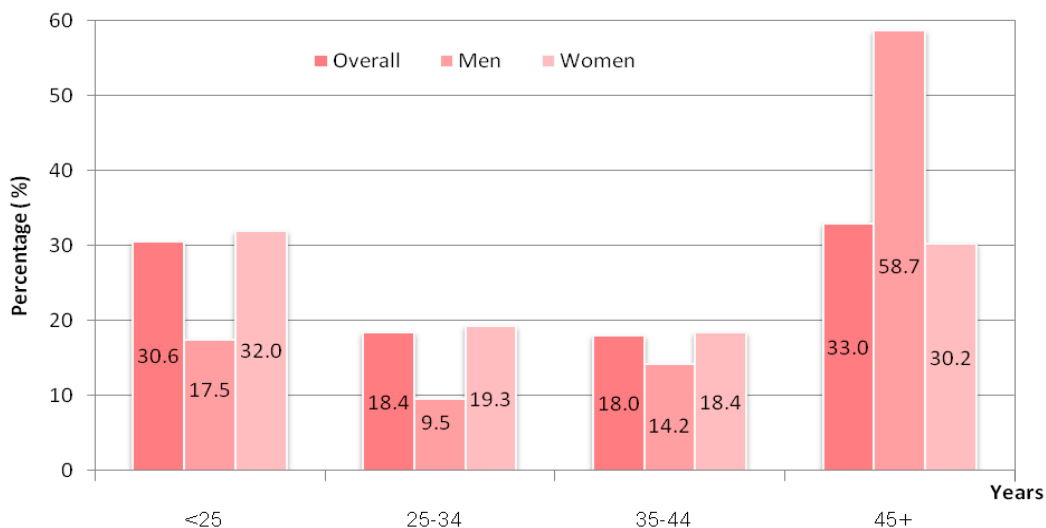
**Figure 4.11:** Percentage distribution of smokeless tobacco users aged 15 years and above who were daily users and occasional users, by residence – GATS Thailand, 2011



**4.1.3.3 Age at initiation of smokeless tobacco use**

Because of a small sample size (less than 25), stratified analysis by four demographic characteristics, i.e. age, education, region and SES, was excluded. **Figure 4.12** and **Table 4.13** present the distribution of age (years) at initiation of smokeless tobacco use among ever daily smokeless tobacco users aged 60–79 years. The largest proportion was in the age group of 45+ years (33.0%). The majority of women daily users commenced use at less than 25 years of age (32.0%), whereas most men started at 45+ years (58.7%). By residence, in both urban and rural areas, the largest proportion of those who initiated daily smokeless tobacco use was in the age group of 45+ years.

**Figure 4.12:** Percentage distribution of age at initiation among ever daily smokeless tobacco users aged 60–79 years, by age group – GATS Thailand, 2011



**Table 4.13:** Percentage distribution of age at initiation among ever daily smokeless tobacco users aged 60–79 years, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Age at initiation of smokeless tobacco use (years) <sup>1</sup>				Total	Mean (95% CI)
	<25	25–34	35–44	45+		
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	30.6 (24.9, 36.9)	18.4 (14.3, 23.3)	18.0 (13.6, 23.6)	33.0 (26.9, 39.7)	100	35.7 (33.5, 37.9)
<b>Gender</b>						
Men	17.5 (9.4, 30.3)	9.5 (3.4, 23.9)	14.2 (5.2, 33.2)	58.7 (41.4, 74.1)	100	47.7 (42.2, 53.3)
Women	32.0 (26.1, 38.5)	19.3 (14.9, 24.7)	18.4 (13.7, 24.4)	30.2 (24.3, 36.9)	100	34.4 (32.3, 36.5)
<b>Residence</b>						
Urban	24.4 (17.5, 33.0)	23.9 (16.0, 34.2)	22.2 (14.3, 32.9)	29.5 (21.1, 39.5)	100	36.6 (33.6, 39.7)
Rural	31.5 (25.2, 38.7)	17.5 (13.1, 23.0)	17.4 (12.5, 23.7)	33.5 (26.7, 41.1)	100	35.5 (33.1, 38.0)

<sup>1</sup> Among respondents 60–79 years of age who were ever daily users of smokeless tobacco

#### 4.1.3.4 Prevalence of former daily smokeless tobacco use and quit ratio

**Table 4.14** presents the prevalence of former daily smokeless tobacco use among all adults aged 15 years and above, and the quit ratio among ever daily smokeless tobacco users. The quit ratio is the percentage of ever daily smokeless tobacco users who currently do not use smokeless tobacco. This indicator indicates the success of efforts to encourage cessation among established smokeless tobacco users. Because the unweighted sample size was less than 25, four demographic characteristics were excluded, i.e. age group, education level, region and SES.

The overall prevalence of former daily smokeless tobacco use was 0.6% and the quit ratio was 16.3%. By selected demographic characteristics, the survey found that there was no appreciable difference by gender or by residence. The quit ratio was significantly different by gender (37.3% in men vs 11.9% in women) but was not significantly different by residence (18.9% in urban areas vs 15.8% in rural areas).

**Table 4.14:** Number (in thousands) and percentage of adults and ever daily smokeless tobacco users aged 15 years and above who were former daily smokeless tobacco users,<sup>1</sup> by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Former daily smokeless tobacco users (among all people)		Former daily smokeless tobacco users (among ever daily smokeless users) <sup>2</sup>	
	Number (in thousands)	% (95% CI)	Number (in thousands)	% (95% CI)
<b>Overall</b>	314.5	0.6 (0.4, 0.8)	314.5	16.3 (12.4, 21.1)
<b>Gender</b>				
Men	124.8	0.5 (0.3, 0.8)	124.8	37.3 (24.0, 52.9)
Women	189.7	0.7 (0.5, 0.9)	189.7	11.9 (9.0, 15.6)
<b>Residence</b>				
Urban	54.2	0.3 (0.2, 0.4)	54.3	18.9 (13.9, 25.2)
Rural	260.2	0.7 (0.5, 1.0)	260.2	15.8 (11.4, 21.5)

<sup>1</sup> Current non-smokeless tobacco users

<sup>2</sup> Also known as the quit ratio for daily smokeless tobacco use

#### 4.1.3.5 Time since quitting smokeless tobacco products

**Table 4.15** shows the time since quitting among former daily smokeless users aged 15 years and above, classified into four categories according to the time since they quit using smokeless tobacco products – less than 1 year, 1 to less than 5 years, 5 to less than 10 years, and 10 years or more. Because of the small sample size (less than 25), stratified analysis by four demographic characteristics, i.e. age, education, region and SES, was excluded.

Among these categories, the majority was in the group who had quit for 10 years or more, (56.1%), and the average number of years was 14.1. By gender and age, the highest figures were also in the group of 10 years or more, with no appreciable difference between the different categories.

**Table 4.15:** Percentage distribution of time since quitting among former daily smokeless tobacco users aged 15 years or above, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Time since quitting smokeless tobacco products (years) <sup>1</sup>				Total	Mean (95% CI)
	<1	1 to <5	5 to <10	≥10		
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	8.6 (4.1, 17.3)	31.0 (20.7, 43.7)	4.3 (2.0, 8.6)	56.1 (42.3, 69.0)	100	14.1 (11.0, 17.2)
<b>Gender</b>						
Men	12.4 (4.4, 30.5)	21.2 (9.3, 41.5)	2.8 (0.7, 10.1)	63.5 (39.8, 82.1)	100	15.9 (10.7, 21.1)
Women	6.1 (1.8, 19.1)	37.5 (24.6, 52.5)	5.2 (2.2, 11.7)	51.2 (37.1, 65.1)	100	12.9 (9.2, 16.7)
<b>Residence</b>						
Urban	14.7 (4.8, 37.1)	25.5 (14.4, 41.0)	8.5 (3.1, 21.1)	51.4 (35.1, 67.3)	100	15.7 (9.3, 22.2)
Rural	7.4 (2.9, 17.6)	32.2 (20.1, 47.3)	3.4 (1.3, 8.6)	57.1 (40.9, 71.9)	100	13.8 (10.3, 17.3)

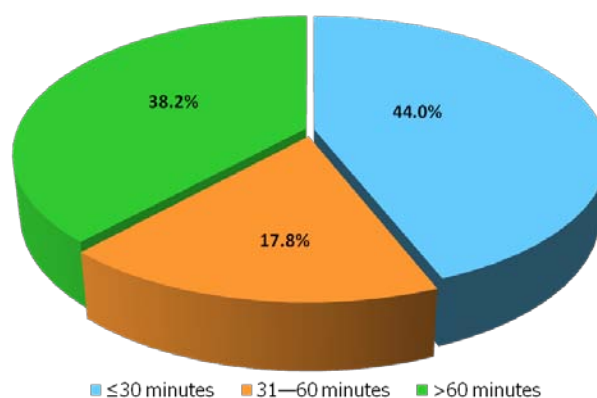
<sup>1</sup>Among former daily smokeless tobacco users (current non-users)

#### 4.1.3.6 Nicotine dependence of smokeless tobacco products

**Figure 4.13** and **Table 4.16** present the indicator of nicotine dependence, which is the time to first use of smokeless tobacco of the day upon waking. Because of the small sample size (less than 25), stratified analysis by four demographic characteristics, i.e. age, education, region and SES, was excluded. The survey found that most daily users used their first smokeless tobacco of the day within 30 minutes of waking up (44.0%).

The proportion of daily smokeless tobacco users who used the first smokeless tobacco within 30 minutes of waking showed no significant differences by gender or residence.

**Figure 4.13:** Percentage distribution of time to first use among daily smokeless tobacco users aged 15 years and above – GATS Thailand, 2011



**Table 4.16:** Percentage distribution of time to first use among daily smokeless tobacco users aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Time to first smokeless tobacco use				Total
	≤5 minutes	6–30 minutes	31–60 minutes	>60 minutes	
	<i>Percentage (95% CI)</i>				
<b>Overall</b>	14.6 (11.4, 18.5)	29.3 (24.5, 34.7)	17.8 (13.1, 23.8)	38.2 (32.3, 44.5)	100
<b>Gender</b>					
Men	16.7 (9.8, 27.2)	28.9 (17.3, 44.1)	15.7 (7.6, 29.5)	38.8 (25.1, 54.5)	100
Women	14.3 (10.9, 18.5)	29.4 (24.5, 34.9)	18.1 (13.2, 24.5)	38.1 (31.8, 45.0)	100
<b>Residence</b>					
Urban	12.4 (8.2, 18.4)	30.0 (22.4, 39.0)	16.8 (11.3, 24.2)	40.7 (32.4, 49.6)	100
Rural	15.0 (11.3, 19.5)	29.2 (23.8, 35.3)	18.0 (12.7, 25.0)	37.8 (31.1, 45.0)	100

#### 4.1.4 Types of current tobacco users

**Table 4.17** presents the prevalence of current tobacco users aged 15 years and above by selected demographic characteristics. Current tobacco users included current tobacco smokers (daily and occasional smokers), as well as current smokeless tobacco users (daily and occasional smokeless tobacco users).

The overall prevalence of tobacco use was 26.9%. By gender, the proportion of men who were current tobacco users was six times higher than of women (47.2% and 7.6%, respectively), **Figures 4.14a and 4.14b**. The prevalence of current tobacco use was not significantly different among different age groups, by residence and regions (**Figure 4.14c**). By education level, the prevalence among those with a lower education level was significantly higher than among those with secondary and university level education. By SES, the prevalence was significantly higher among those in the lower SES.

Considering the types of tobacco use, current tobacco users mostly used smoked tobacco (88.0%), followed by smokeless tobacco (10.8%), and both smoked and smokeless tobacco (1.2%). By gender, men mostly used smoked tobacco (97.7%) while women mostly used smokeless tobacco (65.8%).

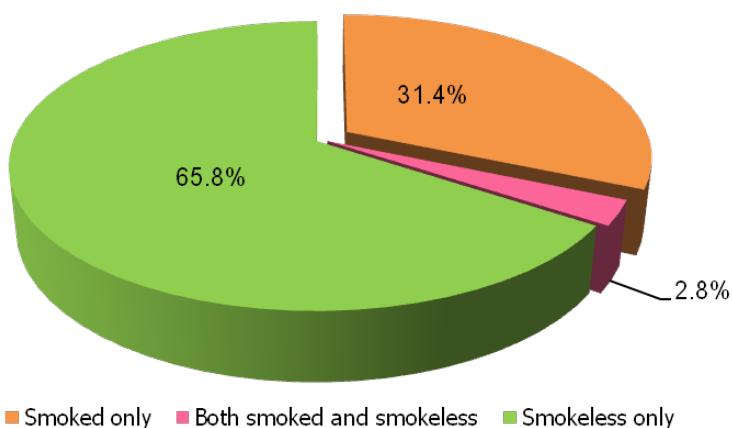
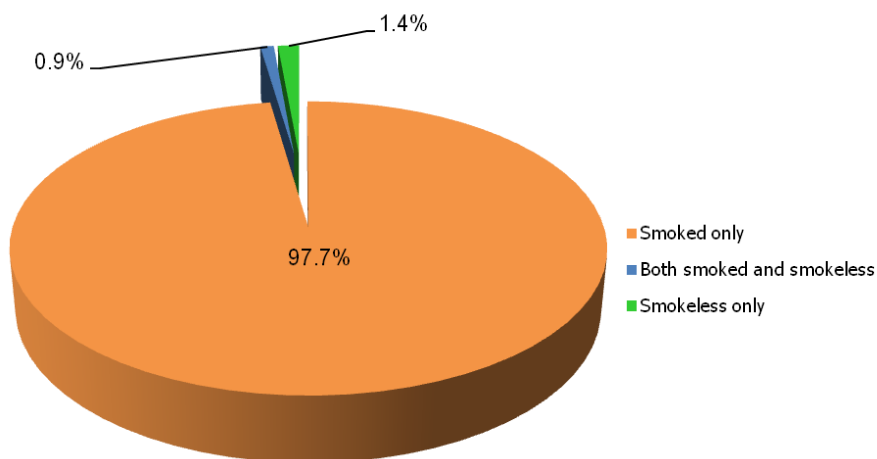
When classified by other selected demographic characteristics, i.e. age group, residence, education level, region and SES, the survey revealed that the majority of users of smoked tobacco were in the 15–24 years age group (99.4%), or 25–44 years of age group (97.4%), lived in urban areas (93.4%), had a university level education (99.5%), or secondary education (99.1%), lived in Bangkok metropolis (96.0%), and were in the high or highest SES (97.3%). By contrast, a large proportion of users of smokeless tobacco only were among the 60+ years age group (40.3%), lived in rural areas (12.8%), had the lowest education level (26.6%), lived in the Northeastern region (15.3%) and were in the lowest SES (25.0%).

**Table 4.17:** Percentage of adults who were current tobacco users, and the percentage distribution of tobacco use patterns among current tobacco users aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Current tobacco users <sup>1</sup>	Type of current tobacco use			Total
		Smoked only	Both smoked and smokeless	Smokeless only	
<i>Percentage (95% CI)</i>					
<b>Overall</b>	26.9 (25.7, 28.1)	88.0 (86.3, 89.5)	1.2 (0.8, 1.9)	10.8 (9.4, 12.4)	100
<b>Gender</b>					
Men	47.2 (45.3, 49.1)	97.7 (96.9, 98.3)	0.9 (0.6, 1.5)	1.4 (1.0, 1.9)	100
Women	7.6 (6.8, 8.6)	31.4 (27.1, 36.0)	2.8 (1.4, 5.7)	65.8 (60.9, 70.4)	100
<b>Age (years)</b>					
15–24	21.8 (19.1, 24.8)	99.4 (97.5, 99.9)	0.1 (0.0, 0.5)	0.5 (0.1, 2.7)	100
25–44	26.7 (24.9, 28.6)	97.4 (95.8, 98.5)	0.7 (0.3, 1.5)	1.9 (1.1, 3.2)	100
45–59	27.8 (26.1, 29.5)	89.8 (86.0, 92.6)	1.8 (1.0, 3.2)	8.4 (5.7, 12.2)	100
60+	31.8 (29.7, 34.0)	57.3 (53.3, 61.2)	2.4 (1.5, 4.0)	40.3 (36.5, 44.3)	100
<b>Residence</b>					
Urban	21.5 (20.5, 22.6)	93.4 (92.1, 94.6)	1.0 (0.6, 1.7)	5.6 (4.6, 6.8)	100
Rural	29.7 (28.0, 31.5)	85.9 (83.5, 88.0)	1.3 (0.7, 2.2)	12.8 (10.9, 15.0)	100
<b>Education level</b>					
Less than primary	31.9 (30.0, 33.8)	70.9 (67.7, 73.8)	2.6 (1.6, 4.1)	26.6 (23.6, 29.7)	100
Primary	32.5 (29.8, 35.3)	97.4 (95.5, 98.5)	0.6 (0.2, 1.8)	2.0 (1.1, 3.7)	100
Secondary	24.2 (22.3, 26.1)	99.1 (98.2, 99.5)	0.2 (0.1, 0.8)	0.7 (0.3, 1.5)	100
University	13.2 (11.6, 15.0)	99.5 (98.2, 99.9)	0.2 (0.0, 1.4)	0.3 (0.1, 1.6)	100
<b>Region</b>					
Bangkok	18.7 (17.1, 20.5)	96.0 (93.2, 97.6)	0.8 (0.2, 2.8)	3.2 (1.9, 5.4)	100
Central	25.0 (23.1, 27.0)	93.0 (91.0, 94.5)	0.6 (0.3, 1.4)	6.4 (5.0, 8.3)	100
Northern	24.9 (22.3, 27.7)	83.6 (78.3, 87.9)	3.5 (1.6, 7.4)	12.9 (9.6, 17.1)	100
Northeastern	29.6 (27.0, 32.4)	84.1 (80.2, 87.3)	0.6 (0.3, 1.2)	15.3 (12.2, 19.1)	100
Southern	32.4 (29.7, 35.2)	91.2 (88.9, 93.1)	1.2 (0.6, 2.1)	7.6 (5.9, 9.8)	100
<b>Socioeconomic status</b>					
Lowest	27.1 (24.7, 29.6)	73.5 (69.0, 77.6)	1.5 (0.8, 2.7)	25.0 (21.0, 29.5)	100
Low	27.7 (25.4, 30.1)	86.4 (83.2, 89.0)	1.9 (1.1, 3.3)	11.7 (9.3, 14.6)	100
Middle	29.9 (27.6, 32.2)	93.7 (91.8, 95.1)	1.3 (0.7, 2.4)	5.1 (3.8, 6.8)	100
High	27.2 (25.2, 29.3)	96.5 (94.6, 97.7)	0.4 (0.1, 1.0)	3.2 (2.1, 4.8)	100
Highest	21.3 (19.4, 23.2)	97.3 (95.6, 98.4)	0.5 (0.1, 1.9)	2.2 (1.2, 3.8)	100

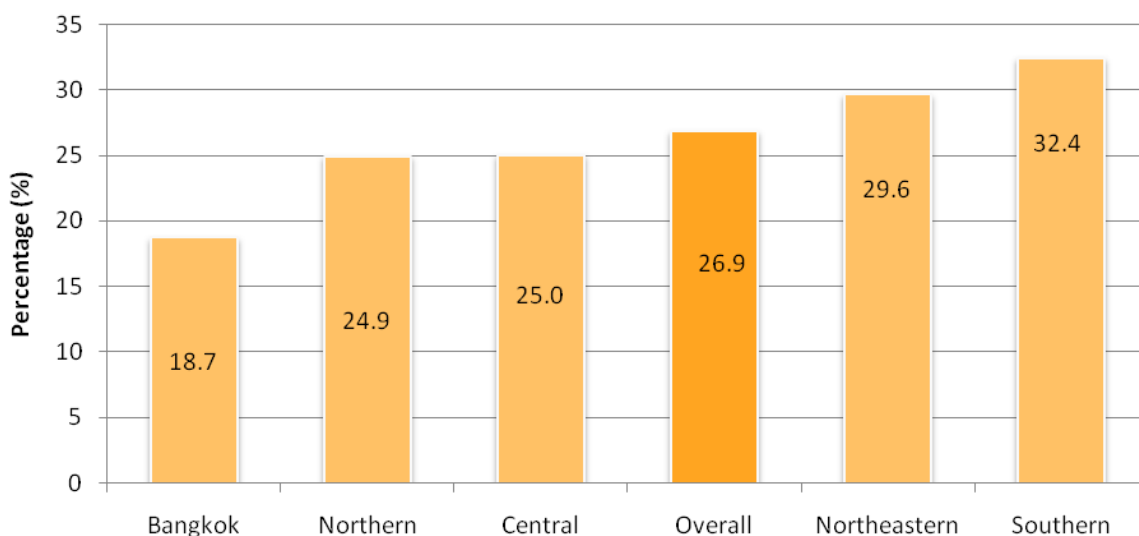
<sup>1</sup> Includes daily and occasional (less than daily) smokers or smokeless tobacco users

**Figure 4.14a:** Percentage distribution of men aged 15 years and above who were current tobacco users, by type of current tobacco use – GATS Thailand, 2011



**Figure 4.14b:** Percentage distribution of women aged 15 years and above who were current tobacco users, by type of current tobacco use – GATS Thailand, 2011

**Figure 4.14c:** Percentage of adults aged 15 years and above who were current tobacco users, by region – GATS Thailand, 2011





## 4.2 Comparison of tobacco use in 2009 and 2011

### Comparison of the key findings of 2009 and 2011 GATS

- Prevalence of current tobacco smoking did not change between 2009 (23.7%) and 2011 (24.0%).
- Prevalence of current smokeless tobacco use decreased from 3.9% in 2009 to 3.2% in 2011.
- The quit ratio of ever daily smokers between 2009 (28.8%) and 2011 (27.2%) did not change significantly.

Comparison of tobacco use in 2009 and 2011 has been covered under three indicators – (i) status of tobacco use, (ii) pattern of tobacco use, and (iii) type of current tobacco users.

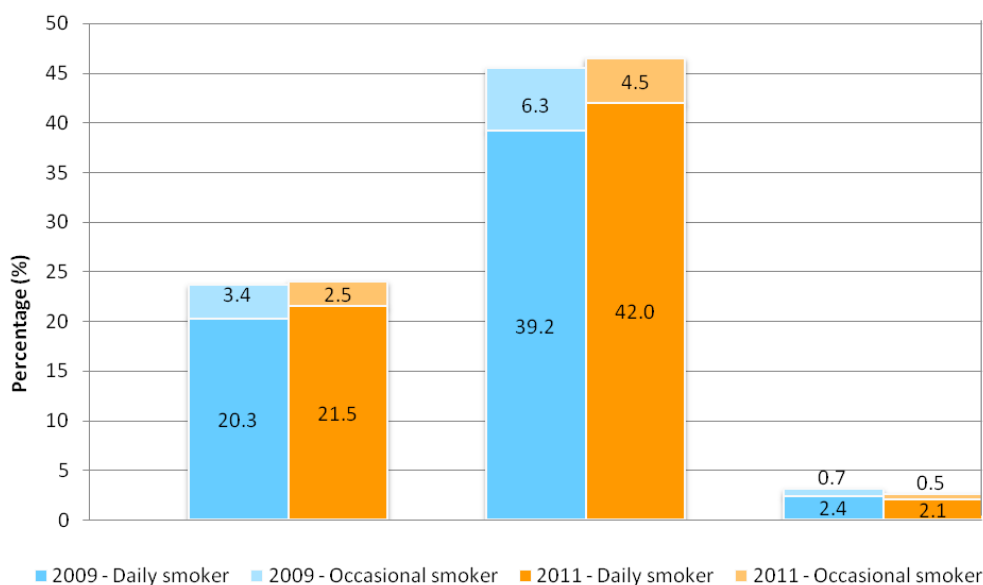
#### 4.2.1 Status of tobacco use in 2009 and 2011

**Figure 4.15** and **Table 4.18** show that there was no significant change in overall current smoking prevalence between 2009 (23.7 %) and 2011 (24.1 %). However, a significant reduction was noticed among women (from 3.1% in 2009 to 2.6% in 2011).

Overall, there was no statistical difference in the prevalence of “daily smoking” (20.3% in 2009 and 21.5% in 2011); however, there was a significant increase among men (39.2% in 2009 to 42.0% in 2011).

The overall prevalence of occasional smoking reduced from 3.4% in 2009 to 2.5% in 2011. The prevalence of occasional smoking also decreased among men (6.3% and 4.5%, respectively). There was no significant change in the prevalence of occasional smoking among women (0.7% and 0.5%, respectively).

**Figure 4.15:** Cumulative percentage of adults aged 15 years and above, by smoking status – GATS Thailand, 2009 and 2011



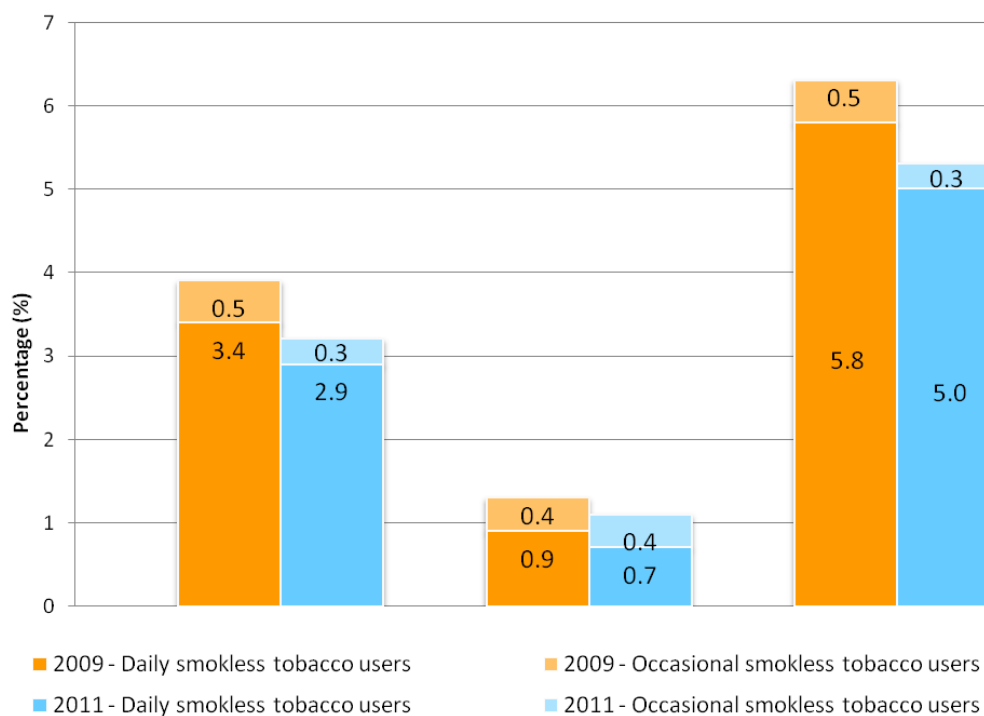
**Table 4.18:** Percentage of adults aged 15 years and above, by detailed smoking status and gender – GATS Thailand, 2009 and 2011

Smoking status	2009	2011	Relative change
<i>Percentage (95% CI)</i>			
<b>Current tobacco smoker</b>	23.7 (22.8, 24.7)	24.0 (22.8, 25.1)	0.9
Daily smoker	20.3 (19.4, 21.2)	21.5 (20.4, 22.6)	5.9
Occasional smoker	3.4 (3.0, 3.9)	2.5 (2.1, 2.9)	-28.3**
<b>Men</b>			
Current tobacco smoker	45.6 (43.8, 47.4)	46.6 (44.7, 48.4)	2.2
Daily smoker	39.2 (37.5, 41.0)	42.0 (40.2, 43.9)	7.1**
Occasional smoker	6.3 (5.5, 7.2)	4.5 (3.8, 5.3)	-28.6**
<b>Women</b>			
Current tobacco smoker	3.1 (2.7, 3.6)	2.6 (2.2, 3.1)	-15.9**
Daily smoker	2.4 (2.0, 2.9)	2.1 (1.8, 2.5)	-13.1
Occasional smoker	0.7 (0.5, 0.9)	0.5 (0.3, 0.7)	-25.7

Notes: Current use includes both daily and occasional (less than daily) use.  
 Relative change calculated by [rate of 2011– rate of 2009] \*100 / rate of 2009  
 \*\* P<0.05

Figure 4.16 and Table 4.19 show that, overall, there was a significant decrease in the prevalence of “current”, “daily” and “occasional” smokeless tobacco use between the 2009 and 2011 GATS. Among men, there was no significant change; however, among women, the prevalence of current smokeless tobacco use reduced significantly.

**Figure 4.16:** Cumulative percentage of adults aged 15 years and above, by smokeless tobacco use status – GATS Thailand, 2009 and 2011



**Table 4.19:** Percentage of adults aged 15 years and above, by detailed smokeless tobacco use status and gender – GATS Thailand, 2009 and 2011

Smokeless tobacco use status	2009	2011	Relative change
	<i>Percentage (95% CI)</i>		
<b>Current smokeless tobacco user</b>	3.9 (3.4, 4.4)	3.2 (2.8, 3.7)	-17.2**
Daily smokeless user	3.4 (3.0, 3.9)	2.9 (2.5, 3.4)	-15.0**
Occasional smokeless user	0.5 (0.4, 0.6)	0.3 (0.2, 0.4)	-32.5**
<b>Men</b>			
Current smokeless tobacco user	1.3 (1.1, 1.7)	1.1 (0.8, 1.5)	-18.0
Daily smokeless user	0.9 (0.7, 1.2)	0.7 (0.5, 1.0)	-20.6
Occasional smokeless user	0.4 (0.3, 0.6)	0.4 (0.2, 0.6)	-12.3
<b>Women</b>			
Current smokeless tobacco user	6.3 (5.5, 7.2)	5.3 (4.5, 6.1)	-17.0**
Daily smokeless user	5.8 (5.0, 6.7)	5.0 (4.3, 5.8)	-14.2
Occasional smokeless user	0.5 (0.4, 0.7)	0.3 (0.2, 0.4)	-47.2**

Notes: Current use includes both daily and occasional (less than daily) use.

Relative change calculated by  $[(\text{rate of 2011} - \text{rate of 2009}) \times 100] / \text{rate of 2009}$

\*\*  $P < 0.05$

## 4.2.2 Pattern of tobacco use in 2009 and 2011

### 4.2.2.1 Prevalence of current smokers by smoked tobacco products

**Table 4.20** shows the survey results of the 2009 and 2011 GATS, giving the prevalence of current smokers by demographic characteristics as well as by types of smoked tobacco products. The types of smoked tobacco products were (i) any cigarette, which includes manufactured cigarettes and hand-rolled cigarettes, and (ii) other smoked tobacco products, i.e. pipe, cigar and water pipe.

There was no significant change in the overall prevalence of any smoked tobacco product between 2009 and 2011. However, a significant reduction was noticed among women and those living in urban areas.

In general, there was no significant change in overall prevalence of manufactured cigarette smoking between 2009 and 2011. However, a significant increase was seen among those in the lowest SES category, and a significant reduction was seen among those in the middle SES group.

Similarly, there was no significant change in the overall prevalence of hand-rolled cigarette smoking between 2009 and 2011. However, a significant reduction was noticed among women and older people (60+ years), and also among those with a university education.

**Table 4.20: Percentage of adults aged 15 years and above who were current smokers of various smoked tobacco products, by selected demographic characteristics – GATS Thailand, 2009 and 2011**

Characteristic	2009					2011					Relative change					
	Any smoked tobacco product	Any cigarette <sup>1</sup>			Other smoked tobacco products <sup>2</sup>	Type of cigarette			Any smoked tobacco product	Any cigarette <sup>1</sup>			Other smoked tobacco products <sup>2</sup>	Type of cigarette		
		Manufactured	Hand-rolled	Hand-rolled		Manufactured	Hand-rolled	Hand-rolled		Manufactured	Hand-rolled	Hand-rolled		Manufactured	Hand-rolled	Hand-rolled
<b>Overall</b>	23.7(22.8,24.7)	23.5(22.6,24.5)	15.0(14.2,15.8)	14.1(13.2,15.0)	0.3(0.1,0.5)	24.0(22.8,25.1)	23.8(22.7,25.0)	15.2(14.3,16.2)	14.4(13.3,15.6)	0.2(0.1,0.5)	0.9	1.2	1.7	2.2	-16.6	
<b>Gender</b>																
Men	45.6(43.8,47.4)	45.4(43.6,47.2)	29.6(28.1,31.1)	27.0(25.2,28.9)	0.3(0.1,0.5)	46.6(44.7,48.4)	46.5(44.6,48.3)	30.1(28.4,31.9)	28.1(26.1,30.2)	0.2(0.1,0.5)	2.2	2.3	1.8	4.1	-2.4	
Women	3.1(2.7,3.6)	2.8(2.4,3.3)	1.1(0.9,1.4)	1.8(1.5,2.2)	0.3(0.1,0.7)	2.6(2.2,3.1)	2.4(2.1,2.8)	1.1(0.9,1.4)	1.4(1.1,1.8)	0.2(0.1,0.6)	-15.9**	-14.5	-0.2	-23.2**	-28.0	
<b>Age (years)</b>																
15-24	19.8(17.4,22.4)	19.7(17.3,22.3)	17.9(15.6,20.5)	8.7(7.0,10.7)	0.3(0.1,0.6)	21.7(19.0,24.6)	21.7(19.0,24.6)	20.1(17.5,23.0)	10.7(8.6,13.3)	0.1(0.0,0.2)	9.4	10.3	12.3	23.7	-68.2**	
25-44	26.5(25.2,27.9)	26.5(25.1,27.9)	18.7(17.6,19.9)	14.4(13.1,15.9)	0.1(0.0,0.2)	26.2(24.5,28.0)	26.1(24.4,28.0)	18.2(16.7,19.8)	14.4(12.8,16.2)	0.1(0.1,0.3)	-1.2	-1.2	-2.8	-0.3	58.9	
45-59	24.0(22.6,25.5)	23.7(22.3,25.1)	12.0(11.0,13.1)	16.0(14.6,17.5)	0.4(0.2,0.8)	25.4(23.9,27.0)	25.1(23.6,26.7)	13.1(12.0,14.3)	16.7(15.2,18.2)	0.4(0.2,0.9)	6.1	6.2	8.9	4.3	1.8	
60+	21.0(19.3,22.7)	20.5(18.8,22.2)	5.4(4.6,6.3)	17.1(15.5,18.8)	0.6(0.3,1.3)	19.0(17.4,20.6)	18.7(17.2,20.4)	5.4(4.6,6.3)	15.1(13.6,16.7)	0.3(0.1,1.1)	-9.6**	-8.6	0.3	-12.0**	-43.9	
<b>Residence</b>																
Urban	21.5(20.6,22.4)	21.4(20.5,22.4)	17.7(16.9,18.6)	6.4(5.9,7.1)	0.1(0.1,0.3)	20.3(19.3,21.3)	20.3(19.3,21.3)	17.0(16.1,18.0)	5.9(5.3,6.5)	0.2(0.1,0.3)	5.5**	-5.4**	-3.9	-8.7	54.3	
Rural	24.8(23.5,26.1)	24.5(23.2,25.8)	13.7(12.7,14.8)	17.5(16.2,18.9)	0.3(0.2,0.7)	25.9(24.3,27.6)	25.7(24.1,27.4)	14.3(12.9,15.7)	18.9(17.2,20.7)	0.2(0.1,0.6)	4.6	5.0	3.8	7.9	-28.4	
<b>Education Level</b>																
Less than primary	24.3(22.9,25.8)	23.8(22.4,25.2)	8.1(7.4,9.0)	19.5(18.2,20.9)	0.6(0.3,1.3)	23.4(21.8,25.0)	23.0(21.6,24.5)	7.8(7.0,8.7)	19.1(17.7,20.6)	0.5(0.2,1.2)	-3.8	-3.2	-3.9	-2.0	-24.7	
Primary	29.2(26.9,31.5)	29.1(26.9,31.4)	18.6(16.8,20.6)	19.7(17.7,22.0)	0.1(0.0,0.4)	31.8(29.1,34.6)	31.8(29.1,34.6)	20.0(17.5,22.7)	22.5(19.9,25.2)	0.1(0.0,0.5)	9.1	9.1	7.4	13.9	1.0	
Secondary	23.3(21.5,25.1)	23.2(21.5,25.0)	20.2(18.7,21.8)	9.1(7.9,10.5)	0.1(0.0,0.1)	24.0(22.2,25.9)	24.0(22.2,25.9)	20.3(18.6,22.1)	10.0(8.6,11.6)	0.1(0.0,0.1)	3.2	3.3	0.5	9.5	41.4	
University	14.3(12.5,16.2)	14.3(12.5,16.2)	13.4(11.6,15.3)	2.8(2.0,3.9)	0.1(0.0,0.3)	13.1(11.5,14.9)	13.1(11.5,14.9)	1.2(1.0,1.4)	1.7(1.3,2.4)	0.2(0.1,0.4)	-8.0	-8.0	-6.2	-8.0**	50.5	
<b>Region</b>																
Bangkok	19.0(17.5,20.5)	19.0(17.5,20.5)	17.5(16.2,18.9)	2.6(2.1,3.2)	0.1(0.0,0.2)	18.1(16.5,19.9)	18.1(16.4,19.8)	1.6(1.5,1.8)	3.3(2.5,4.2)	0.4(0.2,0.7)	-4.6	-4.8	-4.9	25.6	486.9	
Central	23.2(21.5,25.0)	23.2(21.5,25.0)	15.8(14.5,17.2)	10.8(9.2,12.7)	0.1(0.0,0.3)	23.4(21.6,25.3)	23.4(21.6,25.3)	1.6(1.5,1.8)	10.8(9.1,12.8)	0.0(0.0,0.1)	0.7	0.7	5.2	0.1	-32.4	
Northern	22.6(20.5,24.8)	21.5(19.6,23.6)	10.9(9.5,12.6)	12.9(11.0,15.0)	1.3(0.6,2.6)	21.7(19.4,24.2)	20.9(18.8,23.2)	11.3(9.6,13.3)	13.5(11.5,15.8)	0.7(0.3,2.2)	-4.1	-2.9	3.5	4.8	-40.3	
Northeastern	23.9(21.9,26.0)	23.9(21.9,26.0)	14.2(12.6,15.9)	17.2(15.2,19.3)	0.0(0.0,0.1)	25.1(22.5,27.8)	25.1(22.5,27.8)	14.0(12.0,16.2)	17.7(15.1,20.5)	0.1(0.0,0.2)	4.9	5.0	-1.6	2.8	9.0	
Southern	29.7(27.6,31.9)	29.7(27.6,31.9)	19.0(16.9,21.2)	23.0(20.9,25.4)	0.1(0.0,0.2)	29.9(27.5,32.5)	29.9(27.5,32.5)	2.0(1.7,2.2)	22.3(19.9,25.0)	0.2(0.1,0.3)	0.7	0.8	5.3	-2.8	136.6	
<b>Socioeconomic status</b>																
Lowest	17.9(16.2,19.8)	17.4(15.7,19.2)	7.5(6.2,9.1)	13.4(11.9,15.2)	0.6(0.3,1.6)	20.3(18.0,22.8)	20.0(17.7,22.5)	10.8(8.8,13.1)	15.0(12.9,17.3)	0.4(0.2,0.8)	13.3	15.3**	44.0**	11.4	-44.6	
Low	23.7(21.8,25.8)	23.5(21.6,25.5)	11.9(10.4,13.6)	16.8(15.2,18.6)	0.3(0.1,0.8)	24.5(22.2,26.9)	24.2(21.9,26.6)	13.1(11.1,15.5)	17.8(15.7,20.2)	0.3(0.1,0.9)	3.1	3.0	10.1	6.0	1.3	
Middle	29.2(27.2,31.4)	29.2(27.1,31.3)	20.5(18.6,22.5)	17.1(15.3,19.0)	0.1(0.0,0.3)	28.3(26.1,30.7)	28.3(26.1,30.6)	17.4(15.4,19.7)	17.2(15.3,19.3)	0.1(0.0,0.3)	-3.1	-3.1	-14.9**	0.8	23.3	
High	28.4(26.2,30.7)	28.4(26.2,30.7)	21.4(19.5,23.4)	14.4(12.4,16.7)	0.0	26.4(24.4,28.4)	26.4(24.4,28.4)	19.6(17.8,21.4)	12.7(11.0,14.6)	0.1(0.0,0.2)	-7.2	-7.2	-8.5	-12.4	0	
Highest	20.9(19.2,22.7)	20.9(19.2,22.7)	17.6(16.0,19.2)	6.5(5.3,7.9)	0.1(0.0,0.2)	20.8(19.0,22.7)	20.8(19.0,22.6)	17.1(15.6,18.8)	7.3(6.1,8.8)	0.2(0.1,0.4)	-0.4	-0.5	-2.6	12.6	121.1	

Note: Current use includes both daily and occasional (less than daily) use.

<sup>1</sup>Includes manufactured cigarettes and hand-rolled cigarettes

<sup>2</sup>Includes pipes, cigars/ceroots/cigarillos and water pipes

\*\* P<0.05

#### 4.2.2.3 Age at smoking initiation

**Table 4.21** presents the age at smoking initiation of ever daily smokers aged 20–34 years in four groups – <15 years, 15–16 years, 17–19 years and 20+ years. Considering the four demographic characteristics, i.e. gender, residence, region and SES, there were some differences in the age at smoking initiation between 2009 and 2011, but these were not statistically significant.

It was observed that the age at initiation among the overall population during 2009 and 2011 was stable, with no significant statistical change in all age categories by any demographic characteristics with following exceptions:

1. In the age group of 17–19 years, there was a significant reduction among women, those in Bangkok region and those in the middle SES.
2. In the age group of 20+ years, there was a significant increase in urban areas and those in the lowest SES.

#### 4.2.2.4 Prevalence of former daily smokers and quit ratio

**Table 4.22** shows the percentage of former daily smokers among all adults (quit rate) and the percentage of former daily smokers among ever daily smokers (quit ratio). “Quit rate” is determined by the number of former daily smokers (current non-smokers) divided by all adults and “quit ratio” is determined by the number of former daily smokers (current non-smokers) divided by the number of ever daily smokers.

Between 2009 and 2011, there was no change in the overall prevalence of former daily smokers among all adults, and also by gender or residence. However, the percentage of former daily smokers decreased in the age groups of 15–24 and 24–44 years, those with university education, those living in Central region and those in the lowest SES.

Overall, by gender, the percentage of former daily smokers among every daily smokers did not change between 2009 and 2011. However, the percentage decreased in the age group of 15–24 years, in rural areas, those with primary education and those in the lowest SES.

**Table 4.21: Percentage distribution of age at initiation among ever daily smokers aged 20–34 years old, by selected demographic characteristics – GATS Thailand, 2009 and 2011**

Characteristic	Age at smoking initiation (years) <sup>1</sup>										Relative change		
	2009					2011					15–16	17–19	20+
	<15	15–16	17–19	20+	<15	15–16	17–19	20+	<15	15–16	17–19	20+	
<b>Overall</b>	11.8 (8.8, 15.6)	24.3 (20.7, 28.3)	40.1 (36.0, 44.5)	23.7 (20.2, 27.6)	14.3 (10.7, 18.7)	26.8 (22.8, 31.3)	36.1 (31.3, 41.1)	22.8 (19.5, 26.5)	20.7	10.3	-10.2	-3.8	
<b>Gender</b>													
Men	12.0 (8.9, 15.9)	24.7 (21.0, 28.8)	39.9 (35.6, 44.4)	23.4 (19.8, 27.3)	14.3 (10.7, 18.9)	27.2 (23.0, 31.8)	36.3 (31.4, 41.4)	22.3 (18.9, 26.0)	19.5	9.9	-9.2	-4.8	
Women	8.2 (4.6, 23.0)	14.3 (8.1, 24.0)	45.8 (31.9, 60.3)	31.7 (20.2, 46.0)	12.8 (5.9, 25.8)	13.7 (6.5, 26.3)	29.0 (15.7, 47.1)	44.5 (30.6, 59.4)	56.5	-4.6	-36.7**	40.4	
<b>Residence</b>													
Urban	10.3 (8.0, 13.1)	26.8 (23.2, 30.6)	39.8 (35.8, 43.9)	23.2 (19.9, 26.9)	11.5 (8.9, 14.7)	23.1 (19.2, 27.5)	35.2 (30.8, 39.8)	30.3 (25.9, 35.0)	12.1	-13.7	-11.6	30.3**	
Rural	12.7 (8.5, 18.5)	23.0 (18.1, 28.9)	40.3 (34.4, 46.6)	24.0 (19.1, 29.6)	15.7 (10.7, 22.5)	28.8 (23.0, 35.3)	36.5 (29.8, 43.8)	18.9 (14.7, 24.0)	24.3	25.0	-9.4	-21.0	
<b>Region</b>													
Bangkok	9.7 (6.7, 13.6)	26.7 (21.3, 32.8)	39.4 (33.6, 45.6)	24.3 (19.0, 30.5)	11.6 (7.2, 18.1)	24.4 (18.7, 31.3)	31.2 (24.6, 38.7)	32.7 (24.7, 41.9)	20.1	-8.3	-20.8**	35.0	
Central	10.4 (5.3, 19.2)	21.1 (16.2, 27.2)	43.4 (35.4, 51.7)	25.1 (19.4, 31.8)	8.8 (5.4, 14.0)	28.6 (21.9, 36.3)	37.6 (29.8, 46.0)	25.1 (19.7, 31.4)	-15.3	35.2	-13.4	-0.1	
Northern	14.0 (8.2, 22.9)	21.3 (14.7, 29.7)	45.9 (35.8, 56.3)	18.8 (11.7, 28.8)	18.7 (11.3, 29.3)	24.1 (16.9, 33.1)	39.2 (29.7, 49.7)	17.9 (12.6, 24.8)	33.6	13.4	-14.5	-4.8	
Northeastern	13.8 (7.4, 24.4)	27.2 (18.2, 38.4)	34.7 (25.5, 45.3)	24.3 (16.1, 35.0)	16.6 (9.1, 28.3)	29.1 (20.5, 39.7)	33.1 (23.1, 44.9)	21.2 (14.4, 30.0)	19.9	7.3	-4.5	-13.0	
Southern	10.3 (5.8, 17.8)	25.6 (19.5, 32.8)	39.7 (32.8, 47.0)	24.4 (19.3, 30.3)	15.4 (10.2, 22.7)	22.7 (16.2, 30.9)	40.1 (33.1, 47.5)	21.8 (17.2, 27.2)	49.2	-11.1	1.0	-10.8	
<b>Socioeconomic status</b>													
Lowest	16.1 (6.2, 35.9)	33.6 (20.5, 49.8)	29.4 (18.2, 43.8)	20.9 (10.4, 37.6)	14.3 (6.8, 27.6)	28.0 (15.0, 46.0)	47.2 (30.5, 64.6)	10.6 (4.8, 21.8)	-11.4	-16.8	60.4	-49.4**	
Low	17.0 (9.8, 27.8)	24.5 (15.5, 36.6)	41.0 (31.4, 51.3)	17.4 (11.0, 26.5)	17.2 (9.0, 30.5)	32.8 (22.0, 45.7)	38.1 (27.0, 50.7)	11.9 (6.6, 20.4)	1.2	33.5	-7.0	-31.8	
Middle	8.0 (5.0, 12.5)	21.2 (16.4, 27.1)	44.3 (37.1, 51.8)	26.5 (20.5, 33.5)	15.1 (9.0, 24.2)	27.1 (20.4, 35.2)	32.3 (24.9, 40.7)	25.5 (18.5, 33.9)	89.6	27.8	-27.1**	-3.9	
High	13.2 (7.2, 22.9)	27.9 (21.9, 34.9)	37.5 (30.3, 45.2)	21.5 (15.9, 28.3)	13.0 (8.5, 19.2)	23.3 (17.5, 30.4)	33.9 (27.2, 41.3)	29.8 (23.2, 37.4)	-1.6	-16.4	-9.5	39.0	
Highest	5.1 (2.6, 9.7)	17.3 (11.2, 25.8)	41.5 (31.1, 52.7)	36.0 (27.1, 46.1)	10.7 (5.6, 19.7)	23.3 (16.2, 32.3)	33.0 (24.5, 42.8)	33.0 (24.3, 43.0)	108.9	34.5	-20.5	-8.6	

<sup>1</sup>Among respondents 20–34 years of age who were ever daily smokers

\*\* P&lt;0.05

**Table 4.22:** Percentage of former daily smokers among all adults (current non-smokers) and former daily smokers among ever daily smokers, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Former daily smokers among all adults <sup>1</sup>		Former daily smokers among ever daily smokers <sup>1,2</sup>	
	2009	2011	2009	2011
<b>Overall</b>	8.9 (8.3, 9.5)	8.4 (7.8, 9.0)	28.8 (27.0, 30.7)	27.2 (25.5, 29.1)
<b>Gender</b>				
Men	16.7 (15.5, 18.0)	16.0 (14.9, 17.1)	28.4 (26.6, 30.4)	26.8 (25.0, 28.8)
Women	1.4 (1.1, 1.7)	1.2 (1.0, 1.4)	34.4 (29.0, 40.3)	33.8 (29.2, 38.7)
<b>Age (years)</b>				
15–24	1.1 (0.7, 1.9)	0.5 (0.3, 0.7)	6.2 (3.7, 10.2)	2.2 (1.4, 3.7)
25–44	7.0 (6.2, 7.9)	5.9 (5.1, 6.8)	22.4 (20.0, 25.0)	19.7 (17.2, 22.5)
45–59	12.7 (11.4, 14.0)	12.0 (10.8, 13.2)	35.6 (32.6, 38.7)	32.9 (30.1, 35.8)
60+	18.2 (16.7, 19.8)	18.3 (16.8, 19.8)	47.5 (44.1, 50.8)	49.9 (46.6, 53.1)
<b>Residence</b>				
Urban	8.3 (7.8, 8.9)	8.3 (7.7, 9.0)	29.4 (27.6, 31.3)	30.7 (28.7, 32.8)
Rural	9.1 (8.3, 10.0)	8.4 (7.6, 9.3)	28.6 (26.2, 31.2)	25.7 (23.4, 28.2)
<b>Education level</b>				
Less than primary	12.9 (11.9, 14.0)	12.9 (11.9, 14.0)	35.5 (32.9, 38.2)	36.3 (33.7, 39.1)
Primary	7.5 (6.4, 8.8)	6.5 (5.3, 7.8)	21.7 (18.5, 25.2)	17.6 (14.4, 21.3)
Secondary	6.0 (5.2, 6.9)	6.3 (5.5, 7.2)	22.7 (19.8, 25.9)	22.7 (19.9, 25.8)
University	7.8 (6.5, 9.2)	5.7 (4.8, 6.8)	38.3 (33.1, 43.8)	33.0 (28.2, 38.3)
<b>Region</b>				
Bangkok	8.2 (7.3, 9.1)	9.1 (8.0, 10.3)	31.4 (28.2, 34.9)	35.5 (31.6, 39.5)
Central	8.2 (7.3, 9.2)	6.9 (6.0, 8.0)	27.7 (24.8, 30.8)	24.5 (21.4, 27.9)
Northern	11.6 (10.1, 13.2)	10.7 (9.5, 12.1)	36.2 (31.8, 40.8)	34.7 (30.9, 38.8)
Northeastern	9.2 (7.9, 10.6)	8.8 (7.6, 10.2)	29.2 (25.4, 33.4)	27.2 (23.4, 31.3)
Southern	6.0 (5.2, 7.0)	6.0 (5.2, 7.0)	18.2 (15.7, 20.9)	17.5 (14.9, 20.5)
<b>Socioeconomic status</b>				
Lowest	7.9 (6.9, 9.0)	6.6 (5.7, 7.6)	32.8 (29.0, 36.8)	26.0 (22.3, 30.2)
Low	7.8 (6.8, 8.9)	8.1 (7.1, 9.2)	26.3 (23.0, 29.9)	25.5 (22.3, 29.1)
Middle	8.6 (7.4, 10.1)	7.9 (6.7, 9.3)	24.1 (21.0, 27.5)	22.8 (19.5, 26.4)
High	9.0 (7.9, 10.4)	9.6 (8.2, 11.1)	25.6 (22.4, 29.0)	28.3 (24.7, 32.2)
Highest	12.2 (10.7, 13.8)	10.7 (9.3, 12.4)	38.6 (34.6, 42.7)	36.5 (32.2, 41.0)

<sup>1</sup> Current non-smokers<sup>2</sup> Also known as the quit ratio

\*\*, P&lt;0.05





## ***5. Cessation***

## 5. Cessation

This chapter provides the findings of cessation in two main sections. The first section describes the findings in the 2011 GATS, and the second section compares the key findings of the 2009 GATS with the 2011 GATS.

### Key findings in 2011

#### o **Smoked tobacco products**

- 54.0% of current smokers planned to or were thinking about quitting.
- 36.7% of current smokers and recent quitters (<12 months) made a quit attempt in the past 12 months.
- 65.3% of smokers were asked if they smoked tobacco by health-care providers (HCPs) in the past 12 months.
- 55.8% of smokers received advice to quit smoking by HCPs in the past 12 months.
- “Quitting on your own” was the most common cessation method reported (90.7%) by smokers in the past 12 months.

#### o **Smokeless tobacco products**

- 22.2% of current smokeless tobacco users planned to or were thinking about quitting.
- 16.4% of current smokeless tobacco users and recent quitters (<12 months) made a quit attempt in the past 12 months.
- 25.1% of smokeless tobacco users were asked if they used smokeless tobacco by HCPs in the past 12 months.
- 16.3% of smokeless tobacco users received advice to quit such use by HCPs in the past 12 months.
- “Quitting on your own” was the most common cessation method reported (79.5%) by smokeless tobacco users in the past 12 months.

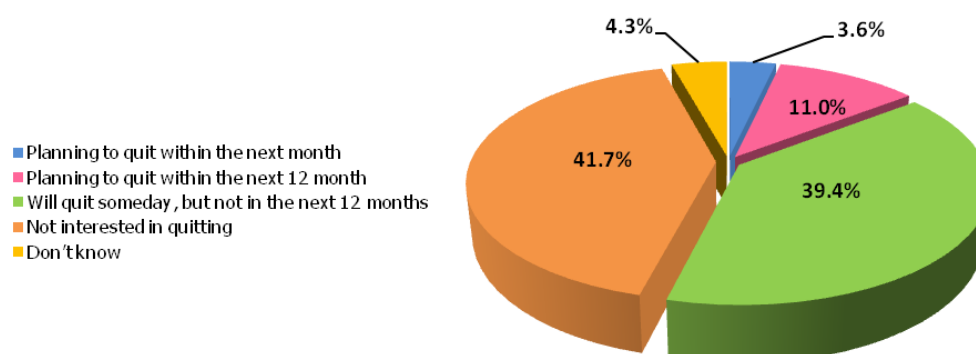
The findings of the 2011 GATS present various aspects of tobacco use cessation among Thai adults who were current or former users of both smoked and smokeless tobacco products. These cover interest in quitting tobacco use, quit attempts of smokers and smokeless tobacco users, receiving cessation advice from health-care providers (HCPs), cessation methods used and duration of abstinence from tobacco use during the last quit attempt.

### 5.1 Cessation in 2011

#### 5.1.1 Interest in quitting tobacco use

Interest in quitting smoking among current smokers is defined as planning to quit or thinking about quitting smoking within the next month, 12 months, or some day. **Figure 5.1** and **Table 5.1** present five categories of “interest in quitting smoking”, which include “planning to quit within the next month”, “thinking about quitting within the next 12 months”, “will quit some day, but not in the next 12 months”, “not interested in quitting” and “don’t know”.

**Figure 5.1:** Percentage distribution of current smokers aged 15 years and above, by interest in quitting smoking – GATS Thailand, 2011



**Table 5.1:** Percentage distribution of current smokers aged 15 years and above, by interest in quitting smoking and selected demographic characteristics – GATS Thailand, 2011

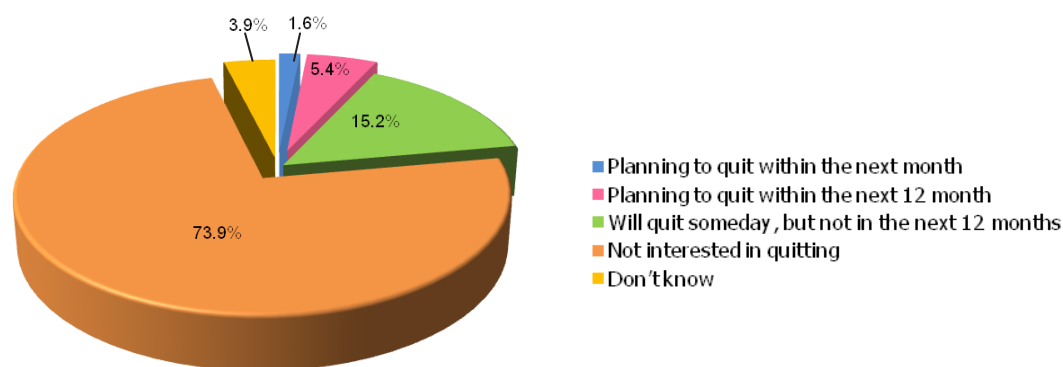
Characteristic	Interest in quitting smoking <sup>1</sup>					Total
	Planning to quit within the next month	Thinking about quitting within the next 12 months	Will quit some day, but not in the next 12 months	Not interested in quitting	Don't know	
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	3.6 (2.8, 4.5)	11.0 (9.4, 12.8)	39.4 (36.6, 42.2)	41.7 (39.0, 44.4)	4.3 (3.1, 5.9)	100
<b>Gender</b>						
Men	3.4 (2.7, 4.4)	10.9 (9.3, 12.8)	39.5 (36.7, 42.5)	42.0 (39.3, 44.8)	4.1 (3.0, 5.6)	100
Women	6.5 (4.2, 9.9)	12.5 (8.6, 18.0)	37.3 (30.5, 44.7)	36.0 (28.9, 43.7)	7.6 (3.8, 14.6)	100
<b>Age (years)</b>						
15–24	3.1 (1.6, 6.0)	10.8 (6.8, 16.9)	34.8 (28.1, 42.1)	44.7 (37.3, 52.4)	6.5 (3.4, 12.0)	100
25–44	4.1 (2.9, 5.6)	11.4 (9.1, 14.2)	40.8 (36.7, 45.1)	40.7 (36.9, 44.5)	3.1 (2.1, 4.4)	100
45–59	3.0 (2.1, 4.3)	10.7 (8.6, 13.2)	41.4 (37.9, 45.1)	40.1 (36.5, 43.9)	4.7 (3.1, 7.2)	100
60+	3.8 (2.5, 5.8)	10.7 (8.0, 14.0)	36.7 (31.9, 41.9)	44.1 (39.2, 49.0)	4.8 (3.0, 7.5)	100
<b>Residence</b>						
Urban	5.4 (4.2, 7.0)	13.1 (11.2, 15.3)	40.3 (37.5, 43.2)	37.9 (35.2, 40.6)	3.3 (2.5, 4.3)	100
Rural	2.8 (2.0, 4.1)	10.1 (8.1, 12.6)	39.1 (35.3, 42.9)	43.3 (39.7, 46.9)	4.7 (3.2, 7.1)	100
<b>Education level</b>						
Less than primary	3.2 (2.3, 4.5)	9.0 (7.3, 11.1)	38.7 (35.4, 42.2)	43.3 (39.7, 47.0)	5.7 (3.5, 9.2)	100
Primary	3.4 (2.0, 5.7)	11.5 (8.1, 16.0)	37.3 (32.0, 43.0)	42.7 (37.8, 47.8)	5.1 (3.2, 7.9)	100
Secondary	3.5 (2.4, 5.2)	12.3 (9.8, 15.2)	40.9 (36.8, 45.2)	40.3 (36.0, 44.9)	2.9 (1.7, 5.0)	100
University	6.1 (3.9, 9.4)	12.0 (7.4, 18.9)	43.1 (36.3, 50.2)	36.9 (30.6, 43.6)	1.9 (1.0, 3.6)	100
<b>Region</b>						
Bangkok	6.0 (3.9, 9.3)	12.5 (9.8, 15.8)	39.0 (34.4, 43.9)	40.0 (35.8, 44.4)	2.5 (1.4, 4.3)	100
Central	5.6 (3.7, 8.4)	8.8 (6.7, 11.4)	39.9 (35.0, 45.1)	42.6 (37.5, 47.8)	3.2 (2.0, 4.9)	100
Northern	1.8 (0.9, 3.6)	6.7 (4.5, 9.7)	36.9 (31.7, 42.4)	46.9 (40.4, 53.5)	7.8 (3.5, 16.5)	100
Northeastern	2.5 (1.4, 4.4)	15.0 (11.2, 19.8)	45.0 (38.9, 51.3)	34.8 (29.7, 40.3)	2.7 (1.3, 5.5)	100
Southern	3.7 (2.4, 5.7)	9.6 (7.5, 12.3)	29.8 (25.5, 34.5)	50.3 (45.0, 55.5)	6.6 (4.4, 9.8)	100
<b>Socioeconomic status</b>						
Lowest	3.6 (2.2, 6.0)	10.4 (6.8, 15.6)	33.5 (27.8, 39.6)	47.0 (40.6, 53.5)	5.5 (2.9, 10.4)	100
Low	2.2 (1.2, 4.1)	9.4 (6.8, 12.9)	41.2 (35.8, 46.9)	41.7 (36.4, 47.1)	5.5 (3.0, 10.0)	100
Middle	3.1 (1.9, 5.1)	12.0 (8.7, 16.2)	37.9 (33.6, 42.5)	42.9 (38.4, 47.5)	4.1 (2.7, 6.2)	100
High	4.5 (2.9, 7.0)	11.2 (8.8, 14.3)	43.6 (38.8, 48.5)	37.5 (33.1, 42.1)	3.1 (1.9, 4.9)	100
Highest	5.1 (3.6, 7.3)	12.6 (9.7, 16.2)	41.9 (36.8, 47.2)	37.6 (32.3, 43.3)	2.7 (1.7, 4.3)	100

<sup>1</sup>Among current daily or less than daily smokers

The largest proportions of current smokers reported that they were “not interested in quitting” and “will quit some day, but not in the next 12 months”. There were no major differences within each category regarding “interest in quitting smoking” by gender, age group, residence, education level, regions and SES.

**Figure 5.1a** and **Table 5.1a** show the same five categories of “interest in quitting smokeless tobacco products” among current smokeless tobacco users as in **Table 5.1**. Because of the small sample size (less than 25), four demographic characteristics were excluded, i.e. age group, education level, region and SES. The largest proportion of current smokeless tobacco users (73.9%) reported that they were not interested in quitting, which was almost twice that of current smokers (41.7%). Among the group “not interested in quitting”, the proportion of women was significantly higher than that of men (77.3% vs 56.9%).

**Figure 5.1a:** Percentage distribution of current smokeless tobacco users aged 15 years and above, by interest in quitting the use of smokeless tobacco products – GATS Thailand, 2011



**Table 5.1a:** Percentage distribution of current smokeless tobacco users aged 15 years and above, by interest in quitting the use of smokeless tobacco products and selected demographic characteristics – GATS Thailand, 2011

Characteristic	Interest in quitting use of smokeless tobacco products <sup>1</sup>					Total
	Planning to quit within the next month	Thinking about quitting within the next 12 months	Will quit some day, but not in the next 12 months	Not interested in quitting	Don't know	
<b>Overall</b>	1.6 (0.8, 3.1)	5.4 (3.8, 7.8)	15.2 (12.2, 18.9)	73.9 (69.2, 78.2)	3.9 (1.9, 7.5)	100
<i>Percentage (95% CI)</i>						
<b>Gender</b>						
Men	4.1 (1.7, 9.2)	11.9 (6.3, 21.3)	19.0 (12.3, 28.2)	56.9 (46.4, 66.8)	8.1 (3.3, 18.3)	100
Women	1.2 (0.5, 2.7)	4.2 (2.6, 6.6)	14.5 (11.2, 18.6)	77.3 (72.3, 81.6)	2.9 (1.5, 5.7)	100
<b>Residence</b>						
Urban	4.7 (1.8, 11.3)	4.8 (2.6, 8.7)	17.8 (12.0, 25.4)	71.5 (62.9, 78.7)	1.3 (0.5, 3.6)	100
Rural	1.1 (0.5, 2.6)	5.6 (3.7, 8.4)	14.8 (11.4, 18.9)	74.4 (69.0, 79.1)	4.2 (2.0, 8.6)	100

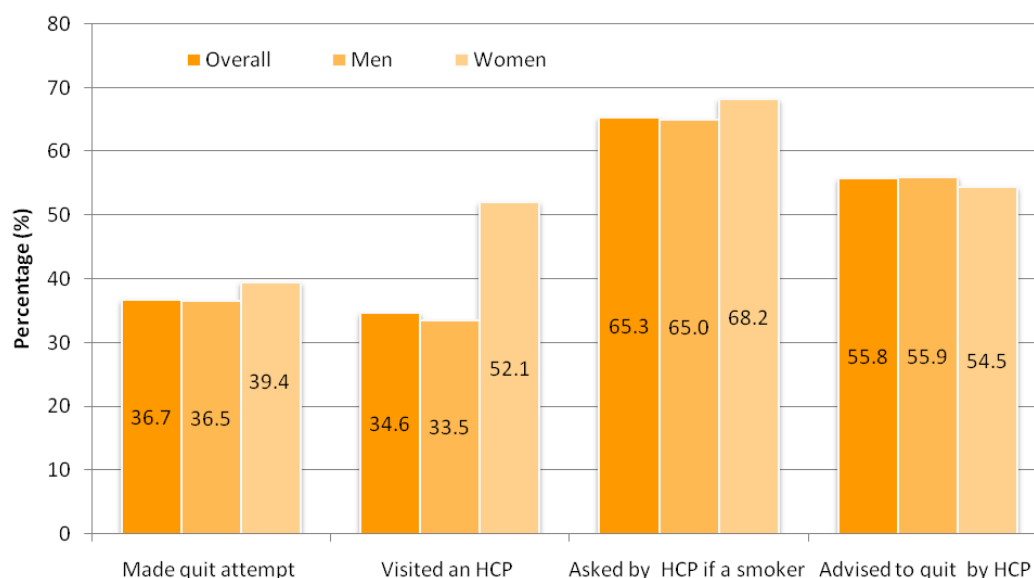
<sup>1</sup>Among current daily or less than daily smokers

### 5.1.2 Quit attempts

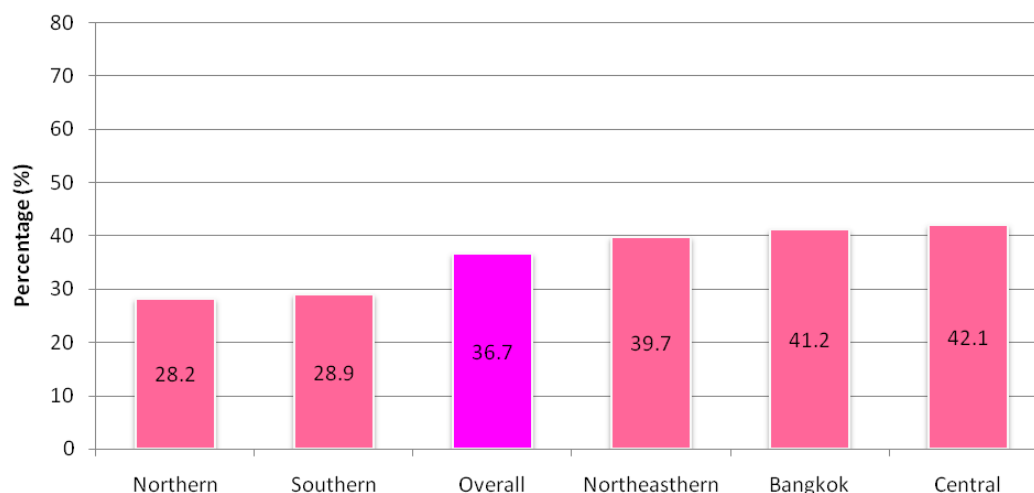
Quit attempts were calculated among all smokers who smoked in the past 12 months, which included current smokers and those who had quit within the past 12 months. **Figure 5.2a** and **Table 5.2** show the proportion of those who in the past 12 months made a quit attempt, visited an HCP, were asked about smoking by an HCP, and had received advice from an HCP on quitting smoking.

Overall, 36.7% of smokers made a quit attempt in the past 12 months. The percentage of those who made a quit attempt was not significantly different by gender, residence, age group, education level and SES. By region, the percentage varied from 41.2% in Bangkok to 28.2% in the Northern region. The quit attempt percentage was higher in Bangkok metropolis, Central region and Northeastern region as compared to the Northern and Southern regions (**Figure 5.2b**).

**Figure 5.2a:** Percentage of smokers aged 15 years and above who made a quit attempt and received health-care provider assistance in the past 12 months – GATS Thailand, 2011



**Figure 5.2b:** Percentage of smokers aged 15 years and above who made a quit attempt in the past 12 months, by region – GATS Thailand, 2011



**Table 5.2:** Percentage of smokers<sup>1</sup> aged 15 years and above who made a quit attempt and received health-care provider advice in the past 12 months, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Smoking cessation and health-care seeking behaviour			
	Made quit attempt <sup>2</sup>	Visited an HCP <sup>2</sup>	Asked by HCP if a smoker <sup>3</sup>	Advised to quit by an HCP <sup>3</sup>
	<i>Percentage (95% CI)</i>			
<b>Overall</b>	36.7 (34.0, 39.4)	34.6 (32.3, 36.9)	65.3 (61.5, 68.9)	55.8 (52.0, 59.5)
<b>Gender</b>				
Men	36.5 (33.7, 39.3)	33.5 (31.2, 35.9)	65.0 (61.0, 68.9)	55.9 (51.9, 59.9)
Women	39.4 (32.4, 46.9)	52.1 (45.0, 59.2)	68.2 (57.5, 77.3)	54.5 (44.6, 64.0)
<b>Age (years)</b>				
15–24	42.6 (35.2, 50.3)	29.6 (23.3, 36.8)	42.9 (30.5, 56.2)	32.8 (21.3, 46.7)
25–44	36.6 (32.6, 40.7)	27.4 (24.3, 30.7)	65.0 (58.9, 70.7)	52.0 (45.7, 58.3)
45–59	34.6 (31.1, 38.2)	38.3 (34.9, 41.8)	69.1 (63.3, 74.4)	60.7 (54.7, 66.4)
60+	33.4 (29.2, 37.8)	57.4 (53.0, 61.7)	75.9 (70.6, 80.5)	70.9 (65.3, 76.0)
<b>Residence</b>				
Urban	41.3 (38.5, 44.1)	33.6 (30.9, 36.4)	68.4 (63.8, 72.7)	56.6 (51.9, 61.2)
Rural	34.7 (31.1, 38.5)	34.9 (32.0, 38.1)	64.1 (59.1, 68.8)	55.5 (50.6, 60.3)
<b>Education level</b>				
Less than primary	31.8 (28.6, 35.2)	43.9 (40.8, 47.0)	73.1 (68.3, 77.5)	66.5 (61.5, 71.2)
Primary	37.3 (31.8, 43.2)	30.5 (25.8, 35.6)	56.6 (47.5, 65.4)	47.5 (38.5, 56.6)
Secondary	39.8 (35.4, 44.3)	29.3 (25.5, 33.5)	60.3 (53.5, 66.8)	46.3 (39.5, 53.3)
University	40.2 (33.9, 47.0)	34.7 (28.4, 41.6)	71.3 (60.3, 80.2)	63.1 (51.7, 73.2)
<b>Region</b>				
Bangkok	41.2 (36.4, 46.2)	30.8 (26.4, 35.6)	71.7 (64.9, 77.7)	60.5 (53.0, 67.5)
Central	42.1 (37.5, 46.9)	36.6 (32.6, 40.8)	59.9 (52.1, 67.2)	49.6 (42.6, 56.7)
Northern	28.2 (22.6, 34.7)	37.4 (32.2, 43.0)	62.6 (53.5, 70.8)	53.0 (44.5, 61.3)
Northeastern	39.7 (33.8, 45.9)	33.9 (29.5, 38.6)	71.0 (63.1, 77.7)	64.6 (56.7, 71.8)
Southern	28.9 (24.9, 33.2)	31.8 (26.8, 37.4)	61.7 (55.0, 68.0)	47.3 (41.1, 53.5)
<b>Socioeconomic status</b>				
Lowest	36.5 (29.9, 43.6)	39.4 (33.7, 45.4)	63.5 (54.0, 72.0)	56.1 (46.8, 65.0)
Low	30.5 (25.6, 35.9)	36.6 (31.4, 42.1)	69.1 (61.5, 75.9)	60.1 (51.5, 68.1)
Middle	37.2 (32.7, 41.9)	28.2 (24.2, 32.7)	65.4 (57.4, 72.6)	53.8 (46.1, 61.4)
High	39.5 (35.1, 44.2)	35.7 (31.5, 40.2)	63.9 (56.6, 70.6)	52.5 (45.2, 59.7)
Highest	41.1 (36.5, 45.9)	32.9 (28.0, 38.2)	64.4 (56.3, 71.8)	56.4 (48.9, 63.7)

HCP health-care provider

<sup>1</sup> Includes current tobacco smokers and former smokers who had been abstinent for less than 12 months<sup>2</sup> Among current smokers and former smokers who had been abstinent for less than 12 months<sup>3</sup> Among current smokers and former smokers who had been abstinent for less than 12 months, and who visited an HCP during the past 12 months

**Table 5.2a** gives the proportion of smokeless tobacco users in the past 12 months (current smokeless tobacco users and those who quit within the past 12 months) who made a quit attempt, visited an HCP, were asked about smokeless tobacco use by an HCP, and received advice from an HCP on quitting the use of smokeless tobacco products. Because of the small sample size (less than 25), four demographic characteristics were excluded, i.e. age group, education level, region and SES.

Overall, 16.4% of smokeless tobacco users made a quit attempt in the past 12 months, which was less than half that of tobacco smokers (36.7%). There were no significant differences in quit attempts by gender and residence.

**Table 5.2a:** Percentage of smokeless tobacco users<sup>1</sup> aged 15 years and above who made a quit attempt and received health-care provider advice in the past 12 months, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Smokeless tobacco use cessation and receiving cessation advice from HCP			
	Made a quit attempt <sup>2</sup>	Visited an HCP <sup>2</sup>	Asked by HCP if a user <sup>3</sup>	Advised to quit by an HCP <sup>3</sup>
	<i>Percentage (95% CI)</i>			
<b>Overall</b>	16.4 (12.9, 20.7)	69.0 (63.9, 73.7)	25.1 (20.2, 30.6)	16.3 (12.8, 20.6)
<b>Gender</b>				
Men	26.3 (17.3, 38.0)	51.6 (37.8, 65.0)	20.8 (10.1, 37.9)	13.2 (5.8, 27.5)
Women	14.3 (10.5, 19.1)	71.5 (66.2, 76.3)	25.8 (20.3, 32.1)	16.9 (13.0, 21.6)
<b>Residence</b>				
Urban	19.9 (13.4, 28.5)	59.7 (51.1, 67.7)	20.0 (13.7, 28.4)	13.5 (9.0, 19.7)
Rural	15.8 (11.9, 20.7)	70.6 (64.8, 75.7)	25.8 (20.4, 32.2)	16.8 (12.8, 21.6)

HCP health-care provider

<sup>1</sup> Includes current smokeless tobacco users and former smokeless tobacco users who had been abstinent for less than 12 months

<sup>2</sup> Among current smokeless tobacco users and former smokeless tobacco users who had been abstinent for less than 12 months

<sup>3</sup> Among current smokeless tobacco users and former smokeless tobacco users who had been abstinent for less than 12 months, and who visited an HCP during the past 12 months

### 5.1.3 Tobacco use cessation and receiving cessation advice from health-care providers

#### 5.1.3.1 Visiting health-care providers

**Table 5.2** shows that, overall, 34.6% of smokers (current smokers and recent quitters [<12 months]) visited an HCP during the past 12 months. Women smokers had a higher proportion of HCP visits than men smokers (52.1% vs 33.5%). Smokers aged 60 years and above had the highest rate of HCP visits (57.4%), which was significantly higher than visits among those in the youngest age group of 15–24 years (29.6%).

There was no significant difference by residence (33.6% in urban areas and 34.9% in rural areas). By education level, visits to an HCP varied from 29.3% (secondary level) to 43.9% (less than primary level). By SES status, visits to an HCP varied from 28.2% (middle SES) to 39.4% (lowest SES).

**Table 5.2a** shows that 69.0% of smokeless tobacco users (current smokeless tobacco users and recent quitters [<12 months]) visited an HCP during the past 12 months. Women's visits were more frequent than men's visits (71.5% vs 51.6%). There was no significant difference in visits to an HCP during the past 12 months by residence.



### 5.1.3.2 Asking about the use of tobacco by an HCP

**Table 5.2** shows that among smokers (current smokers and recent quitters [<12 months]) who visited an HCP during the previous 12 months, 65.3% were asked by an HCP whether they smoked. There was no significant difference by gender (65.0% vs 68.2%).

The percentage was higher among the older age group of 45–59 years (69.1%) and 60+ years (75.9%) as compared to the youngest age group of 15–24 years (42.9%). There was no significant difference by education level, residence, region and SES.

**Table 5.2a** shows that 25.1% of smokeless tobacco users (current smokeless users and recent quitters [<12 months]) were asked by an HCP whether they used smokeless tobacco. There were no significant differences by gender and residence.

### 5.1.3.3 Being advised to quit by an HCP

As shown in **Table 5.2**, the overall percentage of those who received advice to quit smoking by HCPs in the past 12 months was 55.8%. There was no significant difference between men and women in receiving advice to quit smoking. There was a significant difference in receiving advice among the 60+ years age group as compared to the youngest age group of 15–24 years (70.9% vs 32.8%).

The percentages of those who received advice to quit smoking by HCPs by residence (rural and urban) were almost the same. Smokers with the lowest education level had the highest rate of receiving advice on quitting smoking (66.5%), which was almost the same as those with the highest education level (63.1%); whereas those with a primary and secondary level of education had a significantly lower rate of receiving advice (47.5% and 46.3%, respectively). Smokers in the Southern region had the lowest rate of receiving advice on quitting smoking (47.3%), which was significantly different from that in the Northeastern region (64.6%). There were no significant differences in receiving advice on quitting smoking by SES.

As shown in **Table 5.2a**, the overall rate of having received advice to quit using smokeless tobacco by HCPs in the past 12 months was 16.3%, which was far less than the corresponding figures for smokers (55.8%), as given in **Table 5.2**. There were no significant differences in receiving advice on quitting the use of smokeless tobacco products by gender and residence.

### 5.1.4 Cessation methods used

The survey collected information on cessation methods used by smokers (current tobacco smokers and recent quitters [<12 months]) in the past 12 months to try and quit smoking. The four categories reported are (1) pharmacotherapy, including nicotine replacement therapy and other prescribed medications, (2) counselling and advice, including counselling at a cessation clinic and through a quit-line, (3) quitting on one's own, which includes the cold turkey method – stop smoking all at once, gradual reduction in the number of cigarettes smoked per day and (4) other methods, including traditional medicines and any other methods reported by the respondents.

As given in **Table 5.3**, a high percentage of smokers tried to quit on their own in the past 12 months (90.7%). The prevalence of those who tried to quit on their own did not vary significantly by gender, age group, residence, education level, region and SES.

Regarding pharmacotherapy, women smokers used this method more than men smokers; however, the difference was not significant. In urban areas, 10.1% of smokers used this method as compared to 6.3% in rural areas.

**Table 5.3:** Percentage of smokers<sup>1</sup> aged 15 years or above who made a quit attempt in the past 12 months and used any cessation method, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Use of cessation method <sup>2</sup>			
	Pharmacotherapy <sup>3</sup>	Counselling/advice <sup>4</sup>	Quit on your own	Other <sup>5</sup>
	<i>Percentage (95% CI)</i>			
<b>Overall</b>	7.6 (5.7, 10.1)	4.8 (3.6, 6.3)	90.7 (88.0, 92.9)	2.3 (1.5, 3.5)
<b>Gender</b>				
Men	7.5 (5.5, 10.2)	4.6 (3.4, 6.2)	91.1 (88.2, 93.3)	2.1 (1.3, 3.4)
Women	9.3 (5.0, 17.0)	7.1 (3.8, 13.1)	84.7 (75.3, 91.0)	4.7 (2.1, 9.9)
<b>Age (years)</b>				
15–24	9.3 (4.6, 17.9)	5.8 (2.6, 12.1)	92.8 (83.2, 97.1)	3.1 (1.2, 8.3)
25–44	5.9 (4.2, 8.2)	3.0 (1.9, 4.5)	91.8 (88.4, 94.2)	1.7 (0.9, 3.6)
45–59	10.0 (6.5, 15.3)	5.6 (3.4, 9.1)	89.3 (85.1, 92.4)	1.4 (0.7, 3.0)
60+	6.0 (3.3, 10.7)	8.0 (4.8, 13.0)	86.5 (80.3, 91.0)	4.5 (2.0, 9.8)
<b>Residence</b>				
Urban	10.1 (7.7, 13.1)	6.5 (4.7, 9.0)	88.7 (85.7, 91.2)	2.8 (1.6, 4.9)
Rural	6.3 (3.9, 10.1)	3.9 (2.5, 6.0)	91.7 (87.6, 94.5)	2.0 (1.1, 3.6)
<b>Education level</b>				
Less than primary	6.3 (4.0, 9.6)	5.4 (3.7, 8.0)	88.5 (83.8, 91.9)	3.2 (1.8, 5.6)
Primary	6.7 (3.7, 11.7)	1.2 (0.6, 2.4)	94.3 (89.6, 97.0)	0.7 (0.2, 2.6)
Secondary	9.2 (6.2, 13.5)	6.6 (4.2, 10.2)	92.0 (88.6, 94.4)	2.9 (1.4, 5.9)
University	7.6 (4.1, 13.6)	6.4 (3.2, 12.4)	80.3 (66.4, 89.4)	2.0 (0.6, 6.4)
<b>Region</b>				
Bangkok	6.9 (4.1, 11.3)	6.3 (3.6, 10.8)	90.9 (86.2, 94.1)	1.6 (0.6, 4.2)
Central	5.7 (3.8, 8.5)	5.9 (3.7, 9.3)	88.9 (84.2, 92.3)	3.6 (1.8, 7.1)
Northern	4.9 (2.7, 8.8)	5.0 (2.8, 8.8)	89.7 (83.0, 94.0)	1.0 (0.2, 4.3)
Northeastern	9.6 (5.6, 16.0)	3.3 (1.6, 6.7)	91.5 (84.5, 95.6)	1.7 (0.7, 4.1)
Southern	8.8 (4.8, 15.4)	5.5 (3.2, 9.4)	93.0 (89.3, 95.5)	2.8 (1.4, 5.4)
<b>Socioeconomic status</b>				
Lowest	6.4 (3.0, 13.2)	5.8 (2.8, 11.4)	95.7 (93.5, 97.2)	1.5 (0.3, 6.5)
Low	5.0 (2.8, 8.9)	5.4 (3.2, 9.0)	90.2 (81.9, 95.0)	4.3 (2.2, 8.4)
Middle	8.8 (5.7, 13.3)	2.6 (1.4, 4.6)	91.2 (86.8, 94.3)	2.3 (1.0, 5.2)
High	7.1 (4.1, 12.1)	5.1 (3.1, 8.2)	88.6 (82.3, 92.9)	1.9 (0.7, 5.0)
Highest	11.1 (6.8, 17.7)	5.6 (2.7, 11.0)	86.8 (81.1, 91.0)	1.4 (0.5, 3.9)

<sup>1</sup> Includes current smokers and former smokers who had been abstinent for less than 12 months

<sup>2</sup> Among current smokers who made a quit attempt in the past 12 months and former smokers who had been abstinent for less than 12 months

<sup>3</sup> Pharmacotherapy includes nicotine replacement therapy and prescription medications

<sup>4</sup> Includes counselling at a cessation clinic and a telephone quit-line/helpline

<sup>5</sup> "Other" includes traditional medicines and any other reported methods.

**Table 5.3a** presents data on cessation methods used by smokeless tobacco users (current users and recent quitters [<12 months]) in the past 12 months. Because of the unweighted sample size of less than 25, four demographic characteristics were excluded, i.e. age group, education level, region and SES.

As in the case of smokers, a high percentage of smokeless tobacco users tried to quit on their own in the past 12 months (79.5%), with other methods falling far behind.

**Table 5.3a:** Percentage of smokeless tobacco users<sup>1</sup> aged 15 years and above who made a quit attempt in the past 12 months and used any cessation method, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Use of cessation method <sup>2</sup>			
	Pharmacotherapy <sup>3</sup>	Counselling/advice <sup>4</sup>	Quit on your own	Other <sup>5</sup>
	<i>Percentage (95% CI)</i>			
<b>Overall</b>	2.1 (0.5, 7.8)	3.9 (1.2, 11.4)	79.5 (69.2, 87.0)	3.2 (1.3, 7.8)
<b>Gender</b>				
Men	2.5 (0.3, 16.0)	8.8 (2.3, 28.1)	80.2 (63.6, 90.4)	5.0 (1.3, 17.9)
Women	2.0 (0.3, 10.8)	1.8 (0.3, 12.1)	79.2 (65.7, 88.4)	2.4 (0.7, 8.0)
<b>Residence</b>				
Urban	3.8 (0.5, 23.1)	0.0	80.1 (61.5, 91.0)	4.1 (0.6, 24.1)
Rural	1.7 (0.3, 9.7)	4.7 (1.5, 13.9)	79.4 (67.2, 87.9)	3.0 (1.1, 8.2)

<sup>1</sup> Includes current smokeless tobacco users and former smokeless tobacco users who had been abstinent for less than 12 months

<sup>2</sup> Among current smokeless tobacco users who had made a quit attempt in the past 12 months and former smokeless tobacco users who had been abstinent for less than 12 months

<sup>3</sup> Pharmacotherapy includes nicotine replacement therapy and prescription medications

<sup>4</sup> Includes counselling at a cessation clinic and through a telephone quit-line/helpline

<sup>5</sup> "Other" includes traditional medicines and other products. Categories may be adjusted after reviewing the distributions.

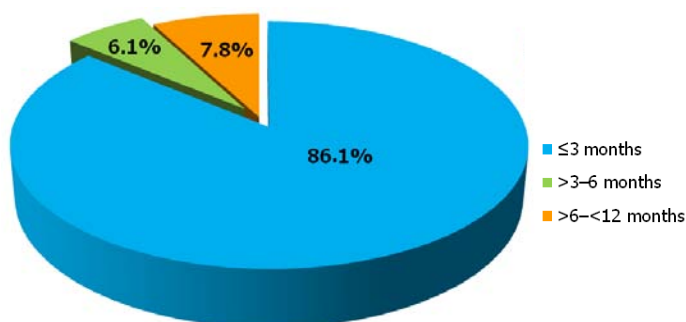
### 5.1.5 Duration of abstinence from smoked tobacco use after the last quit attempt

**Figure 5.3** and **Table 5.4** presents the percentage distribution as well as average duration (months) of smoking abstinence since the last quit attempt of current smokers in the past 12 months. The duration of abstinence was divided into three groups –  $\leq 3$  months,  $>3-6$  months, and  $>6-12$  months. The survey revealed that the average duration of abstinence among current smokers was 1.79 months. There were no significant differences in average duration of abstinence by gender, age group, residence, education level, region and SES, which varied from 1.42 months to 2.14 months.

For the majority of current smokers, the duration of abstinence was less than or equal to three months (86.1%). There was no significant difference in the duration of abstinence between the more than three months to six months (6.1%) group and more than six months and less than 12 months (7.8%) group.

No significant differences in periods of abstinence were found by selected demographic characteristics.

**Figure 5.3:** Percentage distribution by average duration of smoking abstinence during the last quit attempt in the past 12 months among current smokers aged 15 years and above – GATS Thailand, 2011



**Table 5.4:** Percentage distribution and average duration of smoking abstinence during the last quit attempt in the past 12 months among current smokers aged 15 years and above, by selected demographic characteristic – GATS Thailand, 2011

Characteristic	Duration of abstinence (months)			Total	Mean (95% CI)
	≤3 months	>3-6 months	>6-12 months		
	<i>Percentage (95% CI)</i>				
<b>Overall</b>	86.1 (82.1, 89.4)	6.1 (4.6, 8.1)	7.8 (5.3, 11.1)	100	1.79 (1.48, 2.10)
<b>Gender</b>					
Men	86.5 (82.4, 89.7)	5.9 (4.3, 8.0)	7.6 (5.1, 11.3)	100	1.78 (1.46, 2.10)
Women	81.0 (69.8, 88.7)	9.4 (4.0, 20.7)	9.6 (5.0, 17.5)	100	1.94 (1.31, 2.57)
<b>Age (years)</b>					
15-24	85.4 (71.6, 93.2)	4.1 (1.5, 10.7)	10.4 (3.7, 25.9)	100	1.97 (0.91, 3.03)
25-44	85.2 (78.9, 89.9)	6.0 (3.7, 9.6)	8.8 (5.5, 13.7)	100	1.88 (1.43, 2.33)
45-59	88.1 (83.6, 91.4)	7.7 (5.0, 11.8)	4.2 (2.7, 6.5)	100	1.53 (1.25, 1.81)
60+	86.8 (81.2, 91.0)	6.3 (3.7, 10.5)	6.9 (3.8, 11.9)	100	1.68 (1.31, 2.04)
<b>Residence</b>					
Urban	86.7 (83.6, 89.3)	7.0 (5.1, 9.6)	6.3 (4.6, 8.6)	100	1.73 (1.52, 1.94)
Rural	85.9 (79.7, 90.4)	5.7 (3.7, 8.5)	8.5 (5.1, 13.6)	100	1.82 (1.36, 2.28)
<b>Education level</b>					
Less than primary	89.3 (85.1, 92.4)	5.3 (3.4, 8.3)	5.4 (3.3, 8.8)	100	1.50 (1.21, 1.80)
Primary	85.1 (74.2, 91.8)	6.0 (3.0, 11.7)	9.0 (4.0, 19.0)	100	1.86 (1.10, 2.63)
Secondary	84.9 (78.8, 89.4)	6.7 (4.3, 10.4)	8.4 (4.7, 14.5)	100	1.86 (1.40, 2.32)
University	85.2 (77.4, 90.6)	6.2 (3.1, 12.2)	8.6 (4.8, 15.0)	100	2.14 (1.63, 2.65)
<b>Region</b>					
Bangkok	87.0 (81.7, 91.0)	5.1 (3.0, 8.7)	7.9 (4.8, 12.7)	100	1.88 (1.51, 2.26)
Central	90.7 (86.5, 93.6)	4.3 (2.5, 7.4)	5.0 (2.9, 8.4)	100	1.42 (1.12, 1.73)
Northern	83.5 (73.1, 90.4)	7.9 (4.3, 13.9)	8.6 (3.3, 20.5)	100	1.94 (1.11, 2.78)
Northeastern	83.3 (73.2, 90.2)	6.3 (3.5, 11.1)	10.4 (5.5, 18.8)	100	1.99 (1.28, 2.71)
Southern	86.8 (81.0, 91.0)	8.2 (5.3, 12.5)	5.0 (2.5, 9.8)	100	1.74 (1.37, 2.11)
<b>Socioeconomic status</b>					
Lowest	87.0 (72.1, 94.6)	4.9 (2.3, 10.0)	8.1 (2.5, 23.1)	100	1.74 (0.78, 2.70)
Low	88.2 (81.2, 92.8)	4.9 (2.3, 10.1)	6.9 (3.7, 12.5)	100	1.56 (1.10, 2.02)
Middle	83.2 (74.8, 89.2)	8.0 (4.2, 14.8)	8.8 (4.5, 16.4)	100	1.99 (1.42, 2.56)
High	88.2 (80.4, 93.2)	4.7 (2.9, 7.6)	7.1 (2.9, 16.1)	100	1.72 (1.14, 2.29)
Highest	84.0 (77.5, 88.9)	8.3 (4.9, 13.9)	7.7 (4.6, 12.7)	100	1.93 (1.52, 2.35)

## 5.2 Comparison of cessation findings in 2009 and 2011

### Comparison of key findings between 2009 and 2011

#### o **Smoked tobacco products**

- *The percentage of quit attempts significantly declined: 49.8% in 2009 vs 36.7% in 2011.*
- *A significant increase was found in the percentage of smokers who were asked if they smoked tobacco products by health-care providers (HCPs) in the past 12 months: 60.2% in 2009 vs 65.3% in 2011.*
- *No significant difference was found in the percentage of smokers who received advice to quit smoking by HCPs in the past 12 months: 51.9% in 2009 vs 55.8% in 2011.*

#### o **Smokeless tobacco products**

- *A significant reduction was found in the percentage of quit attempts: 21.5% in 2009 vs 16.4% in 2011.*
- *No significant difference was found in the percentage of smokeless tobacco users who were asked if they used smokeless tobacco products by HCPs in the past 12 months: 24.8% in 2009 vs 25.1% in 2011.*
- *No significant difference was found in the percentage of smokeless tobacco users who received advice to quit using smokeless tobacco by HCPs in the past 12 months: 18.7% in 2009 vs 16.3% in 2011.*

Comparison of the tobacco cessation situation in 2009 and 2011 covers two indicators – quit attempts (for both smoked and smokeless tobacco products), and smoking cessation and health-care seeking behaviour.

### 5.2.1 Quit attempts among smokers in 2009 and 2011

**Table 5.5** presents the quit attempt prevalence in 2009 and 2011 among those who smoked in the past 12 months preceding the survey (includes current smokers and former smokers who were abstinent for less than 12 months). The surveys revealed that quit attempts in the past 12 months decreased significantly from 49.8% in 2009 to 36.7% in 2011. A significant decrease in quit attempts was noted by all demographic characteristics, with the exception of people living in the Bangkok region.

**Table 5.5:** Percentage of smokers<sup>1</sup> aged 15 years and above who made a quit attempt in the past 12 months, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Made quit attempt <sup>2</sup>		
	2009	2011	Relative change (%)
	<i>Percentage (95% CI)</i>		
<b>Overall</b>	49.8 (47.0, 52.5)	36.7 (34.0, 39.4)	-26.3**
<b>Gender</b>			
Men	49.9 (47.1, 52.7)	36.5 (33.7, 39.3)	-26.9**
Women	47.4 (40.5, 54.4)	39.4 (32.4, 46.9)	-16.8**
<b>Age (years)</b>			
15–24	60.6 (52.8, 67.8)	42.6 (35.2, 50.3)	-29.7**
25–44	49.3 (45.8, 52.8)	36.6 (32.6, 40.7)	-25.9**
45–59	47.1 (43.5, 50.7)	34.6 (31.1, 38.2)	-26.6**
60+	42.3 (37.9, 46.7)	33.4 (29.2, 37.8)	-21.0**
<b>Residence</b>			
Urban	51.7 (49.2, 54.2)	41.3 (38.5, 44.1)	-20.2**
Rural	49.0 (45.4, 52.6)	34.7 (31.1, 38.5)	-29.1**
<b>Education level</b>			
Less than primary	43.5 (40.1, 47.0)	31.8 (28.6, 35.2)	-27.0**
Primary	49.4 (44.3, 54.4)	37.3 (31.8, 43.2)	-24.5**
Secondary	55.2 (50.6, 59.7)	39.8 (35.4, 44.3)	-27.9**
University	56.5 (49.8, 63.0)	40.2 (33.9, 47.0)	-28.8**
<b>Region</b>			
Bangkok	45.6 (41.4, 50.0)	41.2 (36.4, 46.2)	-9.8
Central	55.5 (50.6, 60.2)	42.1 (37.5, 46.9)	-24.0**
Northern	46.8 (40.6, 53.0)	28.2 (22.6, 34.7)	-39.6**
Northeastern	51.6 (45.7, 57.6)	39.7 (33.8, 45.9)	-23.1**
Southern	43.0 (38.9, 47.3)	28.9 (24.9, 33.2)	-32.9**
<b>Socioeconomic status</b>			
Lowest	44.7 (39.0, 50.5)	36.5 (29.9, 43.6)	-18.3**
Low	45.0 (39.3, 51.0)	30.5 (25.6, 35.9)	-32.3**
Middle	54.7 (50.2, 59.1)	37.2 (32.7, 41.9)	-32.0**
High	52.6 (47.7, 57.5)	39.5 (35.1, 44.2)	-24.8**
Highest	51.9 (47.8, 56.0)	41.1 (36.5, 45.9)	-20.8**

Note: Relative change (%) calculated by [rate of 2011– rate of 2009] \*100 / rate of 2009

<sup>1</sup> Includes current smokers and former smokers who have been abstinent for less than 12 months

<sup>2</sup> Among current smokers and former smokers who have been abstinent for less than 12 months

\*\*  $P < 0.05$

**Table 5.5a** presents the prevalence of quit attempts among those who used smokeless tobacco in the past 12 months preceding the survey (includes current smokeless tobacco users and former smokeless tobacco users who were abstinent for less than 12 months). Analysis of the rate of quit attempts of smokeless tobacco use was done by only two demographic characteristics, i.e. gender and residence, since unweighted samples of other characteristics were less than 25. Overall quit attempts reduced and especially among rural population and women.

**Table 5.5a:** Percentage of smokeless tobacco users<sup>1</sup> aged 15 years and above who made a quit attempt in the past 12 months, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Made quit attempt <sup>2</sup>		
	2009	2011	Relative change (%)
	<i>Percentage (95% CI)</i>		
<b>Overall</b>	21.5 (17.5, 26.1)	16.4 (12.9, 20.7)	-23.7**
<b>Gender</b>			
Men	31.6 (22.2, 42.8)	26.3 (17.3, 38.0)	-16.6
Women	19.5 (15.5, 24.2)	14.3 (10.5, 19.1)	-26.9**
<b>Residence</b>			
Urban	20.7 (13.0, 31.4)	19.9 (13.4, 28.5)	-4.2
Rural	21.6 (17.3, 26.7)	15.8 (11.9, 20.7)	-27.0**

Note: Relative change (%) calculated by  $[(\text{rate of 2011} - \text{rate of 2009}) * 100 / \text{rate of 2009}]$

<sup>1</sup> Includes current and former smokeless tobacco users who have been abstinent for less than 12 months

<sup>2</sup> Among current and former smokeless tobacco users who have been abstinent for less than 12 months

\*\*  $P < 0.05$

## 5.2.2 Smoking cessation and receiving cessation advice from health-care providers in 2009 and 2011

**Table 5.6** presents the prevalence of smokers who visited an HCP, and were asked by an HCP if they used any smoked tobacco product and were advised to quit by the HCP. These covered visits for health-care services for illnesses as well as for annual physical check-ups.

The prevalence of smokers who were asked by HCPs if they used any smoked tobacco product increased significantly from 2009 to 2011; When exploring demographic characteristics, significant increases were noted among men, those in the age group of 25–44 years, living in urban areas, among adults with secondary and university education, those living in Bangkok and the Northeastern region, and those in the middle SES group.

The prevalence of smokers who were advised to quit smoking by HCPs showed no significant statistical change from 2009 to 2011, whether among the overall population or by gender, age and SES. However, an increase was noticed in urban areas, among adults with a university education, and those living in the Bangkok region.



**Table 5.6:** Percentage of smokers<sup>1</sup> aged 15 years and above who received health-care provider advice in the past 12 months, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Health-care provider assistance					
	2009		2011		Relative change (%)	
	Asked by HCP if a smoker <sup>2</sup>	Advised to quit by HCP <sup>2</sup>	Asked by HCP if a smoker <sup>2</sup>	Advised to quit by HCP <sup>2</sup>	Asked by HCP if a smoker <sup>2</sup>	Advised to quit by HCP <sup>2</sup>
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	60.2 (56.7, 63.6)	51.9 (48.4, 55.4)	65.3 (61.5, 68.9)	55.8 (52.0, 59.5)	8.4**	7.5
<b>Gender</b>						
Men	59.9 (56.1, 63.5)	52.3 (48.5, 56.0)	65.0 (61.0, 68.9)	55.9 (51.9, 59.9)	8.6**	7.0
Women	63.9 (55.3, 71.6)	48.7 (40.1, 57.4)	68.2 (57.5, 77.3)	54.5 (44.6, 64.0)	6.8	11.8
<b>Age (years)</b>						
15–24	38.0 (27.0, 50.4)	24.2 (15.3, 36.0)	42.9 (30.5, 56.2)	32.8 (21.3, 46.7)	12.8	35.6
25–44	56.5 (50.8, 62.1)	48.2 (42.4, 54.1)	65.0 (58.9, 70.7)	52.0 (45.7, 58.3)	15.1**	7.9
45–59	63.1 (58.2, 67.7)	54.9 (50.1, 59.7)	69.1 (63.3, 74.4)	60.7 (54.7, 66.4)	9.6	10.4
60+	73.7 (68.4, 78.3)	67.6 (62.0, 72.7)	75.9 (70.6, 80.5)	70.9 (65.3, 76.0)	3.1	5.0
<b>Residence</b>						
Urban	59.2 (55.2, 63.1)	48.8 (44.8, 52.8)	68.4 (63.8, 72.7)	56.6 (51.9, 61.2)	15.6**	16.0**
Rural	60.7 (56.0, 65.1)	53.2 (48.5, 57.8)	64.1 (59.1, 68.8)	55.5 (50.6, 60.3)	5.6	4.3
<b>Education level</b>						
Less than primary	69.3 (65.2, 73.2)	62.2 (57.8, 66.4)	73.1 (68.3, 77.5)	66.5 (61.5, 71.2)	5.5	6.9
Primary	57.9 (48.5, 66.8)	50.6 (41.5, 59.6)	56.6 (47.5, 65.4)	47.5 (38.5, 56.6)	–2.2	–6.1
Secondary	48.9 (42.4, 55.4)	38.0 (32.3, 44.0)	60.3 (53.5, 66.8)	46.3 (39.5, 53.3)	23.4**	21.9
University	55.7 (44.5, 66.4)	47.9 (37.6, 58.4)	71.3 (60.3, 80.2)	63.1 (51.7, 73.2)	28.0**	31.7**
<b>Region</b>						
Bangkok	60.6 (53.3, 67.5)	51.0 (44.1, 58.0)	71.7 (64.9, 77.7)	60.5 (53.0, 67.5)	18.3**	18.5**
Central	57.8 (52.1, 63.3)	47.3 (41.5, 53.1)	59.9 (52.1, 67.2)	49.6 (42.6, 56.7)	3.6	5.0
Northern	60.4 (53.4, 67.0)	51.7 (45.0, 58.3)	62.6 (53.5, 70.8)	53.0 (44.5, 61.3)	3.5	2.5
Northeastern	60.1 (52.2, 67.5)	55.7 (47.4, 63.6)	71.0 (63.1, 77.7)	64.6 (56.7, 71.8)	18.2**	16.1
Southern	63.9 (56.8, 70.5)	51.4 (45.2, 57.6)	61.7 (55.0, 68.0)	47.3 (41.1, 53.5)	–3.4	–8.1
<b>Socioeconomic status</b>						
Lowest	68.0 (60.7, 74.5)	58.7 (51.0, 66.0)	63.5 (54.0, 72.0)	56.1 (46.8, 65.0)	–6.7	–4.5
Low	62.3 (55.6, 68.6)	55.9 (48.9, 62.7)	69.1 (61.5, 75.9)	60.1 (51.5, 68.1)	11.0	7.4
Middle	54.1 (46.3, 61.7)	46.4 (39.0, 54.0)	65.4 (57.4, 72.6)	53.8 (46.1, 61.4)	20.8**	16.0
High	55.9 (48.3, 63.2)	44.2 (36.9, 51.8)	63.9 (56.6, 70.6)	52.5 (45.2, 59.7)	14.4	18.7
Highest	60.8 (53.6, 67.5)	54.4 (47.3, 61.4)	64.4 (56.3, 71.8)	56.4 (48.9, 63.7)	6.0	3.7

Note: Relative change (%) calculated by [rate of 2011– rate of 2009] \*100 / rate of 2009

HCP health-care provider

<sup>1</sup> Includes current smokers and former smokers who had been abstinent for less than 12 months

<sup>2</sup> Among current smokers and former smokers who had been abstinent for less than 12 months, and who visited an HCP during the past 12 months

\*\*  $P < 0.05$

**Table 5.6a** presents the prevalence of smokeless tobacco users who visited an HCP, and were asked by an HCP if they used any smokeless tobacco product and were advised to quit by the HCP. Only two demographic characteristics, gender and residence, were included, since unweighted samples of other characteristics were less than 25.

When the findings of the 2009 and 2011 surveys were compared, it was found that there was no significant difference between the prevalence of being “asked” and “advised” by overall population, gender and residence.

**Table 5.6a:** Percentage of smokeless tobacco users<sup>1</sup> aged 15 years and above who received health-care provider advice in the past 12 months, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Health-care provider assistance					
	2009		2011		Relative change (%)	
	Asked by HCP if a smokeless user <sup>2</sup>	Advised to quit by HCP <sup>2</sup>	Asked by HCP if a smokeless user <sup>2</sup>	Advised to quit by HCP <sup>2</sup>	Asked by HCP if a smokeless user <sup>2</sup>	Advised to quit by HCP <sup>2</sup>
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	24.8 (18.7, 32.0)	18.7 (13.5, 25.5)	25.1 (20.2, 30.6)	16.3 (12.8, 20.6)	1.1	-12.8
<b>Gender</b>						
Men	20.9 (13.5, 31.0)	14.1 (8.2, 23.1)	20.8 (10.1, 37.9)	13.2 (5.8, 27.5)	-0.8	-6.1
Women	25.3 (18.6, 33.5)	19.4 (13.5, 27.1)	25.8 (20.3, 32.1)	16.9 (13.0, 21.6)	1.8	-13.1
<b>Residence</b>						
Urban	18.0 (11.0, 27.9)	14.8 (8.6, 24.3)	20.0 (13.7, 28.4)	15.5 (9.0, 19.7)	43.7	12.9
Rural	25.7 (19.0, 33.8)	19.3 (13.4, 26.9)	25.8 (20.4, 32.2)	16.8 (12.8, 21.6)	-2.4	-15.2

Note: Relative change (%) calculated by [rate of 2011– rate of 2009] \*100 / rate of 2009

HCP = health-care provider

<sup>1</sup> Includes current smokeless tobacco users and former smokeless tobacco users who had been abstinent for less than 12 months

<sup>2</sup> Among current smokeless tobacco users and former smokeless tobacco users who had been abstinent for less than 12 months, and who visited an HCP during the past 12 months



## ***6. Second-hand smoke***

## 6. Second-hand smoke

This chapter describes the data on exposure to second-hand smoke (SHS) at home and in various public places that should be smoke free by law. These include indoor workplaces, government buildings, health-care facilities, restaurants, markets and public transport. The findings are provided in two main sections. The first section describes the findings in the 2011 GATS and the second section compares the key findings between the 2009 GATS and the 2011 GATS.

### 6.1 Exposure to situations with second-hand smoke in 2011

#### Key findings in 2011

##### *In the 30 days preceding the survey:*

- 36.0% of the population (19.5 million) was exposed to SHS in their homes.
- Among those who worked indoors, 30.5% of workers (4.2 million) were exposed to second-hand smoke (SHS) at their indoor workplaces.
- The three most common public places where adults were exposed to SHS were markets (68.8%), bars or night clubs (68.4%), and restaurants (46.9%).

#### 6.1.1 SHS exposure in indoor places at home

**Table 6.1** shows that, overall, 36.0% (19.5 million) of the population was estimated to be exposed to SHS at home, at least monthly. There was no significant difference in the prevalence of exposure to SHS by gender and age group. People in rural areas had a significantly higher prevalence of exposure to SHS than those in urban areas (41.4% vs 25.9%). The prevalence of exposure to SHS at home among those with the lowest education level was significantly higher than among those with the highest education level (39.8% vs 17.5%).

By region, those in the Southern region had the highest exposure rate, which was about three times that in Bangkok metropolis (54.1% vs 19.0%). By SES, those in the lowest SES had a significantly higher prevalence of exposure to SHS at home than those in the highest SES (39.4% vs 22.9%).

Among non-smokers, 28.1% (11.6 million) were estimated to be exposed to SHS at home, at least monthly. Non-smokers who were women had a significantly higher rate of exposure to SHS at home than men (31.2% vs 22.1%), as did adults in the youngest age group of 15–24 years compared with those in oldest age group of 60+ years. A higher prevalence of exposure to SHS at home was also found among non-smokers in rural areas as compared to those in urban areas.

Non-smokers with the highest education level (university education) were significantly less exposed to SHS at home than those with the lowest (less than primary) education level (14.1% vs 30.8%). By region, non-smokers living in Bangkok metropolis were significantly less exposed to SHS than those living in the Southern region. By SES, non-smokers in the lowest SES had a significantly higher exposure to SHS at home than those in the highest SES.

**Table 6.1:** Number (in thousands) and percentage of adults aged 15 years and above who were exposed to tobacco smoke at home at least monthly, by smoking status and selected demographic characteristics – GATS Thailand, 2011

Characteristic	Adults exposed to tobacco smoke at home <sup>1</sup>			
	Overall		Non-smokers	
	Number (in thousands)	% (95% CI)	Number (in thousands)	% (95% CI)
<b>Overall</b>	19 507.3	36.0 (34.3, 37.7)	11 581.4	28.1 (26.5, 29.8)
<b>Gender</b>				
Men	10 503.2	39.9 (37.7, 42.1)	3 111.9	22.1 (20.0, 24.4)
Women	9 004.1	32.3 (30.5, 34.2)	8 469.5	31.2 (29.4, 33.1)
<b>Age (years)</b>				
15–24	4 093.5	39.5 (36.3, 42.9)	2 720.1	33.6 (30.1, 37.2)
25–44	7 742.7	35.8 (33.8, 38.0)	4 493.2	28.2 (26.1, 30.3)
45–59	4 621.9	34.7 (32.5, 37.0)	2 516.4	25.4 (23.3, 27.5)
60+	3 049.3	34.3 (32.0, 36.6)	1 851.8	25.7 (23.5, 28.0)
<b>Residence</b>				
Urban	4 853.8	25.9 (24.5, 27.3)	2 825.2	18.9 (17.6, 20.3)
Rural	14 653.5	41.4 (38.9, 43.9)	8 756.2	33.4 (31.0, 35.9)
<b>Education level</b>				
Less than primary	6 882.5	39.8 (37.5, 42.2)	4 076.8	30.8 (28.6, 33.1)
Primary	4 864.3	43.2 (40.2, 46.2)	2 595.4	33.8 (30.7, 37.1)
Secondary	6 477.2	35.4 (33.2, 37.7)	4 011.5	28.9 (26.6, 31.2)
University	1 277.7	17.5 (15.4, 19.7)	894.1	14.1 (11.9, 16.5)
<b>Region</b>				
Bangkok	1 067.3	19.0 (17.1, 21.1)	605.8	13.2 (11.6, 15.0)
Central	4 742.9	36.4 (33.4, 39.5)	2 761.9	27.6 (24.7, 30.8)
Northern	3 485.3	34.6 (30.2, 39.4)	2 043.2	25.9 (22.1, 30.2)
Northeastern	6 263.4	34.5 (31.0, 38.1)	3 943.7	29.0 (25.7, 32.5)
Southern	3 948.3	54.1 (50.6, 57.5)	2 226.7	43.5 (40.0, 47.1)
<b>Socioeconomic status</b>				
Lowest	5 333.5	39.4 (36.5, 42.4)	3 584.9	33.3 (30.4, 36.2)
Low	4 612.9	40.4 (37.5, 43.4)	2 824.7	32.8 (29.9, 35.8)
Middle	4 111.3	38.9 (36.1, 41.6)	2 214.7	29.2 (26.5, 32.1)
High	3 506.6	34.5 (32.2, 36.9)	1 874.1	25.1 (22.7, 27.6)
Highest	1 943.0	22.9 (20.8, 25.1)	1 082.8	16.1 (14.2, 18.2)

<sup>1</sup> Respondents who reported that smoking inside the home occurs daily, weekly, monthly,

### 6.1.2 SHS exposure in indoor places at work

The updated Ministry of Public Health (MoPH) Notification No. 19: *Designating name or types of Public places where non-smoker's health is under protection and designating a zone or all area of such places to be a smoking Area or a Non-Smoking Area Pursuant to the Non-Smoker's Health Protection Act, 1992*, was enacted on 28 June 2010. It indicates that all indoor areas with or without an air-conditioning system and areas under the roof or structured areas owned by state agencies, state enterprises, government agencies, banks or financial institutions, industrial factories or any place of business where goods are produced, shall be designated as non-smoking areas.

**Table 6.2** shows that, overall, 30.5% (4.2 million) of workers were exposed to SHS in indoor areas of their workplaces in the past 30 days. Workers who were men were significantly more exposed than women workers. Workers in the oldest age group of 60+ years were significantly more exposed than those in the 25–44 years age group. There were significant differences by residence; workers in rural areas were more exposed than workers in urban areas. By education level, workers with university education were significantly less exposed to SHS in indoor areas than those with less than primary education. By region, workers living in Bangkok metropolis were the least exposed. By SES, workers in the highest SES were least exposed while those in the lowest SES were the most exposed.

Among non-smoking workers, 25.2% (2.6 million) were exposed to SHS in indoor areas of their workplaces in the past 30 days. Men were significantly more exposed than women. There was no significant difference in the prevalence of exposure of non-smoking workers by age group and residence. Non-smoking workers with a university education were significantly less exposed to SHS in indoor workplaces than those with less than primary education. By region, workers living in Bangkok metropolis had the least exposure, while by SES, workers in the highest SES had the least exposure and those in the lowest SES had the highest exposure.

**Table 6.2:** Number (in thousands) and percentage of adults aged 15 years and above who worked indoors and were exposed to tobacco smoke at work, by smoking status and selected demographic characteristics – GATS Thailand, 2011

Characteristic	Adults exposed to tobacco smoke at work <sup>1</sup>			
	Overall		Non-smokers	
	Number (in thousands)	% (95% CI)	Number (in thousands)	% (95% CI)
<b>Overall</b>	4 191.2	30.5 (28.1, 32.9)	2 645.4	25.2 (22.9, 27.8)
<b>Gender</b>				
Men	2 737.3	37.1 (33.9, 40.3)	1 249.7	29.4 (25.8, 33.3)
Women	1 453.8	22.8 (20.4, 25.5)	1 395.7	22.4 (19.9, 25.1)
<b>Age (years)</b>				
15–24	587.1	31.8 (25.9, 38.3)	323.9	23.9 (17.3, 32.0)
25–44	2 327.1	28.5 (25.8, 31.5)	1 442.9	23.1 (20.3, 26.2)
45–59	1 102.4	33.1 (29.9, 36.5)	760.7	29.7 (26.3, 33.3)
60+	174.6	40.4 (33.1, 48.1)	118.0	36.0 (28.5, 44.4)
<b>Residence</b>				
Urban	1 701.6	25.4 (23.4, 27.6)	1 124.6	22.0 (20.0, 24.2)
Rural	2 489.6	35.2 (31.1, 39.5)	1 520.8	28.3 (24.2, 32.9)
<b>Education level</b>				
Less than primary	877.0	45.1 (39.9, 50.4)	612.1	40.9 (34.5, 47.7)
Primary	1 031.1	41.8 (36.7, 47.0)	557.1	33.7 (28.0, 40.0)
Secondary	1 486.8	30.6 (27.1, 34.2)	823.7	24.2 (20.6, 28.2)
University	794.3	17.7 (15.4, 20.4)	652.5	16.6 (14.2, 19.4)
<b>Region</b>				
Bangkok	430.1	21.2 (18.0, 24.8)	324.2	20.4 (16.9, 24.3)
Central	1 236.0	27.8 (23.9, 32.1)	784.5	23.3 (19.4, 27.8)
Northern	658.5	27.4 (22.3, 33.1)	459.4	23.7 (18.5, 29.9)
Northeastern	1 054.9	34.4 (28.8, 40.6)	663.2	28.2 (22.6, 34.7)
Southern	811.7	44.4 (35.9, 53.1)	414.0	33.5 (25.4, 42.6)
<b>Socioeconomic status</b>				
Lowest	324.0	54.7 (43.1, 65.8)	213.5	49.4 (36.6, 62.4)
Low	714.9	41.9 (36.1, 47.9)	487.1	36.5 (30.0, 43.4)
Middle	1 089.6	32.5 (28.5, 36.9)	629.8	25.4 (21.3, 30.1)
High	1 101.4	26.4 (23.1, 30.0)	624.9	20.4 (17.0, 24.3)
Highest	959.6	24.4 (21.4, 27.6)	690.1	21.8 (18.7, 25.1)

<sup>1</sup> In the past 30 days

Note: Among those respondents who work outside the home and who usually work indoors

### 6.1.3 Exposure to SHS in public places

The updated MoPH Notification No. 19: *Designating name or types of Public places where non-smoker's health is under protection and designating a zone or all area of such places to be a smoking Area or a Non-Smoking Area Pursuant to the Non-Smoker's Health Protection Act 1992*, was enacted on 28 June 2010. The notification also indicates that the following places shall be designated as non-smoking areas in their entirety: (1) health-care facilities, (2) educational establishments, except higher education institutes (or universities), which shall be smoke free only up to the built-up or structured areas, (3) public places where people gather together such as markets, entertainment places, or places that sell food, beverages or food and beverages, with or without an air-conditioning system, (4) public vehicles and bus stations which are in service, either with or without passengers, and (5) religious places or places for performing religious rites of various religions and sects.

**Table 6.3** shows the prevalence of exposure to SHS at various public places among adults who visited those places in the past 30 days and **Table 6.3a** (in Appendix D, based on Table 6.3) presents the estimated number of adults who were exposed to SHS while visiting various public places in the past 30 days.

**Table 6.3** shows that the three public places with the highest exposure to SHS among adults aged 15 years and above were markets (68.8%), bars or night clubs (68.4%), and restaurants or any place that sold food, beverages, or food and beverages, both with and without an air-conditioning system (46.9%).

There was no significant difference in exposure to SHS at government buildings, health-care facilities, public transportation, universities, and bars or night clubs. Men were more significantly exposed to SHS than women at restaurants, schools and markets. By residence, exposure to SHS in rural areas was significantly higher than that in urban areas in restaurants and schools, while exposure to SHS in public transport in urban areas was significantly higher than in rural areas. By age group, the youngest age group of 15–24 years had significantly higher exposure to SHS at various places (government buildings, restaurants, public transportation, schools, universities, markets) as compared to the other age groups.

There was no significant difference in exposure to SHS at all sites by education level, especially between those with the lowest and the highest education level, except at university sites, where those with university-level education level were significantly more exposed to SHS than those with less than primary education. Those living in the Southern region had the highest exposure to SHS in all public places as compared to people in other regions. By SES, people in the lowest SES were significantly more exposed to SHS at schools than those in the highest SES.



**Table 6.3:** Percentage of adults aged 15 years and above who were exposed to tobacco smoke in public places in the past 30 days among those who visited those places, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Adults exposed to tobacco smoke <sup>1</sup> in...							
	Government buildings	Health-care facilities	Restaurants	Public transportation	Schools	Universities	Bars or night clubs	Markets
	<i>Percentage (95% CI)</i>							
<b>Overall</b>	14.7(13.3,16.3)	7.3(6.4,8.4)	46.9(44.5,49.3)	25.6(23.6,27.7)	28.8(26.0,31.7)	34.9(30.0,40.2)	68.4(63.9,72.6)	68.8(67.1,70.5)
<b>Gender</b>								
Men	16.6(14.6,18.8)	8.3(6.9,10.0)	51.6(48.5,54.6)	25.9(23.1,28.9)	35.9(31.8,40.2)	39.2(32.4,46.4)	70.7(65.6,75.4)	72.9(70.7,75.0)
Women	12.8(11.0,14.7)	6.7(5.8,7.8)	42.0(39.5,44.6)	25.4(23.1,27.9)	22.2(19.7,25.1)	30.4(24.8,36.6)	62.7(54.8,69.9)	65.3(63.4,67.2)
<b>Age (years)</b>								
15–24	20.3(16.5,24.9)	7.5(5.4,10.5)	47.7(43.6,51.8)	26.1(22.3,30.4)	48.3(43.0,53.6)	42.4(34.7,50.5)	68.1(59.4,75.7)	70.0(66.1,73.6)
25–44	13.5(11.7,15.5)	8.7(7.2,10.5)	50.5(47.7,53.4)	28.7(25.9,31.7)	21.5(18.3,25.0)	28.0(22.7,34.1)	69.1(63.8,74.0)	72.6(70.5,74.6)
45–59	13.7(11.8,15.8)	5.6(4.7,6.7)	41.4(38.5,44.3)	25.0(22.2,28.1)	19.1(15.6,23.2)	24.3(17.6,32.5)	70.1(61.6,77.4)	65.6(63.3,67.9)
60+	11.3(9.1,13.9)	7.0(5.7,8.5)	38.8(33.3,44.5)	17.5(14.7,20.6)	17.6(13.6,22.6)	24.4(12.4,42.4)	*	59.2(56.3,62.1)
<b>Residence</b>								
Urban	17.3(15.6,19.1)	8.3(7.2,9.6)	42.9(40.9,44.8)	28.9(26.7,31.2)	22.9(20.8,25.1)	41.5(36.9,46.3)	63.1(58.8,67.2)	68.5(66.8,70.1)
Rural	13.4(11.4,15.7)	6.8(5.6,8.3)	49.7(46.0,53.4)	22.2(19.0,25.7)	31.2(27.5,35.3)	27.9(19.8,37.7)	74.3(65.5,81.5)	69.0(66.4,71.5)
<b>Education level</b>								
Less than primary	10.5(8.5,13.0)	6.1(5.1,7.4)	41.8(38.0,45.6)	19.7(17.4,22.2)	21.9(16.6,28.4)	13.5(6.2,26.8)	66.1(51.1,78.4)	62.4(59.8,64.9)
Primary	9.7(7.6,12.3)	8.1(6.1,10.6)	51.9(47.0,56.8)	26.8(22.6,31.4)	27.1(22.2,32.5)	11.2(5.0,22.9)	73.3(58.4,84.3)	73.6(70.8,76.2)
Secondary	17.9(15.5,20.6)	8.4(6.9,10.2)	48.9(46.1,51.8)	28.1(25.1,31.2)	34.2(30.6,38.0)	36.8(30.5,43.7)	70.5(64.5,75.8)	71.5(69.1,73.7)
University	18.8(16.1,21.8)	7.2(5.7,9.1)	42.8(39.6,46.0)	27.6(24.1,31.4)	23.6(19.7,28.0)	38.6(30.5,47.3)	62.6(55.8,69.0)	66.5(63.0,69.9)
<b>Region</b>								
Bangkok	17.0(14.5,19.9)	7.5(6.0,9.3)	40.5(37.7,43.4)	29.0(26.2,32.1)	17.9(14.6,21.9)	45.9(37.7,54.4)	60.2(52.0,67.8)	70.4(68.1,72.6)
Central	20.6(17.1,24.7)	9.1(7.4,11.3)	55.6(51.4,59.6)	30.6(26.3,35.2)	24.4(19.9,29.5)	45.3(35.7,55.2)	84.0(76.8,89.3)	72.8(69.7,75.7)
Northern	8.7(6.4,11.7)	3.4(2.2,5.3)	35.8(31.2,40.8)	17.8(11.9,25.9)	30.9(23.6,39.4)	30.4(17.9,46.6)	68.2(58.7,76.4)	58.9(54.4,63.2)
Northeastern	10.8(8.4,13.8)	4.3(2.9,6.2)	39.0(33.1,45.3)	16.4(13.2,20.2)	30.2(25.3,35.6)	26.6(18.3,37.0)	57.0(47.3,66.2)	65.1(61.0,69.1)
Southern	22.7(19.0,26.8)	18.7(15.0,23.1)	64.3(59.5,68.8)	36.0(29.9,42.6)	32.3(28.6,36.1)	36.8(28.9,45.5)	78.5(69.7,85.3)	82.1(79.4,84.5)
<b>Socioeconomic status</b>								
Lowest	14.7(11.8,18.3)	5.8(4.4,7.5)	43.6(39.0,48.3)	23.4(19.9,27.3)	39.5(34.3,45.0)	33.5(24.6,43.8)	68.8(53.5,80.8)	64.1(60.6,67.4)
Low	11.9(9.1,15.3)	6.6(5.1,8.6)	45.4(41.0,49.9)	25.5(21.7,29.8)	31.8(26.1,38.2)	48.2(36.2,60.3)	65.3(50.8,77.5)	69.3(66.0,72.5)
Middle	13.8(11.4,16.6)	8.2(6.6,10.2)	50.5(46.3,54.8)	25.5(22.0,29.4)	20.5(16.4,25.2)	30.9(23.3,39.8)	78.6(70.5,84.9)	69.8(67.1,72.4)
High	13.1(10.9,15.7)	7.2(5.6,9.2)	48.8(45.4,52.1)	25.3(21.6,29.4)	20.1(16.5,24.3)	33.0(22.9,44.9)	65.4(57.5,72.6)	70.1(67.5,72.5)
Highest	19.6(16.9,22.6)	9.7(7.7,12.2)	46.3(43.1,49.5)	29.7(26.1,33.7)	23.6(20.1,27.5)	28.0(21.4,35.6)	65.0(57.3,72.1)	71.5(69.0,73.8)

<sup>1</sup> In the past 30 days

\*Sample size less than 25

**Table 6.4** presents the prevalence of exposure to SHS at various public places among non-smokers who visited those places in the past 30 days and **Table 6.4a** (in Appendix D, based on **Table 6.4**) presents the estimated number of non-smokers who were exposed to SHS while visiting various public places in the past 30 days.

**Table 6.4** shows that the three public places with the highest exposure to SHS among adults aged 15 years and above are the same places as those in Table 6.3. These were markets (66.9%), bars or night clubs (64.7%), and restaurants or any place that sold food, beverages, or food and beverages, both with and without an air-conditioning system (43.7%).

Among non-smokers, men were significantly more exposed to SHS than women in schools (35.2% vs 22.3%) and markets (70.1% vs 65.3%). By residence, exposure in rural areas to SHS in public transport was significantly higher than that in urban areas. By age group, the youngest age group of 15–24 years had significantly higher exposure to SHS at various public places (government buildings, restaurants, public transportation, schools, universities, markets) as compared to the other age groups.

There was no significant difference between the highest education level and lowest education level in exposure to SHS at several public places (government buildings, public transportation and universities). Those living in the Southern region had the highest exposure to SHS in several public places as compared to the other regions, except in universities and bars or night clubs. Adults in the highest SES were significantly more exposed to SHS than those in the lowest SES at health-care facilities and markets.

**Table 6.4:** Percentage of non-smokers aged 15 years and above who were exposed to tobacco smoke in public places in the past 30 days among those who visited those places, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Non-smokers exposed to tobacco smoke <sup>1</sup> in...							
	Government buildings	Health-care facilities	Restaurants	Public transportation	Schools	Universities	Bars or night clubs	Markets
	<i>Percentage (95% CI)</i>							
<b>Non-smokers</b>	14.1 (12.6, 15.7)	7.1 (6.2, 8.1)	43.7 (41.4, 46.1)	25.4 (23.4, 27.7)	26.9 (24.3, 29.7)	34.8 (29.4, 40.5)	64.7 (59.0, 70.1)	66.9 (65.1, 68.7)
<b>Gender</b>								
Men	16.3 (14.0, 18.9)	7.9 (6.5, 9.7)	46.9 (43.4, 50.4)	25.5 (22.1, 29.3)	35.2 (30.6, 40.1)	40.9 (32.7, 49.7)	67.5 (59.4, 74.6)	70.1 (67.4, 72.7)
women	12.7 (11.0, 14.7)	6.7 (5.8, 7.8)	41.8 (39.2, 44.4)	25.4 (23.1, 27.9)	22.3 (19.7, 25.2)	30.2 (24.7, 36.4)	61.4 (53.2, 68.9)	65.3 (63.3, 67.2)
<b>Age (years)</b>								
15–24	19.6 (15.7, 24.2)	7.2 (5.0, 10.2)	43.8 (39.7, 48.1)	27.3 (23.0, 32.0)	45.5 (40.4, 50.8)	42.2 (33.9, 50.9)	68.6 (58.1, 77.5)	68.5 (64.3, 72.3)
25–44	12.6 (10.7, 14.7)	8.0 (6.5, 9.7)	47.4 (44.4, 50.4)	28.1 (25.1, 31.4)	19.8 (16.7, 23.3)	27.3 (21.4, 34.1)	63.5 (56.0, 70.5)	71.1 (68.9, 73.2)
45–59	13.2 (11.3, 15.4)	5.8 (4.8, 7.1)	38.7 (35.5, 42.0)	24.4 (21.5, 27.5)	16.8 (13.7, 20.3)	21.6 (14.6, 30.7)	60.8 (48.3, 72.0)	63.1 (60.6, 65.6)
60+	10.5 (8.3, 13.1)	6.9 (5.6, 8.5)	36.1 (30.6, 42.1)	16.9 (14.1, 20.2)	13.2 (9.5, 18.2)	22.1 (11.1, 39.2)	*	56.9 (53.9, 59.8)
<b>Residence</b>								
Urban	16.5 (14.8, 18.4)	8.4 (7.3, 9.7)	41.0 (39.0, 43.1)	28.8 (26.5, 31.2)	23.2 (21.0, 25.7)	40.3 (35.2, 45.5)	62.5 (57.5, 67.2)	67.5 (65.8, 69.2)
Rural	12.8 (10.7, 15.1)	6.4 (5.2, 7.8)	45.7 (41.9, 49.5)	21.9 (18.5, 25.8)	28.6 (25.0, 32.4)	28.9 (20.1, 39.7)	67.9 (55.6, 78.1)	66.5 (63.8, 69.1)
<b>Education level</b>								
Less than primary	10.0 (8.1, 12.4)	5.8 (4.8, 7.1)	38.3 (34.4, 42.4)	19.0 (16.5, 21.7)	18.0 (13.4, 23.7)	10.7 (4.0, 25.7)	49.7 (30.7, 68.8)	58.8 (56.1, 61.4)
Primary	9.6 (7.3, 12.5)	8.4 (6.3, 11.1)	44.5 (39.5, 49.6)	26.3 (22.0, 31.1)	24.2 (19.7, 29.4)	10.0 (3.7, 24.3)	71.9 (53.0, 85.4)	71.5 (68.3, 74.4)
Secondary	16.7 (14.1, 19.6)	7.7 (6.2, 9.5)	47.0 (44.0, 50.1)	28.0 (24.7, 31.5)	33.1 (29.5, 36.9)	38.5 (31.5, 46.2)	69.0 (61.0, 76.1)	71.0 (68.5, 73.5)
University	17.5 (14.8, 20.5)	7.3 (5.7, 9.3)	41.2 (37.7, 44.9)	28.1 (24.4, 32.1)	22.4 (18.2, 27.1)	34.9 (26.9, 43.9)	58.4 (50.0, 66.4)	65.0 (61.1, 68.6)
<b>Region</b>								
Bangkok	16.7 (14.0, 19.6)	7.7 (6.1, 9.6)	39.1 (36.2, 42.2)	29.0 (26.0, 32.1)	17.8 (14.2, 22.1)	45.5 (36.6, 54.7)	60.2 (50.3, 69.3)	69.7 (67.3, 72.1)
Central	19.3 (15.9, 23.2)	9.3 (7.5, 11.5)	53.2 (48.5, 57.9)	29.8 (25.2, 34.7)	22.1 (18.3, 26.4)	41.5 (31.1, 52.6)	78.9 (68.1, 86.8)	70.8 (67.6, 73.8)
Northern	9.1 (6.5, 12.6)	3.3 (2.2, 4.7)	33.7 (29.0, 38.7)	18.9 (12.1, 28.4)	29.1 (22.7, 36.4)	32.6 (19.0, 50.0)	67.0 (55.3, 76.8)	58.1 (53.7, 62.4)
Northeastern	10.6 (8.2, 13.7)	4.4 (3.0, 6.4)	35.0 (29.8, 40.5)	16.2 (12.8, 20.3)	28.7 (23.8, 34.2)	26.6 (17.8, 37.7)	53.5 (41.6, 65.1)	63.0 (58.8, 67.0)
Southern	21.3 (17.3, 25.9)	16.8 (13.3, 21.0)	61.5 (56.2, 66.6)	37.0 (30.7, 43.7)	30.2 (25.8, 35.0)	37.9 (26.6, 50.7)	73.6 (60.0, 83.8)	79.8 (76.7, 82.6)
<b>Socioeconomic status</b>								
Lowest	14.7 (11.7, 18.2)	5.5 (4.2, 7.1)	40.1 (36.1, 44.3)	23.9 (20.1, 28.0)	38.3 (33.2, 43.8)	34.3 (24.7, 45.5)	65.6 (49.4, 78.8)	61.8 (58.3, 65.2)
Low	11.2 (8.5, 14.7)	6.8 (5.1, 9.1)	41.8 (37.2, 46.6)	24.8 (20.7, 29.4)	25.4 (20.2, 31.5)	46.5 (34.4, 59.1)	63.6 (45.4, 78.5)	66.2 (62.7, 69.5)
Middle	12.9 (10.4, 15.9)	7.2 (5.6, 9.2)	46.4 (42.0, 50.9)	23.8 (20.2, 27.7)	18.7 (14.5, 23.8)	32.3 (23.6, 42.3)	73.9 (62.4, 82.9)	68.5 (65.5, 71.4)
High	12.6 (10.2, 15.5)	6.7 (5.2, 8.7)	46.6 (42.8, 50.5)	25.3 (21.4, 29.8)	19.4 (15.4, 24.0)	34.9 (23.8, 47.9)	62.7 (53.5, 71.1)	68.6 (65.8, 71.3)
Highest	18.1 (15.2, 21.3)	10.0 (8.0, 12.4)	43.6 (40.2, 47.1)	30.8 (26.7, 35.2)	22.5 (18.6, 27.1)	25.3 (18.3, 33.7)	61.0 (51.0, 70.2)	70.4 (67.7, 73.0)

<sup>1</sup> In the past 30 days

## 6.2 Comparison of exposure to situations with second-hand smoke in 2009 and 2011

### Comparison of the key findings between 2009 and 2011

- o *There was a significant increase in the overall prevalence of exposure to second-hand smoke (SHS) among workers at their indoor workplaces between 2009 (27.2%) and 2011 (30.5%).*
- o *There was a significant increase in the overall prevalence of exposure to SHS among people in their homes (from 33.2% in 2009 to 36.0% in 2011).*
- o *There was a significant increase in the prevalence of exposure to SHS among people at health-care facilities (from 4.8% in 2009 to 7.3% in 2011), and in public transportation (from 21.6% in 2009 to 25.6% in 2011).*

Comparisons of exposure to SHS in 2009 and 2011 cover three places – at work, at home and in public places.

#### 6.2.1 Exposure to SHS in indoor areas at work in 2009 and 2011

**Table 6.5** presents the prevalence of exposure to SHS in indoor areas at workplaces, among overall workers and non-smokers during the past 30 days, by demographic characteristics.

The results showed an increasing rate of exposure to SHS at indoor workplaces in 2011 as compared to 2009 among all workers. The overall percentage of adults exposed to tobacco smoke at the workplace increased from 27.2% in 2009 to 30.5% in 2011. An increase was noticed among women, those in the age group of 25–44 years, those with less than primary education, and those in the lowest SES.

Between 2009 and 2011, among non-smokers, the percentage of adults exposed to tobacco smoke at the workplace increased among women, those in the in age group of 45–59 years, those with less than primary education and those in the lowest SES (from 29.6% in 2009 to 49.4% in 2011).

**Table 6.5:** Percentage of adults aged 15 years and above who worked indoors and were exposed to tobacco smoke at work, by smoking status and selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Adults exposed to tobacco smoke at work <sup>1</sup>					
	2009		2011		Relative change (%)	
	Overall	Non-smokers	Overall	Non-smokers	Overall	Non-smokers
	Percentage (95% CI)		Percentage (95% CI)			
<b>Overall</b>	27.2 (24.9, 29.7)	23.6 (21.1, 26.2)	30.5 (28.1, 32.9)	25.2 (22.9, 27.8)	11.8**	7.0
<b>Gender</b>						
Men	34.9 (31.2, 38.8)	30.8 (26.0, 36.1)	37.1 (33.9, 40.3)	29.4 (25.8, 33.3)	6.0	-4.5
Women	18.9 (16.8, 21.2)	18.9 (16.8, 21.2)	22.8 (20.4, 25.5)	22.4 (19.9, 25.1)	20.5**	18.5**
<b>Age (years)</b>						
15–24	29.7 (21.7, 39.3)	26.2 (17.6, 37.2)	31.8 (25.9, 38.3)	23.9 (17.3, 32.0)	6.9	-8.9
25–44	25.3 (23.2, 27.6)	22.3 (20.1, 24.8)	28.5 (25.8, 31.5)	23.1 (20.3, 26.2)	12.7**	3.7
45–59	29.5 (26.0, 33.2)	24.3 (20.9, 27.9)	33.1 (29.9, 36.5)	29.7 (26.3, 33.3)	12.3	22.3**
60+	35.6 (26.4, 46.0)	27.7 (18.7, 38.9)	40.4 (33.1, 48.1)	36.0 (28.5, 44.4)	13.4	30.1
<b>Residence</b>						
Urban	23.7 (21.9, 25.5)	20.9 (19.0, 22.9)	25.4 (23.4, 27.6)	22.0 (20.0, 24.2)	7.3	5.4
Rural	30.1 (26.3, 34.3)	25.8 (21.8, 30.4)	35.2 (31.1, 39.5)	28.3 (24.2, 32.9)	16.9	9.6
<b>Education level</b>						
Less than primary	36.3 (31.3, 41.8)	29.1 (23.7, 35.1)	45.1 (39.9, 50.4)	40.9 (34.5, 47.7)	24.1**	40.8**
Primary	38.6 (33.5, 44.0)	33.1 (27.3, 39.5)	41.8 (36.7, 47.0)	33.7 (28.0, 40.0)	8.1	1.9
Secondary	26.4 (21.9, 31.3)	23.2 (18.2, 29.1)	30.6 (27.1, 34.2)	24.2 (20.6, 28.2)	16.0	4.1
University	19.3 (16.9, 21.9)	18.5 (15.9, 21.4)	17.7 (15.4, 20.4)	16.6 (14.2, 19.4)	-7.9	-10.3
<b>Region</b>						
Bangkok	18.2 (15.4, 21.3)	15.9 (13.0, 19.4)	21.2 (18.0, 24.8)	20.4 (16.9, 24.3)	16.9	27.8
Central	24.0 (20.2, 28.2)	21.0 (17.7, 24.8)	27.8 (23.9, 32.1)	23.3 (19.4, 27.8)	16.1	10.9
Northern	27.6 (23.5, 32.1)	24.8 (20.3, 30.0)	27.4 (22.3, 33.1)	23.7 (18.5, 29.9)	-0.8	-4.4
Northeastern	31.1 (24.4, 38.5)	28.0 (20.6, 36.8)	34.4 (28.8, 40.6)	28.2 (22.6, 34.7)	10.9	0.9
Southern	40.8 (36.0, 45.8)	32.1 (27.3, 37.4)	44.4 (35.9, 53.1)	33.5 (25.4, 42.6)	8.8	4.3
<b>Socioeconomic status</b>						
Lowest	31.2 (22.4, 41.5)	29.6 (20.3, 41.0)	54.7 (43.1, 65.8)	49.4 (36.6, 62.4)	75.6**	67.1**
Low	37.6 (29.6, 46.3)	28.9 (20.6, 38.9)	41.9 (36.1, 47.9)	36.5 (30.0, 43.4)	11.4	26.1
Middle	31.6 (27.4, 36.1)	28.4 (23.7, 33.7)	32.5 (28.5, 36.9)	25.4 (21.3, 30.1)	3.0	-10.4
High	22.5 (19.3, 26.0)	17.6 (14.5, 21.3)	26.4 (23.1, 30.0)	20.4 (17.0, 24.3)	17.3	15.5
Highest	22.8 (20.1, 25.7)	21.6 (18.6, 24.8)	24.4 (21.4, 27.6)	21.8 (18.7, 25.1)	7.0	0.9

Note: Relative change (%) calculated by [rate of 2011– rate of 2009] \*100 / rate of 2009

<sup>1</sup> In the past 30 days, among those respondents who worked outside of the home and usually worked indoors.

\*\* P<0.05

### 6.2.2 SHS exposure in indoor areas at home in 2009 and 2011

**Table 6.6** presents data on exposure to SHS at home among all adults and non-smokers during the past 30 days, by demographic characteristics. Between 2009 and 2011, the overall percentage of adults exposed to tobacco smoke at home increased from 33.2% to 36.0%. An increase was observed among women (29.2% in 2009 to 32.3% in 2011), those in the age groups of 25–44 and 45–49 years, the rural population, those with a less than primary, primary and secondary education, those living in the Central region, and those belonging to the middle SES (35.5% in 2009 to 38.9% in 2011).

Among non-smokers, the overall percentage of adults exposed to tobacco smoke at home increased from 25.3% in 2009 to 28.1% in 2011. Among non-smokers, the percentage of adults exposed to tobacco smoke at home increased among women (27.9% to 31.2%), those in the age groups of 25–44 and 45–49 years, those living in rural areas (29.0% to 33.4%), those with a less-than-primary education (27.2% to 30.8%) and primary education (29.0% to 33.8%), those living in the Central region, and those belonging to the low, middle and highest SES.

**Table 6.6:** Percentage of adults aged 15 years and above who were exposed to tobacco smoke at home at least monthly, by smoking status and selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Adults exposed to tobacco smoke at home <sup>1</sup>					
	2009		2011		Relative change (%)	
	Overall	Non-smokers	Overall	Non-smokers	Overall	Non-smokers
	<i>Percentage (95% CI)</i>		<i>Percentage (95% CI)</i>			
<b>Overall</b>	33.2 (31.5, 34.9)	25.3 (23.7, 27.0)	36.0 (34.3, 37.7)	28.1 (26.5, 29.8)	8.5**	11.0**
<b>Gender</b>						
Men	37.3 (35.1, 39.6)	20.5 (18.0, 23.2)	39.9 (37.7, 42.1)	22.1 (20.0, 24.4)	6.9	7.8
Women	29.2 (27.4, 31.1)	27.9 (26.1, 29.8)	32.3 (30.5, 34.2)	31.2 (29.4, 33.1)	10.6**	12.0**
<b>Age (years)</b>						
15–24	37.5 (33.5, 41.6)	32.0 (27.6, 36.7)	39.5 (36.3, 42.9)	33.6 (30.1, 37.2)	5.5	4.9
25–44	32.7 (30.7, 34.7)	24.6 (22.7, 26.6)	35.8 (33.8, 38.0)	28.2 (26.1, 30.3)	9.6	14.5**
45–59	31.2 (29.2, 33.3)	21.9 (20.0, 23.9)	34.7 (32.5, 37.0)	25.4 (23.3, 27.5)	11.3**	15.9**
60+	31.9 (29.6, 34.4)	23.4 (21.1, 25.9)	34.3 (32.0, 36.6)	25.7 (23.5, 28.0)	7.4	9.7
<b>Residence</b>						
Urban	25.3 (24.1, 26.6)	17.5 (16.3, 18.7)	25.9 (24.5, 27.3)	18.9 (17.6, 20.3)	2.1	8.1
Rural	36.7 (34.3, 39.2)	29.0 (26.7, 31.5)	41.4 (38.9, 43.9)	33.4 (31.0, 35.9)	12.7**	14.9**
<b>Education level</b>						
Less than primary	36.5 (34.4, 38.7)	27.2 (25.2, 29.3)	39.8 (37.5, 42.2)	30.8 (28.6, 33.1)	9.0**	13.4**
Primary	38.8 (36.0, 41.7)	29.0 (26.2, 31.9)	43.2 (40.2, 46.2)	33.8 (30.7, 37.1)	11.3**	16.8**
Secondary	31.8 (29.1, 34.6)	26.2 (23.2, 29.4)	35.4 (33.2, 37.7)	28.9 (26.6, 31.2)	11.4**	10.2
University	18.0 (15.9, 20.4)	13.8 (11.7, 16.1)	17.5 (15.4, 19.7)	14.1 (11.9, 16.5)	-3.2	2.2
<b>Region</b>						
Bangkok	20.1 (18.2, 22.1)	13.1 (11.5, 14.9)	19.0 (17.1, 21.1)	13.2 (11.6, 15.0)	-5.2	0.7
Central	32.0 (29.3, 34.9)	22.5 (20.2, 25.0)	36.4 (33.4, 39.5)	27.6 (24.7, 30.8)	13.6**	22.7**
Northern	32.1 (28.4, 36.1)	24.3 (21.1, 27.9)	34.6 (30.2, 39.4)	25.9 (22.1, 30.2)	7.9	6.7
Northeastern	31.2 (27.4, 35.2)	25.4 (21.7, 29.6)	34.5 (31.0, 38.1)	29.0 (25.7, 32.5)	10.7	14.1
Southern	52.3 (49.0, 55.6)	43.5 (40.2, 47.0)	54.1 (50.6, 57.5)	43.5 (40.0, 47.1)	3.4	-0.1
<b>Socioeconomic status</b>						
Lowest	37.0 (33.8, 40.4)	31.4 (28.1, 34.9)	39.4 (36.5, 42.4)	33.3 (30.4, 36.2)	6.5	5.9
Low	36.8 (33.9, 39.9)	28.9 (26.1, 31.9)	40.4 (37.5, 43.4)	32.8 (29.9, 35.8)	9.8	13.4**
Middle	35.3 (32.9, 37.9)	25.1 (22.6, 27.7)	38.9 (36.1, 41.6)	29.2 (26.5, 32.1)	9.9**	16.6**
High	31.6 (29.0, 34.2)	22.6 (20.0, 25.5)	34.5 (32.2, 36.9)	25.1 (22.7, 27.6)	9.3	10.7
Highest	20.3 (18.3, 22.5)	13.0 (11.2, 15.1)	22.9 (20.8, 25.1)	16.1 (14.2, 18.2)	12.4	23.6**

Note: Relative change (%) calculated by [rate of 2011– rate of 2009] \*100 / rate of 2009

<sup>1</sup> Respondents who reported that smoking inside the home occurred daily, weekly, less than monthly, or monthly

\*\* P<0.05

### 6.2.3 SHS exposure in indoor areas of public places in 2009 and 2011

**Figure 6.1** and **Table 6.7** present data on exposure to SHS in public places among overall adults and non-smokers during the past 30 days, by six demographic characteristics. Public places included (a) inside government buildings/offices, (b) inside health-care facilities, (c) public transportation, and (d) markets.

In government buildings/offices, there was no significant change in the percentage exposed to SHS between 2009 and 2011 among overall adults and by gender and age. However, the percentage of adults exposed to tobacco smoke in government buildings increased in urban areas, among adults with a university education, those living in the Central region (8.9% to 20.6%; a 131.2% increase), and those in the highest SES.

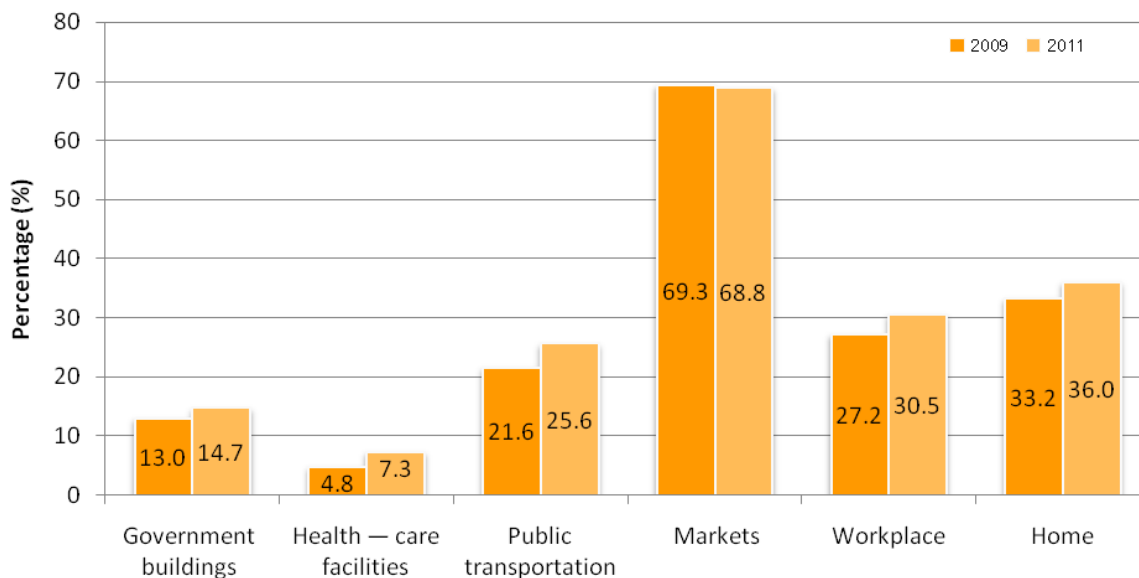
The overall percentage of adults exposed to tobacco smoke at health-care facilities increased in 2011 (7.3% in 2011 and 4.8% in 2009). The increase was noticed across all demographic characteristics

with the exception of the age group of 15–24 years, those with a university education, those living in Bangkok, the Northern and Northeastern regions, and those in lowest and high SES.

The overall percentage of adults exposed to tobacco smoke in public transportation increased from 21.6% in 2009 to 25.6% in 2011. This increase was noticed among both sexes, those in the age groups of 25–44 and 45–49 years, those living in urban areas, those with less than primary education, those residing in Bangkok and the Central region, and from the middle and highest SES.

The prevalence of exposure to SHS in marketplaces showed no significant statistical difference among all adults, as well as among sub-groups by demographic characteristics. However, the prevalence in 2011 remained as high as that in 2009, 69.3% and 68.8%, respectively.

**Figure 6.1:** Percentage of adults aged 15 years and above who were exposed to tobacco smoke in public places, at work, and at home at least monthly in the past 30 days – GATS Thailand, 2009 and 2011



**Table 6.7: Percentage of adults aged 15 years and above who were exposed to tobacco smoke in public places in the past 30 days, by selected demographic characteristics – GATS Thailand, 2009 and 2011**

Characteristic	Adults exposed to tobacco smoke in public places <sup>1</sup>											
	2009					2011					Relative change (%)	
	Government buildings	Health-care facilities	Public transportation	Markets	Government buildings	Health-care facilities	Public transportation	Markets	Government buildings	Health-care facilities	Public transportation	Markets
<b>Overall</b>	130 (11.5, 14.7)	48 (4.2, 5.6)	21.6 (19.6, 23.9)	69.3 (67.7, 70.9)	14.7 (13.3, 16.3)	7.3 (6.4, 8.4)	25.6 (23.6, 27.7)	68.8 (67.1, 70.5)	13.1	52.1**	18.4**	-0.7
<b>Gender</b>												
Men	144 (12.4, 16.7)	5.8 (4.6, 7.2)	22.2 (19.5, 25.0)	75.1 (73.2, 76.9)	16.6 (14.6, 18.8)	8.3 (6.9, 10.0)	25.9 (23.1, 28.9)	72.9 (70.7, 75.0)	15.7	44.2**	17.0**	-2.9
Women	11.4 (9.3, 13.9)	4.2 (3.5, 5.0)	21.3 (18.7, 24.1)	64.5 (62.4, 66.6)	12.8 (11.0, 14.7)	6.7 (5.8, 7.8)	25.4 (23.1, 27.9)	65.3 (63.4, 67.2)	11.8	59.8**	19.2**	1.3
<b>Age (years)</b>												
15-24	20.6 (14.6, 28.2)	6.6 (4.1, 10.5)	29.4 (23.8, 35.8)	73.7 (70.1, 77.0)	20.3 (16.5, 24.9)	7.5 (5.4, 10.5)	26.1 (22.3, 30.4)	70.0 (66.1, 73.6)	-1.1	14.1	-11.2	-5.0
25-44	11.4 (10.0, 13.1)	4.9 (4.0, 6.0)	21.7 (19.2, 24.4)	71.9 (70.0, 73.8)	13.5 (11.7, 15.5)	8.7 (7.2, 10.5)	28.7 (25.9, 31.7)	72.6 (70.5, 74.6)	17.9	76.8**	32.3**	0.9
45-59	12.6 (10.7, 14.7)	4.1 (3.3, 5.1)	16.7 (14.6, 19.2)	66.1 (63.9, 68.3)	13.7 (11.8, 15.8)	5.6 (4.7, 6.7)	25.0 (22.2, 28.1)	65.6 (63.3, 67.9)	8.7	36.1**	49.4**	-0.8
60+	8.1 (6.2, 10.6)	4.2 (3.2, 5.5)	13.8 (11.4, 16.6)	55.8 (52.4, 59.1)	11.3 (9.1, 13.9)	7.0 (5.7, 8.5)	17.5 (14.7, 20.6)	59.2 (56.3, 62.1)	38.9	65.7**	26.7	6.2
<b>Residence</b>												
Urban	14.3 (12.9, 15.8)	6.2 (5.4, 7.2)	22.0 (20.0, 24.1)	70.5 (69.1, 71.9)	17.3 (15.6, 19.1)	8.3 (7.2, 9.6)	28.9 (26.7, 31.2)	68.5 (66.8, 70.1)	21.1**	34.3**	31.5**	-2.9**
Rural	12.4 (10.3, 14.9)	4.3 (3.4, 5.3)	21.3 (18.0, 25.1)	68.7 (66.4, 71.0)	13.4 (11.4, 15.7)	6.8 (5.6, 8.3)	22.2 (19.0, 25.7)	69.0 (66.4, 71.5)	7.8	59.7**	3.8	0.4
<b>Education level</b>												
Less than primary	9.1 (7.3, 11.2)	4.1 (3.2, 5.2)	14.8 (12.7, 17.1)	60.3 (57.9, 62.7)	10.5 (8.5, 13.0)	6.1 (5.1, 7.4)	19.7 (17.4, 22.2)	62.4 (59.8, 64.9)	16.1	51.5**	33.1**	3.5
Primary	11.7 (8.9, 15.3)	4.1 (2.8, 5.9)	24.2 (19.9, 29.0)	73.6 (70.5, 76.5)	9.7 (7.6, 12.3)	8.1 (6.1, 10.6)	26.8 (22.6, 31.4)	73.6 (70.8, 76.2)	-17.1	98.8**	10.9	0.0
Secondary	15.4 (12.4, 19.0)	5.6 (4.2, 7.4)	24.4 (20.5, 28.7)	73.1 (70.7, 75.4)	17.9 (15.5, 20.6)	8.4 (6.9, 10.2)	28.1 (25.1, 31.2)	71.5 (69.1, 73.7)	15.8	50.4**	15.3	-2.2
University	14.5 (12.2, 17.1)	6.3 (4.8, 8.2)	24.1 (20.0, 28.7)	71.0 (68.5, 73.3)	18.8 (16.1, 21.8)	7.2 (5.7, 9.1)	27.6 (24.1, 31.4)	66.5 (63.0, 69.9)	29.5**	14.9	14.6	-6.2**
<b>Region</b>												
Bangkok	16.1 (13.5, 19.1)	8.2 (6.3, 10.7)	22.7 (19.6, 26.0)	71.6 (69.1, 73.9)	17.0 (14.5, 19.9)	7.5 (6.0, 9.3)	29.0 (26.2, 32.1)	70.4 (68.1, 72.6)	5.7	-9.3	28.2**	-1.6
Central	8.9 (6.9, 11.5)	4.8 (3.7, 6.2)	18.9 (15.7, 22.5)	71.5 (68.9, 74.0)	20.6 (17.1, 24.7)	9.1 (7.4, 11.3)	30.6 (26.3, 35.2)	72.8 (69.7, 75.7)	13.12**	91.1**	62.1**	1.8
Northern	10.2 (7.8, 13.4)	3.4 (2.3, 4.9)	17.1 (12.8, 22.5)	58.2 (54.0, 62.3)	8.7 (6.4, 11.7)	3.4 (2.2, 5.3)	17.8 (11.9, 25.9)	58.9 (54.4, 63.2)	-15.1	1.0	4.3	1.1
Northeastern	12.6 (9.3, 16.8)	2.9 (1.8, 4.7)	19.2 (14.3, 25.3)	67.2 (63.5, 70.8)	10.8 (8.4, 13.8)	4.3 (2.9, 6.2)	16.4 (13.2, 20.2)	65.1 (61.0, 69.1)	-14.1	48.4	-14.9	-3.1
Southern	22.9 (19.6, 26.6)	10.6 (8.6, 13.1)	37.2 (31.2, 43.6)	83.1 (80.3, 85.5)	22.7 (19.0, 26.8)	18.7 (15.0, 23.1)	36.0 (29.9, 42.6)	82.1 (79.4, 84.5)	-1.1	75.9**	-3.1	-1.2
<b>Socioeconomic status</b>												
Lowest	14.7 (9.9, 21.2)	4.3 (2.8, 6.6)	22.1 (17.6, 27.4)	62.2 (59.1, 65.2)	14.7 (11.8, 18.3)	5.8 (4.4, 7.5)	23.4 (19.9, 27.3)	64.1 (60.6, 67.4)	0.5	33.7	5.7	3.0
Low	11.5 (8.2, 15.8)	3.1 (2.3, 4.1)	21.1 (17.3, 25.5)	68.4 (65.5, 71.2)	11.9 (9.1, 15.3)	6.6 (5.1, 8.6)	25.5 (21.7, 29.8)	69.3 (66.0, 72.5)	3.4	114.0	21.0	1.3
Middle	11.2 (8.9, 14.0)	4.9 (3.5, 6.8)	20.0 (17.0, 23.3)	71.0 (68.1, 73.7)	13.8 (11.4, 16.6)	8.2 (6.6, 10.2)	25.5 (22.0, 29.4)	69.8 (67.1, 72.4)	23.6	68.0	28.0**	-1.7
High	12.5 (10.1, 15.3)	6.1 (4.6, 8.1)	23.4 (19.6, 27.6)	72.9 (70.2, 75.5)	13.1 (10.9, 15.7)	7.2 (5.6, 9.2)	25.3 (21.6, 29.4)	70.1 (67.5, 72.5)	5.3	18.2	8.3	-3.9
Highest	14.6 (12.5, 17.0)	6.8 (5.4, 8.5)	22.0 (18.6, 25.8)	73.5 (71.0, 75.8)	19.6 (16.9, 22.6)	9.7 (7.7, 12.2)	29.7 (26.1, 33.7)	71.5 (69.0, 73.8)	34.4**	42.7**	35.4**	-2.7

Note: Relative change (%) calculated by [rate of 2011 - rate of 2009] \* 100 / rate of 2009

<sup>1</sup> In the past 30 days

\*\* P < 0.05





## *7. Economics*

## 7. Economics

This chapter focuses on the economic aspects of tobacco use, including the use of manufactured cigarettes and shredded tobacco products used for hand-rolled cigarettes, and smokeless tobacco use. The chapter is divided into two main sections. The first section describes the findings from the 2011 GATS and the second section compares key findings between the 2009 GATS and the 2011 GATS.

### 7.1 Economics of tobacco use in 2011

#### Key findings in 2011

- o 88.3% of current manufactured cigarette smokers aged 15–17 years purchased their last cigarettes in loose form (sticks).
- o Of the five most purchased manufactured cigarette brands, four are produced by the Thailand Tobacco Monopoly (TTM) and two of these four brands are the inexpensive brands produced by TTM.
- o 88.3% of current manufactured cigarette smokers bought manufactured cigarettes from grocery stores.
- o A median of THB 586 per month was spent on manufactured cigarettes and a median of only THB 37.5 per month was spent on shredded tobacco products.
- o 4.8% of current manufactured cigarette smokers reported that their last purchase of a cigarette package did not have a pictorial health warning (PHW).

This section covers details of (1) the type of last purchase, (2) brand of manufactured cigarettes last purchased, (3) source of the last purchase, (4) expenditure on manufactured cigarettes and shredded tobacco products, and (5) purchase of cigarette packs without any pictorial health warning.

#### 7.1.1 Type of last purchase

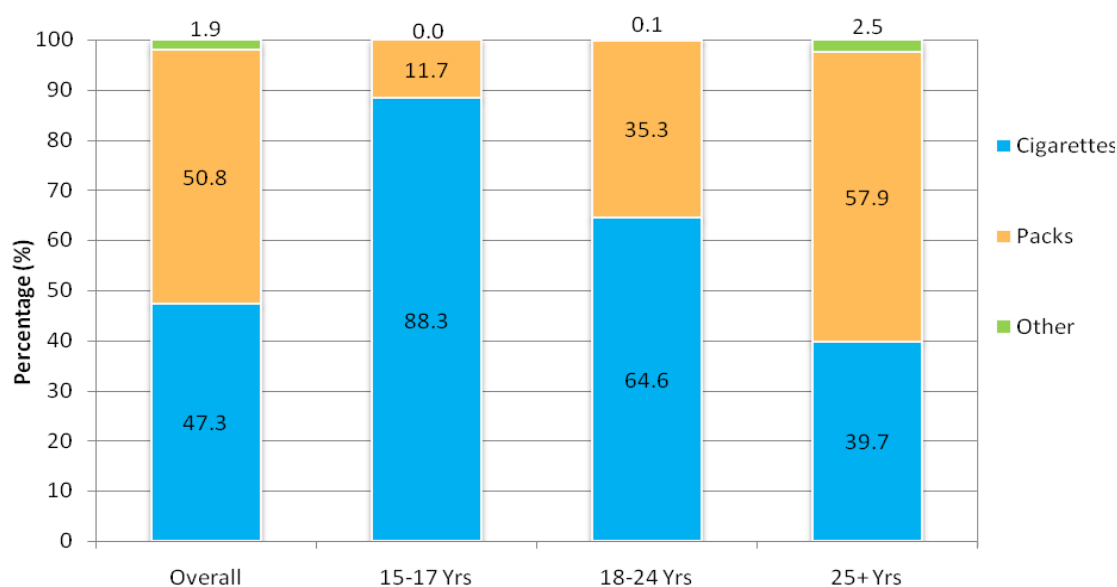
**Table 7.1** and **Table 7.1a** (in **Appendix D**, based on **Table 7.1**) present the type of last purchase of manufactured cigarettes including cigarettes in loose form (sticks), packs, and other types such as a carton or box. The survey found that half of current manufactured cigarette smokers aged 15 years and above purchased their last cigarettes in packs (50.8%), followed by purchase in loose form or stick (47.3%) and other (1.9%).

Among those whose last purchase was in loose form (stick), no significant difference was observed by gender. A larger percentage of those in the youngest age group of 15–17 years purchased manufactured cigarettes in loose form (88.3%) than those in the age groups of 18–24 years and 25+ years (64.6% and 39.7%, respectively), **Figure 7.1a**. More adults living in rural areas purchased cigarettes in loose form than those in urban areas (53.0% vs 38.7%). By region, more smokers in the Northeastern region purchased cigarettes in loose form (61.4%), while those in Bangkok metropolis purchased the least (31.9%). By SES, those in the lowest SES purchased most often in loose form while those in the highest SES purchased the least.

With regard to manufactured cigarettes in packs, those in the age group of 25+ years purchased manufactured cigarettes in packs more often (57.9%). The percentage of those who purchased

manufactured cigarettes in packs was significantly higher among those living in urban areas, and in the highest SES.

**Figure 7.1a:** Percentage distribution of the type of manufactured cigarettes at last purchase of cigarettes, by age group – GATS Thailand, 2011



**Table 7.1:** Percentage distribution of the type of manufactured cigarettes at last purchase of cigarettes – GATS Thailand, 2011

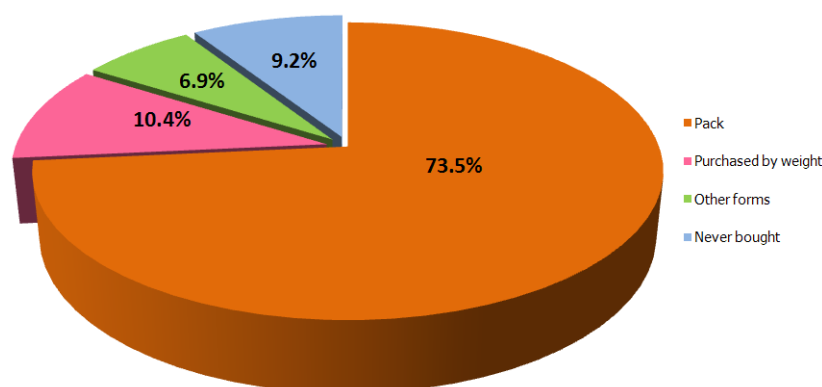
Characteristic	Type of last purchase			Total
	Cigarettes	Packs	Other <sup>1</sup>	
	<i>Percentage (95% CI)</i>			
<b>Overall</b>	47.3 (44.0, 50.7)	50.8 (47.4, 54.2)	1.9 (1.4, 2.5)	100
<b>Gender</b>				
Men	47.6 (44.1, 51.1)	50.5 (47.0, 54.0)	1.9 (1.4, 2.6)	100
Women	39.8 (31.3, 49.1)	59.6 (50.4, 68.2)	0.6 (0.2, 2.0)	100
<b>Age (years)</b>				
15–17	88.3 (73.7, 95.4)	11.7 (4.6, 26.3)	0.0	100
18–24	64.6 (56.6, 71.9)	35.3 (28.0, 43.3)	0.1 (0.0, 0.8)	100
25+	39.7 (36.6, 42.9)	57.9 (54.7, 61.0)	2.5 (1.8, 3.3)	100
<b>Residence</b>				
Urban	38.7 (35.5, 41.9)	58.5 (55.2, 61.8)	2.8 (2.0, 4.0)	100
Rural	53.0 (47.9, 58.0)	45.8 (40.8, 50.9)	1.2 (0.7, 2.1)	100
<b>Region</b>				
Bangkok	31.9 (27.3, 36.8)	64.8 (59.8, 69.5)	3.3 (2.1, 5.2)	100
Central	39.2 (33.4, 45.3)	58.5 (52.0, 64.6)	2.4 (1.3, 4.4)	100
Northern	38.5 (30.6, 47.0)	60.3 (51.9, 68.3)	1.2 (0.5, 2.8)	100
Northeastern	61.4 (54.0, 68.3)	37.6 (30.8, 45.0)	0.9 (0.4, 2.1)	100
Southern	52.0 (46.2, 57.8)	45.8 (40.1, 51.5)	2.2 (1.3, 3.9)	100
<b>Socioeconomic status</b>				
Lowest	66.5 (57.1, 74.8)	31.9 (23.8, 41.2)	1.6 (0.6, 4.0)	100
Low	54.2 (46.6, 61.7)	44.9 (37.5, 52.5)	0.9 (0.4, 1.9)	100
Middle	47.3 (41.7, 53.0)	51.4 (45.8, 57.0)	1.2 (0.5, 3.1)	100
High	42.8 (37.3, 48.5)	55.9 (50.3, 61.3)	1.3 (0.7, 2.4)	100
Highest	27.7 (22.7, 33.4)	67.6 (61.8, 72.9)	4.7 (3.1, 7.1)	100

<sup>1</sup> Includes cartons and others

**Table 7.1a** and **Table 7.1b** (in **Appendix D**, based on **Table 7.1a**) present the type of last purchase of shredded tobacco products, including packs (manufactured packs), purchased by weight, and other forms such as purchased by cube, roll, can, bundle, bottle, box, chump, manual pack. The majority of tobacco users who used shredded tobacco products for hand-rolled cigarettes and smokeless tobacco use purchased their last shredded tobacco products in manufactured packs (73.5%), **Figure 7.1b**.

The percentage of those who purchased shredded tobacco products in manufactured packs was the lowest among women tobacco users and those in the Northern region. The highest percentage of those who purchased shredded tobacco products in other forms was among those in the Northern region.

**Figure 7.1b:** Percentage distribution of the type of last purchase of shredded tobacco products among shredded tobacco user aged 15 years and above – GATS Thailand, 2011



**Table 7.1a:** Percentage distribution of the type of last purchase of shredded tobacco products among shredded tobacco users<sup>1</sup> aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Type of last purchase				Total
	Pack	Purchased by weight	Other forms <sup>2</sup>	Never bought	
	<i>Percentage (95% CI)</i>				
<b>Overall</b>	73.5 (70.1, 76.7)	10.3 (8.5, 12.5)	6.9 (4.7, 10.1)	9.2 (7.5, 11.3)	100
<b>Gender</b>					
Men	79.9 (76.2, 83.2)	6.8 (5.5, 8.5)	5.9 (3.7, 9.3)	7.4 (5.8, 9.4)	100
Women	46.5 (41.2, 51.9)	25.0 (20.2, 30.6)	11.4 (7.8, 16.4)	17.0 (12.4, 23.0)	100
<b>Age (years)</b>					
15–17	63.2 (36.3, 83.8)	6.0 (1.5, 21.5)	0.0	30.8 (11.5, 60.4)	100
18–24	79.2 (68.2, 87.2)	1.7 (0.6, 5.0)	5.6 (2.1, 14.0)	13.5 (7.1, 24.0)	100
25+	73.3 (69.9, 76.5)	11.3 (9.4, 13.7)	7.3 (5.1, 10.4)	8.0 (6.5, 9.9)	100
<b>Residence</b>					
Urban	76.4 (72.3, 80.0)	10.3 (8.0, 13.3)	4.7 (3.1, 7.2)	8.5 (6.3, 11.5)	100
Rural	73.1 (69.1, 76.7)	10.3 (8.3, 12.8)	7.3 (4.7, 11.0)	9.3 (7.4, 11.7)	100
<b>Region</b>					
Bangkok	85.6 (72.9, 92.9)	8.5 (4.4, 15.5)	0.4 (0.1, 2.6)	5.6 (1.5, 18.6)	100
Central	85.8 (80.9, 89.6)	5.3 (3.1, 9.1)	3.4 (1.8, 6.2)	5.5 (3.2, 9.4)	100
Northern	46.6 (37.2, 56.2)	16.0 (11.1, 22.5)	24.5 (14.7, 37.9)	12.9 (8.4, 19.4)	100
Northeastern	78.9 (74.0, 83.1)	10.8 (7.8, 14.8)	2.6 (1.2, 5.7)	7.6 (5.1, 11.3)	100
Southern	75.1 (69.9, 79.6)	8.3 (5.8, 11.8)	3.7 (2.4, 5.7)	13.0 (9.9, 16.7)	100
<b>Socioeconomic status</b>					
Lowest	63.5 (57.2, 69.5)	15.8 (12.0, 20.6)	6.2 (3.9, 9.5)	14.5 (10.6, 19.5)	100
Low	73.8 (67.6, 79.2)	9.3 (6.7, 12.8)	10.9 (6.6, 17.6)	5.9 (4.2, 8.2)	100
Middle	78.0 (71.9, 83.1)	7.7 (5.5, 10.6)	6.7 (3.3, 12.9)	7.7 (4.9, 12.0)	100
High	83.1 (77.9, 87.2)	6.9 (4.4, 10.7)	3.5 (1.8, 6.7)	6.5 (4.4, 9.4)	100
Highest	83.8 (77.8, 88.5)	4.3 (2.5, 7.5)	3.5 (1.8, 6.5)	8.4 (5.4, 12.8)	100

<sup>1</sup> Includes tobacco users who used shredded tobacco products for hand-rolled cigarettes and smokeless tobacco use

<sup>2</sup> Includes tobacco purchased by cube, roll, can, bundle, bottle, box, chump, manual pack

### 7.1.2 Brand of manufactured cigarettes last purchased

The 2011 GATS Thailand asked respondents to report the brand names of the last manufactured cigarettes purchased. **Table 7.2** presents the top five brands last purchased among current smokers of manufactured cigarettes. The majority of current manufactured cigarette smokers purchased these top five brands (91.2%). Among the following top five brands, four of the five are local brands, except L&M, which is an imported manufactured cigarette: Krongthip (37.8%), Wonder (25.3%), L&M (11.6%), SMS (10.0%) and Sai-Fon (6.5%). Among the four local brands, two were inexpensive brands produced by the Thailand Tobacco Monopoly (TTM), i.e. Wonder and SMS. In addition, SMS was the latest inexpensive brand produced by TTM after the last cigarette excise tax increase in 2009.

The survey found no significant difference in purchase of the SMS brand by gender, residence and SES. Younger smokers (15–24 years) purchased the SMS brand significantly less often than those in the other age groups. Those with the lowest education level and less than primary education purchased the SMS brand significantly more often as compared to those with the highest education (university) level (14.3% vs 4.9%). SMS is a popular brand in all regions except the Southern region, and among those in the low, middle and high SES.

For the cheap Wonder brand, there was no significant difference in purchase by gender and age group. The survey revealed that those in rural areas purchased the Wonder brand significantly more often than those in urban areas (29.5% vs 18.8%). The Wonder brand was purchased significantly less often by those with the highest education (university) level and those living in the Southern region. By SES, those in the lowest SES purchased it significantly more often than those in highest SES (34.0% vs 16.7%).

**Table 7.2:** Percentage of current smokers of manufactured cigarettes aged 15 years and above, by the brand of manufactured cigarette last purchased and selected demographic characteristics – GATS Thailand, 2011

Characteristic	Brand purchased last				
	Krongthip	Wonder	L&M	SMS	Sai-Fon
	<i>Percentage (95% CI)</i>				
<b>Overall</b>	37.8 (34.7, 41.0)	25.3 (22.5, 28.3)	11.6 (9.9, 13.6)	10.0 (8.4, 11.9)	6.5 (4.9, 8.5)
<b>Gender</b>					
Men	38.4 (35.2, 41.7)	25.2 (22.3, 28.4)	11.3 (9.5, 13.3)	9.9 (8.2, 11.8)	6.3 (4.7, 8.4)
Women	21.8 (16.0, 29.0)	26.4 (18.7, 35.9)	19.0 (12.7, 27.5)	14.1 (8.7, 22.2)	11.5 (7.1, 18.1)
<b>Age (years)</b>					
15–24	45.2 (37.4, 53.2)	26.3 (19.4, 34.6)	9.9 (6.3, 15.3)	4.8 (2.8, 8.3)	7.8 (3.8, 15.4)
25–44	36.0 (32.1, 40.1)	23.4 (19.9, 27.3)	14.1 (11.9, 16.7)	11.1 (8.7, 14.2)	6.7 (5.0, 8.9)
45–59	36.0 (31.3, 41.0)	28.0 (23.4, 33.2)	8.0 (5.9, 10.8)	12.7 (10.1, 15.8)	3.5 (2.5, 5.0)
60+	26.4 (19.9, 34.2)	26.4 (19.6, 34.6)	10.9 (6.9, 16.9)	14.2 (9.5, 20.6)	9.5 (5.3, 16.5)
<b>Residence</b>					
Urban	35.9 (33.1, 38.9)	18.8 (16.4, 21.3)	17.4 (15.2, 20.0)	9.9 (8.1, 11.9)	7.5 (6.1, 9.1)
Rural	39.0 (34.3, 43.9)	29.5 (25.2, 34.3)	7.8 (5.5, 10.8)	10.1 (7.8, 13.0)	5.8 (3.6, 9.4)
<b>Education level</b>					
Less than primary	33.8 (28.9, 39.0)	29.3 (24.2, 34.9)	6.4 (4.3, 9.3)	14.3 (11.0, 18.3)	3.9 (2.5, 5.9)
Primary	42.3 (35.8, 49.0)	26.3 (20.4, 33.3)	6.1 (3.2, 11.3)	10.5 (7.7, 14.2)	7.2 (3.7, 13.6)
Secondary	38.5 (34.0, 43.3)	26.7 (22.2, 31.7)	12.5 (10.2, 15.2)	9.6 (7.0, 13.0)	6.5 (4.4, 9.3)
University	29.5 (23.1, 36.9)	11.7 (8.3, 16.2)	28.1 (22.5, 34.4)	4.9 (2.9, 8.0)	8.4 (4.2, 15.8)
<b>Region</b>					
Bangkok	38.0 (33.2, 42.9)	13.4 (10.4, 17.0)	17.4 (14.1, 21.2)	10.1 (7.6, 13.2)	8.8 (6.5, 11.8)
Central	37.3 (31.9, 43.1)	18.2 (14.4, 22.7)	14.9 (10.7, 20.3)	13.6 (10.4, 17.5)	8.3 (5.7, 11.8)
Northern	26.2 (19.2, 34.7)	39.9 (32.7, 47.6)	12.1 (7.9, 18.1)	14.1 (10.3, 19.0)	2.8 (1.4, 5.7)
Northeastern	34.2 (27.5, 41.5)	42.1 (35.1, 49.5)	4.4 (2.8, 6.8)	8.1 (4.9, 13.1)	8.4 (4.7, 14.7)
Southern	53.5 (47.5, 59.4)	3.2 (1.9, 5.5)	15.1 (11.4, 19.7)	4.8 (2.9, 7.9)	1.6 (0.9, 2.7)
<b>Socioeconomic status</b>					
Lowest	37.7 (29.6, 46.5)	34.0 (24.9, 44.4)	6.8 (3.2, 13.9)	5.8 (3.2, 10.2)	10.9 (5.3, 21.2)
Low	37.9 (30.5, 46.0)	28.8 (23.0, 35.3)	6.9 (4.0, 11.7)	13.2 (8.4, 20.0)	3.6 (1.9, 6.7)
Middle	41.4 (35.8, 47.2)	23.4 (18.6, 29.1)	8.1 (5.8, 11.2)	12.5 (9.1, 17.1)	4.8 (3.3, 6.9)
High	38.0 (33.2, 43.0)	24.5 (19.6, 30.1)	13.4 (10.5, 16.9)	10.1 (7.8, 12.9)	6.2 (4.2, 8.9)
Highest	32.9 (28.1, 38.2)	16.7 (12.9, 21.4)	22.8 (18.5, 27.8)	7.9 (5.2, 11.7)	7.6 (4.3, 13.0)

Note: Current manufactured cigarette smokers include those with daily and occasional (less than daily) use. The top five reported brands last purchased among all manufactured cigarette smokers are shown here.

### 7.1.3 Source of last purchase

**Table 7.3** presents the source of last purchase of cigarettes among smokers of manufactured cigarettes. The most common sources of purchase were grocery stores (88.3%), followed by convenience stores (9.6%) and other sources (2.2%), which included wholesale shops/department stores, street vendors, hawkers, flea markets, duty-free shops, outside the country, on the internet, military stores, from another person and other sources.

Among manufactured cigarette smokers who purchased cigarettes at grocery stores, there were significant differences by gender (88.8% for men vs 75.0% for women), residence and SES, and between the youngest and oldest age groups.

In contrast, when considering those who purchased cigarettes at convenience stores, a significantly higher prevalence was observed among those in the oldest age group of 25+ years as compared to the youngest age group of 15–17 years (10.7% vs 1.4%), those in urban areas as compared to rural areas (17.0% vs. 4.7%), those in the Bangkok metropolis as compared to the Northeastern region (28.1% vs 2.1%), and those in the highest SES as compared to the lowest SES (20.2% vs 4.2%).

**Table 7.3:** Percentage distribution of the source of last purchase of cigarettes among smokers of manufactured cigarettes aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Sources			Total
	Grocery	Convenience store	Other <sup>1</sup>	
	<i>Percentage (95% CI)</i>			
<b>Overall</b>	88.3 (86.3, 90.0)	9.6 (8.0, 11.4)	2.2 (1.6, 2.9)	100
<b>Gender</b>				
Men	88.8 (86.8, 90.5)	9.1 (7.5, 11.0)	2.1 (1.6, 2.9)	100
Women	75.0 (66.0, 82.3)	22.4 (15.4, 31.5)	2.6 (1.1, 6.0)	100
<b>Age (years)</b>				
15–17	97.7 (93.4, 99.2)	1.4 (0.4, 4.7)	0.9 (0.1, 6.0)	
18–24	92.4 (88.0, 95.3)	7.5 (4.6, 11.9)	0.1 (0.0, 0.8)	100
25+	86.5 (84.3, 88.4)	10.7 (9.0, 12.8)	2.8 (2.1, 3.7)	100
<b>Residence</b>				
Urban	79.5 (76.8, 82.0)	17.0 (14.7, 19.6)	3.5 (2.5, 4.8)	100
Rural	94.0 (91.3, 95.9)	4.7 (3.0, 7.4)	1.3 (0.7, 2.2)	100
<b>Region</b>				
Bangkok	68.7 (63.2, 73.8)	28.1 (23.2, 33.5)	3.2 (1.7, 6.0)	100
Central	85.7 (80.9, 89.5)	11.8 (8.2, 16.6)	2.5 (1.4, 4.5)	100
Northern	88.9 (84.3, 92.2)	9.0 (6.0, 13.4)	2.1 (1.1, 4.1)	100
Northeastern	96.7 (94.0, 98.2)	2.1 (0.9, 4.9)	1.2 (0.6, 2.4)	100
Southern	89.8 (84.7, 93.3)	7.6 (4.5, 12.8)	2.6 (1.6, 4.3)	100
<b>Socioeconomic status</b>				
Lowest	94.0 (90.4, 96.3)	4.2 (2.4, 7.4)	1.8 (0.7, 4.2)	100
Low	96.3 (93.8, 97.8)	2.4 (1.2, 4.8)	1.3 (0.6, 2.8)	100
Middle	90.7 (87.5, 93.1)	6.8 (4.8, 9.5)	2.5 (1.4, 4.4)	100
High	85.4 (81.4, 88.7)	13.4 (10.2, 17.3)	1.2 (0.7, 2.2)	100
Highest	75.6 (70.8, 79.9)	20.2 (16.2, 24.8)	4.2 (2.7, 6.5)	100

<sup>1</sup> Includes wholesale shop/department store, street vendor, hawker, flea market, duty-free shop, outside the country, on the internet, military store, from another person and others

#### 7.1.4 Expenditure on manufactured cigarettes and shredded tobacco products

**Table 7.4** presents the average and median expenditure on cigarettes (Thai Baht [THB] per month) among smokers of manufactured cigarettes, as well as the average and median expenditure for shredded tobacco products used for hand-rolled cigarettes and smokeless tobacco use such as snuff by mouth, betel quid with tobacco, and chewing tobacco. The expenditure data for manufactured cigarettes and shredded tobacco products were asymmetrically distributed, in a positive skewed distribution. Tests for normality using the Kolmogorov–Smirnov test (K-S) found that the data were non-normal. The median of the data set was therefore selected for use in the following details.

The survey found that the median amount of money spent on buying packs of 20 manufactured cigarettes was THB 585.5 per month. By gender, current men smokers of manufactured cigarettes spent THB 608.3 per month, which was about THB 173.8 higher than the amount spent by women. Smokers in the age group of 45–59 years spent the most (THB 638.7 per month). Urban current



smokers spent THB 638.7 per month, while rural smokers spent THB 127.7 less. Smokers with a university level education, those living in Bangkok metropolis and in the highest SES spent the most on cigarettes per month.

Regarding the median expenditure on shredded tobacco products, hand-rolled cigarette smokers and smokeless tobacco users spent about THB 37.5 per month, which was 15 times lower than the amount spent by smokers of manufactured cigarettes. Those in the age group of 25–59 years, living in rural areas, with a low education level, less than primary to primary level education, living in the Northern region, in a low SES, had the highest spending as compared to the other groups.

**Table 7.4:** Mean and median expenditures per month among manufactured cigarette smokers aged 15 years and above and shredded tobacco users aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Cigarette expenditure per month (Baht) <sup>1</sup>		Shredded tobacco expenditure per month (Baht) <sup>2</sup>	
	Average (95% CI)	Median	Average (95% CI)	Median
<b>Overall</b>	697.57 (662.54, 732.59)	585.52	43.34 (40.59, 46.08)	37.50
<b>Gender</b>				
Men	700.63 (664.70, 736.56)	608.33	45.63 (42.67, 48.60)	37.50
Women	619.43 (487.10, 751.77)	434.52	26.55 (23.79, 29.30)	21.43
<b>Age (years)</b>				
15–24	588.44 (519.33, 657.55)	506.94	39.23 (28.32, 50.15)	30.00
25–44	722.50 (672.71, 772.30)	608.33	45.07 (40.35, 49.79)	37.50
45–59	791.50 (721.00, 862.00)	638.75	48.09 (43.82, 52.35)	37.50
60+	638.42 (547.62, 729.23)	501.88	35.81 (32.61, 39.00)	30.00
<b>Residence</b>				
Urban	777.03 (738.79, 815.28)	638.75	40.00 (36.93, 43.08)	30.00
Rural	645.51 (593.24, 697.78)	511.00	43.90 (40.74, 47.07)	37.50
<b>Education level</b>				
Less than primary	687.52 (613.01, 762.03)	532.29	41.57 (38.60, 44.55)	37.50
Primary	724.01 (658.08, 789.93)	638.75	45.10 (40.05, 50.15)	37.50
Secondary	641.07 (596.02, 686.11)	511.00	44.84 (37.82, 51.86)	30.00
University	874.33 (780.46, 968.20)	684.38	31.32 (24.11, 38.53)	25.00
<b>Region</b>				
Bangkok	842.62 (772.54, 912.71)	752.81	35.72 (28.94, 42.51)	25.00
Central	789.79 (719.93, 859.65)	617.46	42.73 (36.68, 48.78)	37.50
Northern	627.05 (542.21, 711.88)	506.94	46.34 (40.95, 51.73)	42.86
Northeastern	587.43 (516.56, 658.29)	506.94	47.54 (42.60, 52.49)	37.50
Southern	706.29 (634.83, 777.76)	529.25	33.24 (30.78, 35.69)	30.00
<b>Socioeconomic status</b>				
Lowest	636.09 (536.72, 735.47)	547.50	39.74 (35.53, 43.96)	30.00
Low	626.77 (544.92, 708.61)	506.94	46.37 (39.73, 53.01)	37.50
Middle	674.77 (612.56, 736.98)	532.29	45.41 (41.25, 49.56)	37.50
High	708.39 (649.45, 767.33)	608.33	42.66 (36.17, 49.15)	30.00
Highest	843.28 (776.01, 910.54)	709.72	41.21 (35.41, 47.01)	32.14

<sup>1</sup> Includes smokers of manufactured cigarettes 15 years of age and above who bought packs

<sup>2</sup> Includes users of shredded tobacco 15 years of age and above who bought packs

### 7.1.5 Cigarette packs without pictorial health warnings

Estimates of cigarette packs without pictorial health warnings (PHWs, to avoid tax) were based on whether respondents who were current smokers of manufactured cigarettes aged 15 years and above noticed that the last cigarette package they purchased did not have an PHW.

**Table 7.5** provides information on the estimate for cigarette packs without PHWs. Overall, 4.8% purchased such cigarette packs. Among smokers of manufactured cigarettes, men purchased significantly more of these cigarettes than women (5.0% vs 0.2%). A significantly higher percentage of these cigarettes were bought by those in the Southern region (18.5%) as compared to those in the other regions. No significant difference in the percentages of buying cigarette packs without PHWs was seen by age group, residence, education level and SES.

**Table 7.5:** Percentage distribution of current smokers of manufactured cigarettes aged 15 years and above whose last purchased cigarette packet had and did not have an PHW, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Cigarette package last purchased that .....		Total
	did not have an PHW	had an PHW	
	<i>Percentage (95% CI)</i>		
<b>Overall</b>	4.8 (3.5, 6.4)	95.2 (93.6,96.5)	100
<b>Gender</b>			
Men	5.0 (3.7, 6.7)	95.0 (93.3,96.3)	100
Women	0.2 (0.0, 1.6)	99.8 (98.4,100.0)	100
<b>Age (years)</b>			
15–24	4.0 (1.3, 11.7)	96.0 (88.3,98.7)	100
25–44	4.0 (2.5, 6.3)	96.0 (93.7,97.5)	100
45–59	6.1 (4.2, 8.9)	93.9 (91.1,95.8)	100
60+	7.2(3.1,16.0)	92.8 (84.0,96.9)	100
<b>Residence</b>			
Urban	4.1 (3.0, 5.7)	95.9 (94.3,97.0)	100
Rural	5.3 (3.4, 8.3)	94.7 (91.7,96.6)	100
<b>Education level</b>			
Less than primary	7.7 (4.6, 12.8)	92.3 (87.2,95.4)	100
Primary	6.4 (3.9, 10.2)	93.6 (89.8,96.1)	100
Secondary	3.1 (1.8, 5.2)	96.9 (94.8,98.2)	100
University	3.7 (1.9, 7.1)	96.3 (92.9,98.1)	100
<b>Region</b>			
Bangkok	3.5 (1.7, 7.1)	96.5 (92.9,98.3)	100
Central	2.1 (0.8, 5.4)	97.9 (94.6,99.2)	100
Northern	1.7 (0.6, 4.6)	98.3 (95.4,99.4)	100
Northeastern	1.6 (0.7, 3.9)	98.4 (96.1,99.3)	100
Southern	18.5 (12.6, 26.4)	81.5 (73.6,87.4)	100
<b>Socioeconomic status</b>			
Lowest	4.5 (2.1, 9.7)	95.5 (90.3,97.9)	100
Low	7.1 (3.7, 13.0)	92.9 (87.0,96.3)	100
Middle	5.6 (3.3, 9.3)	94.4 (90.7,96.7)	100
High	3.8 (2.0, 7.0)	96.2 (93.0,98.0)	100
Highest	3.8 (2.3, 6.2)	96.2 (93.8,97.7)	100

## 7.2 Comparison of the economics of tobacco use in 2009 and 2011

### Comparison of the key findings between 2009 and 2011

- *The percentage of those who purchased their last cigarettes in loose form (sticks) among current smokers aged 15–17 years remained high and did not change significantly (84.3% in 2009 and 88.3% in 2011).*
- *The median price of cigarettes per 20 sticks increased from THB 45 in 2009 to THB 58 in 2011.*
- *The percentage of current manufactured cigarette smokers who reported that their last purchase of a cigarette package did not have PHWs was higher in 2011 than in 2009 (4.8% vs 2.6%), but the difference was not significant.*

Comparisons of the economics of tobacco use in 2009 and 2011 covered two indicators, i.e. type of last purchase of manufactured cigarettes, and last purchase of cigarette packs without PHWs.

#### 7.2.1 Type of last purchase of manufactured cigarettes in 2009 and 2011

**Table 7.6** presents the percentages of the type of last purchase of manufactured cigarettes among smokers of manufactured cigarettes aged 15 years and above, categorized into three types – loose form (sticks), packs and others (large packs or cartons).

Last purchase of manufactured cigarettes in 2009 and 2011 followed the same pattern. These were mostly purchased by pack, followed by loose form (sticks), and others (large packs or cartons). A significant decrease in the patterns of buying in loose form was noted among those in the age group of 25+ years and in the low SES. A significant increase of buying in pack was seen among those in the low SES.

#### 7.2.2 Last purchase of cigarette packs without pictorial health warnings in 2009 and 2011

**Table 7.7** presents the percentages of those who last purchased cigarette packs without PHWs. These types of cigarette packs do not carry PHWs to avoid taxation. To identify those who purchased these cigarettes, respondents were asked if the last cigarette pack they bought carried any PHW on it. There was no overall significant difference between difference sub-group by demographic characteristics (gender, age group, residence, education level, region and SES).

**Table 7.6:** Percentage distribution of the type of cigarettes last purchased by manufactured cigarette smokers aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Type of last purchase						Relative change (%)		
	2009			2011			Cigarettes	Packs	Others <sup>1</sup>
	Cigarettes	Packs	Others <sup>1</sup>	Cigarettes	Packs	Others <sup>1</sup>	Cigarettes	Packs	Others <sup>1</sup>
<b>Overall</b>	48.6 (45.6, 51.6)	49.8 (46.9, 52.8)	1.6 (1.1, 2.2)	47.3 (44.0, 50.7)	50.8 (47.4, 54.2)	1.9 (1.4, 2.5)	-2.6	2.0	18.8
<b>Gender</b>									
Men	49.1 (46.0, 52.1)	49.3 (46.3, 52.4)	1.6 (1.1, 2.3)	47.6 (44.1, 51.1)	50.5 (47.0, 54.0)	1.9 (1.4, 2.6)	-2.9	2.3	19.0
Women	37.4 (27.9, 47.9)	62.0 (51.5, 71.5)	0.6 (0.1, 2.4)	39.8 (31.3, 49.1)	59.6 (50.4, 68.2)	0.6 (0.2, 2.0)	6.6	-4.0	-2.0
<b>Age (years)</b>									
15-17	84.3 (67.2, 93.4)	15.7 (6.6, 32.8)	0.0	88.3 (73.7, 95.4)	11.7 (4.6, 26.3)	0.0	4.7	-25.6	0.0
18-24	62.4 (53.8, 70.2)	37.0 (29.2, 45.6)	0.6 (0.2, 2.3)	64.6 (56.6, 71.9)	35.3 (28.0, 43.3)	0.1 (0.0, 0.8)	3.6	-4.8	-82.1**
25+	43.4 (40.3, 46.6)	54.7 (51.5, 57.8)	1.9 (1.3, 2.8)	39.7 (36.6, 42.9)	57.9 (54.7, 61.0)	2.5 (1.8, 3.3)	-8.7**	5.8	30.0
<b>Residence</b>									
Urban	40.1 (37.4, 42.9)	57.5 (54.8, 60.2)	2.4 (1.7, 3.4)	38.7 (35.5, 41.9)	58.5 (55.2, 61.8)	2.8 (2.0, 4.0)	-3.6	1.7	19.6
Rural	53.8 (49.3, 58.1)	45.2 (40.8, 49.6)	1.1 (0.5, 2.2)	53.0 (47.9, 58.0)	45.8 (40.8, 50.9)	1.2 (0.7, 2.1)	-1.4	1.3	13.4
<b>Region</b>									
Bangkok	33.9 (29.8, 38.2)	63.4 (59.0, 67.5)	2.7 (1.6, 4.7)	31.9 (27.3, 36.8)	64.8 (59.8, 69.5)	3.3 (2.1, 5.2)	-6.0	2.3	22.2
Central	41.7 (36.3, 47.4)	56.4 (50.9, 61.7)	1.9 (1.0, 3.4)	39.2 (33.4, 45.3)	58.5 (52.0, 64.6)	2.4 (1.3, 4.4)	-6.1	3.7	25.7
Northern	45.4 (38.2, 52.8)	53.0 (45.6, 60.2)	1.7 (0.4, 7.3)	38.5 (30.6, 47.0)	60.3 (51.9, 68.3)	1.2 (0.5, 2.8)	-15.2	13.9	-29.5
Northeastern	57.4 (50.4, 64.1)	41.6 (34.9, 48.6)	1.0 (0.5, 2.2)	61.4 (54.0, 68.3)	37.6 (30.8, 45.0)	0.9 (0.4, 2.1)	6.9	-9.4	-6.6
Southern	57.0 (52.0, 61.9)	41.9 (37.0, 47.0)	1.1 (0.5, 2.2)	52.0 (46.2, 57.8)	45.8 (40.1, 51.5)	2.2 (1.3, 3.9)	-8.7	9.2	101.8
<b>Socioeconomic status</b>									
Lowest	61.6 (52.3, 70.2)	38.0 (29.5, 47.3)	0.3 (0.1, 1.4)	66.5 (57.1, 74.8)	31.9 (23.8, 41.2)	1.6 (0.6, 4.0)	7.9	-16.1	362.9
Low	64.0 (57.3, 70.2)	34.2 (28.2, 40.8)	1.8 (0.7, 4.8)	54.2 (46.6, 61.7)	44.9 (37.5, 52.5)	0.9 (0.4, 1.9)	-15.3**	31.3**	-51.0
Middle	53.1 (47.5, 58.7)	45.7 (40.2, 51.4)	1.1 (0.6, 2.1)	47.3 (41.7, 53.0)	51.4 (45.8, 57.0)	1.2 (0.5, 3.1)	-10.9	12.4	10.8
High	43.4 (37.9, 49.0)	55.3 (49.7, 60.8)	1.3 (0.7, 2.4)	42.8 (37.3, 48.5)	55.9 (50.3, 61.3)	1.3 (0.7, 2.4)	-1.3	1.0	1.0
Highest	25.0 (20.1, 30.6)	71.9 (66.2, 77.0)	3.1 (1.8, 5.2)	27.7 (22.7, 33.4)	67.6 (61.8, 72.9)	4.7 (3.1, 7.1)	11.0	-6.0	51.6

Note: Relative change (%) calculated by [rate of 2011 - rate of 2009] \* 100 / rate of 2009.

<sup>1</sup> Includes cartons and large packs

\*\* P<0.05

**Table 7.7:** Percentage of current manufactured cigarette smokers aged 15 years and above whose last purchased cigarette package did not have a pictorial health warning, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Cigarette package last purchased which did not contain a PHW		
	2009	2011	Relative change (%)
	<i>Percentage (95% CI)</i>		
<b>Overall</b>	2.6 (1.6, 4.2)	4.8 (3.5, 6.4)	82.1
<b>Gender</b>			
Men	2.6 (1.6, 4.3)	5.0 (3.7, 6.7)	90.8
Women	2.9 (0.8, 9.8)	0.2 (0.0, 1.6)	-92.4
<b>Age (years)</b>			
15–24	2.8 (0.9, 8.4)	4.0 (1.3, 11.7)	44.5
25–44	2.2 (1.1, 4.5)	4.0 (2.5, 6.3)	81.6
45–59	2.3 (1.2, 4.3)	6.7 (4.5, 9.7)	186.7
60+	6.6 (3.1, 13.6)	4.8 (2.3, 9.9)	-27.3
<b>Residence</b>			
Urban	2.0 (1.2, 3.5)	4.1 (3.0, 5.7)	104.0
Rural	3.1 (1.6, 6.0)	5.3 (3.4, 8.3)	72.2
<b>Education level</b>			
Less than primary	3.4 (2.0, 5.6)	7.7 (4.6, 12.8)	128.7
Primary	3.0 (1.2, 6.9)	6.4 (3.9, 10.2)	115.9
Secondary	2.0 (1.0, 4.1)	3.1 (1.8, 5.2)	51.4
University	2.7 (0.5, 12.1)	3.7 (1.9, 7.1)	37.5
<b>Region</b>			
Bangkok	0.4 (0.1, 1.4)	3.5 (1.7, 7.1)	691.3
Central	1.7 (0.6, 4.4)	2.1 (0.8, 5.4)	27.9
Northern	4.2 (1.1, 14.4)	1.7 (0.6, 4.6)	-59.3
Northeastern	1.0 (0.4, 2.7)	1.6 (0.7, 3.9)	68.3
Southern	8.6 (4.5, 15.8)	18.5 (12.6, 26.4)	116.3
<b>Socioeconomic status</b>			
Lowest	5.3 (1.9, 14.2)	4.5 (2.1, 9.7)	-14.2
Low	5.7 (2.4, 13.1)	7.1 (3.7, 13.0)	24.2
Middle	1.8 (0.9, 3.5)	5.6 (3.3, 9.3)	214.9
High	1.9 (1.0, 3.6)	3.8 (2.0, 7.0)	101.6
Highest	1.8 (0.9, 3.7)	3.8 (2.3, 6.2)	108.8

Note: Relative change (%) calculated by [rate of 2011– rate of 2009] \*100 / rate of 2009



## ***8. Media***

## 8. Media

This chapter is divided into two main sections. The first section describes the findings from the 2011 GATS and the second section compares the key findings between the 2009 GATS and the 2011 GATS.

### 8.1 Media awareness-related to tobacco use in 2011

#### *Key findings of GATS 2011*

- *Eight out of 10 people noticed anti-smoking information in the media and public places.*
- *Nine out of 10 current smokers noticed a pictorial health warning (PHW) on cigarette packs, and six in 10 current smokers contemplated quitting because of the PHW.*
- *Out of 10 current smokers of hand-rolled cigarettes and smokeless tobacco users, more than seven noticed an PHW on shredded tobacco packs, and five out of 10 thought about quitting because of the PHW.*
- *25.7% of people noticed any cigarette advertisement, sponsorship or promotion campaign.*

This section is divided into three parts. It presents data on noticing anti-cigarette smoking information; PHW labels on cigarette packs (including manufactured cigarettes and shredded tobacco packs)<sup>†</sup> and their impact on motivation to quit smoking; and exposure to cigarette marketing in different forms and in various media outlets in the past 30 days.

#### 8.1.1 Noticing anti-smoking information

This aspect studied people's awareness of anti-smoking information through various media outlets and in displays at public places. These included newspapers or magazines, television, radio, billboards, leaflets or stickers, the internet, campaigns and promotional activities, demonstration boards and others.

**Table 8.1** and **Figure 8.1** show that 81.2% of adults aged 15 years and above reported having noticed at least one message about the dangers of smoking cigarettes (or motivating smokers to quit) in various places during the past 30 days.

Most people noticed messages while watching television or listening to the radio (70.7%), followed by those who noticed messages on the television only (68.1%). However, less than 10% of people noticed anti-smoking messages on the internet.

Overall, the prevalence of noticing any anti-smoking message differed by age group, place of residence, region and socioeconomic status (SES). Among current smokers, a lower prevalence of noticing any anti-smoking message was seen among those living in the Northern region and in the lowest SES. Among non-smokers, differences in the prevalence of noticing anti-smoking messages were found among those in the age groups of 15–24 years and 25 years and above, and by residence.

<sup>†</sup> In Thailand, health warning and messages on tobacco product packaging and labeling display in the form of pictures since 2005. The packet of manufactured cigarette and cigar require to display the pictures in full colour (four-colour printing) and black-and-white for shredded tobacco packs use for hand-rolled cigarette and smokeless tobacco use



**Table 8.1:** Percentage of adults aged 15 years and above who noticed anti-cigarette smoking information during the past 30 days in various places, by smoking status and selected demographic characteristics – GATS Thailand, 2011

Places	Overall	Gender		Age (years)		Residence	
		Men	Women	15–24	≥25	Urban	Rural
<b>Overall</b>							
<i>Percentage (95% CI)</i>							
In newspapers or magazines	20.2(19.0, 21.4)	20.5(18.9, 22.1)	19.9(18.5, 21.3)	22.4(19.7, 25.3)	19.6(18.4, 20.9)	28.1(26.5, 29.7)	16.0(14.4, 17.7)
On television or radio	70.7(68.8, 72.6)	70.2(67.9, 72.3)	71.2(69.0, 73.3)	75.0(71.8, 78.0)	69.7(67.7, 71.6)	73.3(71.5, 74.9)	69.4(66.5, 72.1)
On television	68.1(66.0, 70.0)	67.5(65.1, 69.7)	68.6(66.4, 70.8)	74.1(70.8, 77.1)	66.6(64.6, 68.7)	71.3(69.6, 73.0)	66.3(63.4, 69.2)
On the radio	28.7(26.9, 30.5)	29.2(27.1, 31.5)	28.1(26.3, 30.0)	22.6(19.8, 25.7)	30.1(28.3, 32.0)	25.7(24.1, 27.3)	30.2(27.7, 32.9)
On billboards	32.6(30.6, 34.5)	32.4(30.1, 34.8)	32.7(30.7, 34.8)	40.2(36.7, 43.8)	30.7(28.8, 32.7)	39.0(36.9, 41.2)	29.1(26.5, 32.0)
Leaflet/sticker	38.1(35.9, 40.5)	37.5(34.8, 40.2)	38.8(36.5, 41.2)	48.1(44.2, 52.0)	35.8(33.6, 38.1)	42.3(40.1, 44.5)	36.0(32.7, 39.3)
Internet	8.4(7.7, 9.3)	8.4(7.4, 9.5)	8.5(7.6, 9.4)	22.8(20.1, 25.7)	5.1(4.6, 5.6)	13.0(11.9, 14.1)	6.0(5.1, 7.2)
Campaign activity	12.2(11.0, 13.6)	12.4(10.9, 14.1)	12.1(10.8, 13.5)	18.5(15.9, 21.4)	10.8(9.6, 12.1)	15.1(13.7, 16.6)	10.7(9.0, 12.8)
Demonstration board	24.9(23.1, 26.9)	24.8(22.5, 27.2)	25.1(23.2, 27.0)	38.4(34.4, 42.6)	21.7(20.1, 23.5)	26.7(25.0, 28.5)	24.0(21.4, 26.8)
Somewhere else	0.4(0.3, 0.7)	0.6(0.3, 1.2)	0.3(0.2, 0.5)	1.0(0.4, 2.5)	0.3(0.2, 0.4)	0.5(0.3, 0.8)	0.4(0.2, 0.9)
<b>Any location</b>	81.2(79.7, 82.7)	81.0(79.1, 82.8)	81.4(79.8, 83.0)	87.5(84.9, 89.8)	79.7(78.1, 81.3)	84.2(82.6, 85.7)	79.6(77.4, 81.7)
<b>Current smokers<sup>1</sup></b>							
In newspapers or magazines	16.4(14.7, 18.3)	16.7(14.9, 18.6)	10.9(7.5, 15.7)	14.9(10.5, 20.9)	16.7(14.9, 18.6)	25.9(23.4, 28.5)	12.4(10.4, 14.8)
On television or the radio	66.8(64.0, 69.5)	66.7(63.7, 69.5)	69.3(63.2, 74.8)	68.3(60.9, 74.9)	66.5(63.6, 69.3)	70.1(67.2, 72.8)	65.5(61.6, 69.1)
On television	64.1(61.1, 67.0)	64.2(61.1, 67.2)	61.7(55.1, 67.9)	68.0(60.6, 74.5)	63.3(60.1, 66.3)	68.2(65.3, 71.0)	62.4(58.3, 66.3)
On the radio	26.9(24.4, 29.6)	26.7(24.1, 29.5)	29.9(23.5, 37.2)	18.1(13.2, 24.3)	28.8(26.1, 31.6)	24.4(22.0, 27.0)	28.0(24.6, 31.6)
On billboards	28.3(25.8, 31.0)	28.8(26.2, 31.6)	20.5(15.2, 27.1)	27.2(21.0, 34.4)	28.6(26.0, 31.3)	39.2(36.2, 42.3)	23.8(20.6, 27.4)
Leaflet/sticker	33.4(30.5, 36.6)	33.8(30.7, 37.1)	26.9(20.7, 34.1)	35.2(28.4, 42.7)	33.1(30.1, 36.2)	41.5(38.4, 44.7)	30.1(26.2, 34.3)
Internet	4.2(3.3, 5.3)	4.3(3.4, 5.5)	2.5(1.3, 4.6)	11.8(7.7, 17.6)	2.6(2.1, 3.2)	8.4(6.9, 10.2)	2.4(1.5, 4.0)
Campaign activity	10.1(8.4, 12.2)	10.2(8.4, 12.4)	8.5(5.6, 12.8)	13.3(8.7, 19.7)	9.5(7.9, 11.3)	13.8(11.7, 16.2)	8.6(6.4, 11.4)
Demonstration board	19.5(17.2, 22.1)	20.0(17.5, 22.7)	12.7(8.9, 17.8)	25.6(18.9, 33.5)	18.3(16.1, 20.7)	23.5(20.9, 26.4)	17.9(14.8, 21.4)
Somewhere else	0.9(0.4, 2.2)	0.9(0.4, 2.3)	0.1(0.0, 0.7)	2.9(0.7, 10.9)	0.5(0.3, 0.8)	0.6(0.3, 1.2)	1.0(0.3, 3.0)
<b>Any location</b>	78.3(75.8, 80.6)	78.3(75.7, 80.7)	77.9(72.5, 82.4)	82.0(74.7, 87.5)	77.5(74.9, 79.9)	82.1(79.5, 84.4)	76.7(73.3, 79.8)
<b>Non-smokers<sup>2</sup></b>							
In newspapers or magazines	21.3(20.0, 22.7)	23.7(21.7, 25.9)	20.1(18.7, 21.6)	24.5(21.4, 27.8)	20.6(19.3, 21.9)	28.6(26.9, 30.4)	17.2(15.4, 19.2)
On television or the radio	71.9(69.9, 73.9)	73.2(70.9, 75.4)	71.3(69.1, 73.4)	76.9(73.3, 80.1)	70.7(68.7, 72.7)	74.1(72.3, 75.8)	70.7(67.7, 73.5)
On television	69.3(67.3, 71.3)	70.3(67.8, 72.6)	68.8(66.6, 71.0)	75.7(72.2, 79.0)	67.7(65.6, 69.8)	72.1(70.3, 73.9)	67.7(64.7, 70.6)
On the radio	29.2(27.4, 31.1)	31.4(28.9, 34.1)	28.0(26.3, 29.9)	23.8(20.6, 27.4)	30.5(28.6, 32.5)	26.0(24.3, 27.8)	31.0(28.4, 33.8)
On billboards	33.9(31.8, 36.0)	35.5(32.7, 38.5)	33.0(31.0, 35.1)	43.8(39.9, 47.9)	31.4(29.4, 33.5)	38.9(36.7, 41.2)	31.0(28.1, 34.0)
Leaflet/sticker	39.6(37.4, 42.0)	40.6(37.7, 43.6)	39.1(36.8, 41.5)	51.6(47.5, 55.7)	36.7(34.4, 39.0)	42.5(40.3, 44.7)	38.0(34.7, 41.4)
Internet	9.8(8.9, 10.7)	12.0(10.5, 13.7)	8.6(7.8, 9.6)	25.8(22.7, 29.3)	5.8(5.3, 6.5)	14.1(13.0, 15.4)	7.3(6.1, 8.7)
Campaign activity	12.9(11.6, 14.3)	14.4(12.6, 16.3)	12.2(10.9, 13.6)	19.9(17.0, 23.1)	11.2(10.0, 12.6)	15.4(14.0, 17.0)	11.5(9.7, 13.6)
Demonstration board	26.6(24.7, 28.6)	29.0(26.4, 31.8)	25.4(23.5, 27.4)	42.0(37.7, 46.3)	22.9(21.1, 24.7)	27.5(25.7, 29.4)	26.1(23.4, 29.1)
Somewhere else	0.3(0.2, 0.4)	0.2(0.1, 0.4)	0.3(0.2, 0.5)	0.4(0.2, 0.9)	0.3(0.2, 0.4)	0.5(0.3, 0.7)	0.2(0.1, 0.4)
<b>Any location</b>	82.2(80.6, 83.6)	83.4(81.4, 85.2)	81.5(79.8, 83.1)	89.1(86.3, 91.3)	80.5(78.8, 82.0)	84.8(83.2, 86.3)	80.7(78.3, 82.8)

<sup>1</sup> Includes daily and occasional (less than daily) smokers

<sup>2</sup> Includes former and never smokers

**Table 8.1 (cont.)** Percentage of adults aged 15 years and above who noticed anti-cigarette smoking information during the past 30 days in various places, by smoking status and selected demographic characteristics – GATS Thailand, 2011

Places	Region				
	Bangkok	Central	Northern	Northeastern	Southern
<b>Overall</b>					
In newspapers or magazines	32.3 (29.6, 35.2)	24.4 (21.7, 27.4)	19.1 (16.2, 22.3)	15.0 (13.1, 17.2)	17.4 (15.2, 19.9)
On television or the radio	77.8 (75.4, 80.1)	70.8 (66.9, 74.3)	70.9 (66.1, 75.2)	69.7 (65.8, 73.4)	67.3 (62.3, 72.0)
On television	76.2 (73.7, 78.5)	69.2 (65.4, 72.8)	67.4 (62.4, 72.0)	66.3 (62.1, 70.3)	65.1 (60.3, 69.7)
On the radio	31.3 (28.6, 34.2)	21.0 (18.3, 24.0)	33.7 (29.4, 38.3)	32.6 (28.9, 36.6)	23.4 (19.8, 27.5)
On billboards	46.4 (43.0, 49.8)	34.7 (30.8, 38.9)	23.7 (20.1, 27.7)	33.0 (29.0, 37.3)	29.2 (25.2, 33.5)
Leaflet/sticker	40.2 (36.6, 43.8)	35.4 (31.8, 39.2)	42.7 (37.9, 47.7)	34.0 (29.1, 39.4)	45.4 (40.9, 50.1)
Internet	14.7 (13.1, 16.5)	9.6 (8.0, 11.5)	6.9 (5.3, 8.8)	6.6 (5.3, 8.2)	8.3 (6.7, 10.1)
Campaign activity	17.6 (14.9, 20.7)	12.3 (9.8, 15.4)	6.4 (4.9, 8.2)	14.6 (11.8, 17.8)	10.3 (8.0, 13.1)
Demonstration board	28.0 (24.9, 31.4)	19.4 (16.6, 22.6)	22.2 (19.3, 25.5)	27.6 (23.4, 32.3)	29.5 (25.3, 34.0)
Somewhere else	0.6 (0.3, 1.2)	0.1 (0.0, 0.4)	0.2 (0.1, 0.4)	0.7 (0.3, 1.7)	0.4 (0.2, 0.8)
<b>Any location</b>	86.5 (84.3, 88.4)	81.3 (78.2, 84.2)	79.4 (75.0, 83.3)	80.6 (77.6, 83.3)	81.0 (77.3, 84.3)
<b>Current smokers<sup>1</sup></b>					
In newspapers or magazines	34.7 (29.8, 39.9)	19.7 (16.5, 23.4)	13.3 (9.9, 17.6)	12.6 (9.4, 16.6)	14.3 (11.7, 17.4)
On television or the radio	76.8 (72.2, 80.8)	65.9 (60.4, 71.0)	66.5 (59.9, 72.6)	65.7 (59.6, 71.3)	66.0 (60.9, 70.8)
On television	74.8 (70.0, 79.0)	64.2 (58.7, 69.3)	61.5 (54.8, 67.7)	62.9 (56.3, 69.1)	64.1 (58.8, 69.0)
On the radio	32.0 (27.1, 37.3)	19.2 (15.4, 23.7)	32.1 (25.7, 39.3)	30.2 (25.1, 36.0)	23.2 (18.8, 28.3)
On billboards	48.2 (43.0, 53.4)	32.3 (27.1, 38.0)	18.0 (14.3, 22.4)	27.0 (21.7, 33.0)	26.7 (22.7, 31.2)
Leaflet/sticker	40.2 (34.8, 45.8)	34.6 (29.2, 40.4)	31.0 (25.7, 36.7)	27.4 (21.3, 34.5)	43.8 (37.8, 50.0)
Internet	9.9 (7.5, 13.0)	5.9 (3.7, 9.3)	2.3 (1.3, 4.0)	2.5 (1.3, 5.0)	4.5 (2.9, 6.7)
Campaign activity	18.7 (14.3, 24.1)	10.2 (7.1, 14.3)	4.6 (2.6, 7.9)	10.4 (7.0, 15.3)	11.0 (7.7, 15.5)
Demonstration board	28.4 (23.2, 34.4)	15.4 (11.9, 19.6)	13.6 (10.1, 18.1)	20.8 (15.8, 26.8)	24.5 (19.4, 30.5)
Somewhere else	0.3 (0.1, 1.0)	0.2 (0.0, 1.6)	0.1 (0.0, 0.8)	1.9 (0.6, 6.0)	0.8 (0.3, 2.1)
<b>Any location</b>	85.0 (80.8, 88.5)	80.3 (75.4, 84.5)	73.3 (66.2, 79.3)	76.8 (71.6, 81.2)	80.5 (76.3, 84.0)
<b>Non-smokers<sup>2</sup></b>					
In newspapers or magazines	31.8 (29.0, 34.8)	25.9 (22.8, 29.2)	20.7 (17.5, 24.2)	15.9 (13.7, 18.3)	18.7 (15.9, 21.9)
On television or the radio	78.1 (75.6, 80.4)	72.2 (68.4, 75.8)	72.1 (67.2, 76.5)	71.1 (67.0, 74.9)	67.9 (62.1, 73.2)
On television	76.5 (73.9, 78.9)	70.7 (67.0, 74.2)	69.0 (63.9, 73.7)	67.4 (63.2, 71.5)	65.6 (60.0, 70.8)
On the radio	31.2 (28.5, 34.0)	21.6 (18.7, 24.7)	34.1 (29.9, 38.6)	33.4 (29.5, 37.6)	23.5 (19.7, 27.9)
On billboards	46.0 (42.5, 49.5)	35.4 (31.4, 39.7)	25.2 (21.3, 29.6)	35.0 (30.8, 39.5)	30.2 (25.7, 35.2)
Leaflet/sticker	40.2 (36.6, 43.9)	35.7 (32.0, 39.5)	46.0 (40.9, 51.1)	36.3 (31.2, 41.6)	46.1 (41.6, 50.7)
Internet	15.8 (14.0, 17.8)	10.7 (9.0, 12.8)	8.1 (6.3, 10.5)	8.0 (6.3, 10.0)	9.9 (7.9, 12.2)
Campaign activity	17.4 (14.8, 20.4)	13.0 (10.4, 16.1)	6.9 (5.3, 8.9)	16.0 (13.1, 19.3)	10.0 (7.7, 12.8)
Demonstration board	28.0 (24.9, 31.2)	20.6 (17.7, 24.0)	24.6 (21.5, 28.1)	29.9 (25.4, 34.8)	31.6 (27.3, 36.2)
Somewhere else	0.7 (0.4, 1.4)	0.1 (0.0, 0.3)	0.2 (0.1, 0.4)	0.4 (0.2, 0.8)	0.3 (0.1, 0.7)
<b>Any location</b>	86.8 (84.6, 88.7)	81.7 (78.5, 84.5)	81.1 (76.8, 84.9)	81.9 (78.9, 84.5)	81.2 (76.9, 84.9)

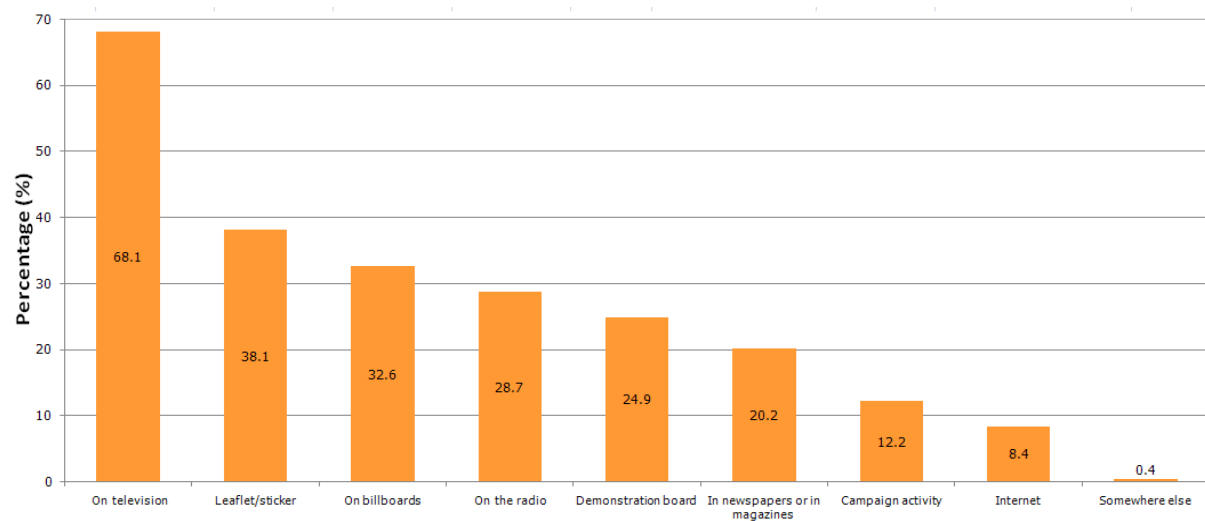
<sup>1</sup> Includes daily and occasional (less than daily) smokers<sup>2</sup> Includes former and never smokers

**Table 8.1 (cont.)** Percentage of adults aged 15 years and above who noticed anti-cigarette smoking information during the past 30 days in various places, by smoking status and selected demographic characteristics – GATS Thailand, 2011

Places	Socioeconomic status				
	Lowest	Low	Middle	High	Highest
<b>Overall</b>					
In newspapers or magazines	15.1 (13.3, 17.0)	14.3 (12.3, 16.4)	17.8 (15.8, 19.9)	25.9 (23.8, 28.3)	32.2 (29.8, 34.7)
On television or the radio	66.4 (63.3, 69.3)	69.3 (66.4, 72.1)	70.8 (67.6, 73.7)	74.1 (71.3, 76.7)	75.4 (72.8, 77.9)
On television	63.2 (60.0, 66.3)	66.4 (63.4, 69.4)	68.1 (64.8, 71.2)	71.7 (68.9, 74.4)	73.6 (71.0, 76.1)
On the radio	26.1 (23.8, 28.7)	29.9 (27.0, 32.9)	27.8 (24.9, 31.0)	30.3 (27.4, 33.3)	30.1 (27.7, 32.5)
On billboards	26.2 (23.6, 29.1)	27.3 (24.3, 30.6)	31.3 (28.4, 34.3)	38.7 (35.8, 41.6)	44.0 (40.8, 47.2)
Leaflet/sticker	33.2 (30.0, 36.5)	34.7 (31.1, 38.6)	36.4 (33.2, 39.7)	42.6 (39.6, 45.6)	47.5 (44.4, 50.7)
Internet	9.9 (8.4, 11.7)	5.4 (4.3, 6.9)	4.7 (3.7, 6.0)	8.1 (6.7, 9.6)	15.2 (13.4, 17.1)
Campaign activity	11.2 (9.4, 13.3)	9.9 (8.0, 12.1)	10.4 (8.8, 12.3)	13.7 (11.9, 15.8)	17.7 (15.6, 19.9)
Demonstration board	25.0 (22.1, 28.2)	20.5 (17.8, 23.5)	21.8 (19.4, 24.4)	27.1 (24.7, 29.7)	32.1 (29.5, 34.8)
Somewhere else	0.7 (0.2, 1.9)	0.4 (0.2, 1.0)	0.2 (0.1, 0.4)	0.4 (0.2, 0.7)	0.4 (0.2, 0.7)
<b>Any location</b>	<b>76.7 (74.3, 79.0)</b>	<b>78.9 (76.2, 81.4)</b>	<b>80.9 (78.1, 83.5)</b>	<b>85.2 (83.1, 87.2)</b>	<b>87.1 (85.0, 88.9)</b>
<b>Current smokers<sup>1</sup></b>					
In newspapers or magazines	9.5 (6.6, 13.4)	9.9 (7.0, 13.9)	13.9 (11.0, 17.4)	23.5 (20.1, 27.2)	30.8 (26.6, 35.5)
On television or the radio	62.4 (55.9, 68.5)	66.4 (61.0, 71.5)	62.7 (57.2, 67.9)	71.5 (66.8, 75.7)	74.1 (69.1, 78.6)
On television	60.0 (53.6, 66.1)	63.7 (58.1, 68.8)	59.4 (53.8, 64.9)	68.3 (63.5, 72.7)	72.6 (67.6, 77.2)
On the radio	21.0 (16.7, 26.1)	31.2 (25.8, 37.2)	23.4 (19.2, 28.3)	29.1 (24.5, 34.1)	32.0 (27.3, 37.0)
On billboards	17.2 (12.9, 22.4)	22.3 (17.4, 28.1)	26.7 (22.8, 31.0)	38.6 (34.0, 43.5)	42.4 (37.4, 47.6)
Leaflet/sticker	25.6 (20.4, 31.5)	29.1 (23.4, 35.7)	32.2 (27.6, 37.1)	38.6 (34.1, 43.4)	46.8 (41.6, 52.1)
Internet	5.2 (2.6, 10.2)	1.9 (1.1, 3.1)	1.6 (0.9, 3.1)	4.6 (3.0, 7.0)	9.9 (7.6, 12.8)
Campaign activity	7.8 (4.8, 12.3)	8.0 (5.3, 11.7)	8.5 (6.3, 11.5)	11.8 (8.9, 15.5)	17.4 (13.9, 21.5)
Demonstration board	15.3 (10.6, 21.5)	15.1 (11.6, 19.6)	17.9 (14.3, 22.1)	23.1 (19.2, 27.4)	30.6 (25.9, 35.8)
Somewhere else	1.8 (0.3, 8.9)	0.9 (0.2, 4.3)	0.3 (0.1, 0.8)	0.8 (0.3, 1.9)	0.6 (0.1, 2.4)
<b>Any location</b>	<b>70.8 (64.8, 76.1)</b>	<b>78.1 (73.1, 82.4)</b>	<b>75.3 (69.9, 80.0)</b>	<b>84.1 (80.3, 87.3)</b>	<b>86.6 (82.5, 89.8)</b>
<b>Non-smokers<sup>2</sup></b>					
In newspapers or magazines	16.5 (14.5, 18.7)	15.7 (13.5, 18.1)	19.3 (17.1, 21.7)	26.8 (24.2, 29.6)	32.6 (29.8, 35.4)
On television or the radio	67.4 (64.0, 70.6)	70.2 (67.1, 73.2)	73.9 (70.7, 77.0)	75.0 (72.0, 77.8)	75.8 (73.0, 78.4)
On television	64.0 (60.5, 67.3)	67.3 (64.1, 70.4)	71.5 (68.2, 74.6)	73.0 (69.9, 75.8)	73.9 (71.0, 76.6)
On the radio	27.5 (24.8, 30.3)	29.5 (26.5, 32.6)	29.6 (26.5, 32.8)	30.7 (27.7, 34.0)	29.6 (26.9, 32.3)
On billboards	28.5 (25.6, 31.6)	29.0 (25.9, 32.2)	33.1 (29.7, 36.6)	38.7 (35.5, 41.9)	44.3 (41.0, 47.8)
Leaflet/sticker	35.1 (31.9, 38.5)	36.6 (32.7, 40.5)	38.1 (34.6, 41.6)	44.0 (40.8, 47.2)	47.7 (44.5, 51.0)
Internet	11.2 (9.3, 13.3)	6.6 (5.1, 8.5)	5.9 (4.6, 7.7)	9.3 (7.6, 11.2)	16.6 (14.5, 18.8)
Campaign activity	12.1 (10.2, 14.2)	10.5 (8.5, 12.9)	11.1 (9.3, 13.3)	14.4 (12.4, 16.6)	17.7 (15.6, 20.1)
Demonstration board	27.5 (24.5, 30.7)	22.2 (19.3, 25.5)	23.3 (20.7, 26.2)	28.6 (25.8, 31.5)	32.5 (29.7, 35.4)
Somewhere else	0.4 (0.2, 0.8)	0.2 (0.1, 0.4)	0.2 (0.1, 0.5)	0.3 (0.1, 0.6)	0.3 (0.2, 0.6)
<b>Any location</b>	<b>78.2 (75.7, 80.6)</b>	<b>79.2 (76.4, 81.7)</b>	<b>83.2 (80.5, 85.6)</b>	<b>85.6 (83.1, 87.8)</b>	<b>87.2 (84.9, 89.2)</b>

<sup>1</sup> Includes daily and occasional (less than daily) smokers<sup>2</sup> Includes former and never smokers

**Figure 8.1:** Percentage of adults aged 15 years and above who noticed anti-cigarette smoking information in the past 30 days – GATS Thailand, 2011



### 8.1.2 Noticed health warning label on cigarette packets and thought about quitting

The section on PHW labels is divided into two parts by type of tobacco, i.e. manufactured cigarettes and shredded tobacco. In Thailand, PHW labels on cigarette packets consist of 10 coloured PHWs and on shredded tobacco packs there are two black and white PHWs. This section also presents data on the perception of PHWs on cigarette and shredded tobacco packs, and their impact on motivation to quit smoking.

#### 8.1.2.1 Current smokers who noticed health warning label on cigarette packets and thought about quitting

**Table 8.2** shows the percentage of current smokers aged 15 years and above who reported noticing PHWs on manufactured cigarette packets during the past 30 days and thought about quitting because of the warning labels. Among current smokers, 94.6% noticed PHWs on manufactured cigarette packets and 62.6% thought about quitting smoking because of those PHWs. The prevalence of noticing PHWs on cigarette packets differed by some demographic characteristics (gender, age, residence, education level and SES).

More men noticed PHWs on cigarette packets than women but there was no difference in thinking about quitting because of the warning labels. The lowest percentage of those who noticed PHWs on cigarette packets was among people aged 60 years and above. Those living in urban areas, with a higher education level and from all regions except the Northern noticed PHWs on cigarette packets most often. Thinking about quitting because of PHWs on cigarette packets did not differ by gender, age, residence and SES. Those who thought the highest about quitting because of PHWs on cigarette packets were those living in the Northeastern regions.

**Table 8.2:** Number (in thousands) and percentage of current smokers aged 15 years and above who noticed health warnings on cigarette packets and considered quitting because of the warning label during the past 30 days, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Current smokers <sup>1</sup> who...			
	Noticed health warnings on cigarette packets <sup>2</sup>		Thought about quitting because of warning label <sup>2</sup>	
	Number (in thousands)	% (95% CI)	Number (in thousands)	% (95% CI)
<b>Overall</b>	12 291.9	94.6 (93.3, 95.7)	8 122.3	62.6 (60.0, 65.2)
<b>Gender</b>				
Men	11 698.7	95.4 (94.2, 96.4)	7 692.9	62.9 (60.1, 65.5)
Women	593.2	81.5 (75.3, 86.4)	429.4	59.0 (52.0, 65.5)
<b>Age (years)</b>				
15–24	2 224.0	99.0 (96.0, 99.8)	1 331.5	59.3 (51.6, 66.5)
25–44	5 532.2	97.7 (96.4, 98.5)	3 768.2	66.6 (62.5, 70.5)
45–59	3 149.1	92.9 (90.4, 94.9)	2 146.4	63.5 (60.1, 66.7)
60+	1 386.6	82.2 (78.2, 85.5)	876.2	52.0 (47.4, 56.5)
<b>Residence</b>				
Urban	3 713.4	97.3 (96.5, 98.0)	2 314.2	60.8 (57.8, 63.7)
Rural	8 578.6	93.5 (91.7, 95.0)	5 808.1	63.4 (59.8, 66.8)
<b>Education level</b>				
Less than primary	3 497.5	86.5 (83.3, 89.1)	2 387.5	59.1 (55.8, 62.3)
Primary	3 499.6	97.6 (95.7, 98.7)	2 335.1	65.2 (59.8, 70.2)
Secondary	4 335.6	98.7 (97.6, 99.3)	2 880.3	65.7 (61.5, 69.6)
University	957.2	99.5 (98.3, 99.9)	517.4	53.9 (46.8, 60.8)
<b>Region</b>				
Bangkok	998.7	98.2 (96.7, 99.0)	608.2	59.9 (54.9, 64.8)
Central	2 992.7	98.0 (96.6, 98.9)	1 661.8	54.7 (49.3, 59.9)
Northern	1 854.3	85.0 (78.9, 89.6)	1 214.8	55.7 (50.4, 60.9)
Northeastern	4 363.8	95.9 (94.1, 97.1)	3 299.7	72.5 (67.0, 77.5)
Southern	2 082.4	95.4 (93.6, 96.6)	1 337.7	61.3 (56.4, 65.9)
<b>Socioeconomic status</b>				
Lowest	2 445.9	89.0 (85.9, 91.5)	1 535.5	56.0 (49.5, 62.3)
Low	2 607.5	93.3 (90.4, 95.3)	1 728.8	61.9 (56.3, 67.1)
Middle	2 875.1	95.8 (92.8, 97.6)	1 871.6	62.6 (58.1, 66.9)
High	2 614.6	97.6 (96.0, 98.6)	1 819.5	67.9 (63.7, 71.9)
Highest	1 748.8	99.0 (98.2, 99.4)	1 165.2	66.1 (61.4, 70.6)

<sup>1</sup> Includes daily and occasional (less than daily) smokers

<sup>2</sup> During the past 30 days

### 8.1.2.2 Current users of hand-rolled cigarettes and smokeless tobacco products who noticed health warning labels on shredded tobacco packs and thought about quitting

Table 8.2a shows the percentage of current hand-rolled cigarette smokers and smokeless tobacco users aged 15 years and above who reported noticing PHWs on shredded tobacco packs and thought about quitting because of the warning labels during the past 30 days. Among all current shredded tobacco users, 75.2% noticed PHWs on shredded tobacco packs and 49.5% thought about quitting because of those PHWs. The prevalence of noticing PHWs on shredded tobacco packs differed by some demographic characteristics (gender, age, education level and region). More men noticed PHWs on shredded tobacco packs than women (81.5% and 48.6%, respectively) and also thought more about quitting because of the warning label (53.4% and 32.9%, respectively).

Those who noticed PHWs on shredded tobacco packs the least were persons aged 60 years and above (52.6%), those with a less-than-primary education level (64.2%), those from the Northern region (60.7%) and those in the lowest SES (66.6%). Thinking about quitting because of PHWs on shredded tobacco packs differed by gender, age, education level, region and status, but not by residence. Those who thought the least about quitting because of PHWs on shredded tobacco packs were adults aged 60 years and above (33.2%), those with a university level education (30.9%), from the Northern region (35.5%) and in the lowest SES (42.5%).

**Table 8.2a:** Number (in thousands) and percentage of current hand-rolled cigarette smokers and smokeless tobacco users aged 15 years and above who noticed health warnings on shredded tobacco packs and considered quitting because of the warnings label during the past 30 days, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Current hand-rolled cigarette smokers <sup>1</sup> and smokeless tobacco <sup>2</sup> users who...			
	Noticed health warnings on shredded tobacco pack <sup>3</sup>		Thought about quitting because of health warnings <sup>3</sup>	
	Number (in thousands)	% (95% CI)	Number (in thousands)	% (95% CI)
<b>Overall</b>	6 947.9	75.2 (72.3, 77.9)	4 566.7	49.5 (46.0, 53.0)
<b>Gender</b>				
Men	6 088.7	81.5 (78.3, 84.3)	3 985.4	53.4 (49.4, 57.4)
Women	859.1	48.6 (42.4, 54.8)	581.3	32.9 (27.1, 39.2)
<b>Age (years)</b>				
15–24	959.0	85.3 (76.5, 91.2)	588.4	52.4 (40.7, 63.8)
25–44	2 799.5	87.4 (83.4, 90.5)	1 861.0	58.2 (51.9, 64.1)
45–59	1 930.0	76.7 (72.2, 80.7)	1 325.1	52.7 (48.0, 57.4)
60+	1 259.3	52.6 (48.2, 57.0)	792.2	33.2 (29.0, 37.6)
<b>Residence</b>				
Urban	1 008.0	77.5 (74.0, 80.6)	624.6	48.4 (44.1, 52.6)
Rural	5 939.9	74.8 (71.4, 78.0)	3 942.1	49.7 (45.6, 53.7)
<b>Education level</b>				
Less than primary	2 987.2	64.2 (60.3, 67.8)	1 960.9	42.2 (38.7, 45.8)
Primary	2 295.9	88.4 (84.2, 91.5)	1 552.3	59.8 (53.2, 66.1)
Secondary	1 564.8	84.4 (79.6, 88.3)	1 013.1	54.8 (47.7, 61.6)
University	100.0	76.5 (61.1, 87.1)	40.3	30.9 (17.7, 48.0)
<b>Region</b>				
Bangkok	181.4	86.8 (78.2, 92.3)	106.1	50.8 (41.8, 59.7)
Central	1 256.3	78.7 (72.3, 84.0)	692.1	43.6 (36.5, 51.1)
Northern	1 014.8	60.7 (51.6, 69.0)	592.7	35.5 (28.8, 42.8)
Northeastern	3 238.3	81.0 (77.2, 84.3)	2 340.7	58.6 (52.6, 64.3)
Southern	1 257.1	71.3 (65.1, 76.8)	835.1	47.4 (40.3, 54.5)
<b>Socioeconomic status</b>				
Lowest	1 938.8	66.6 (61.7, 71.1)	1 235.4	42.5 (36.6, 48.5)
Low	1 801.1	75.6 (70.1, 80.4)	1 164.2	48.9 (43.0, 54.9)
Middle	1 623.3	83.5 (78.4, 87.6)	1 068.4	55.1 (49.0, 61.1)
High	1 087.8	80.0 (73.9, 85.0)	751.6	55.3 (48.3, 62.1)
Highest	496.7	77.1 (68.4, 84.0)	347.1	54.1 (45.2, 62.8)

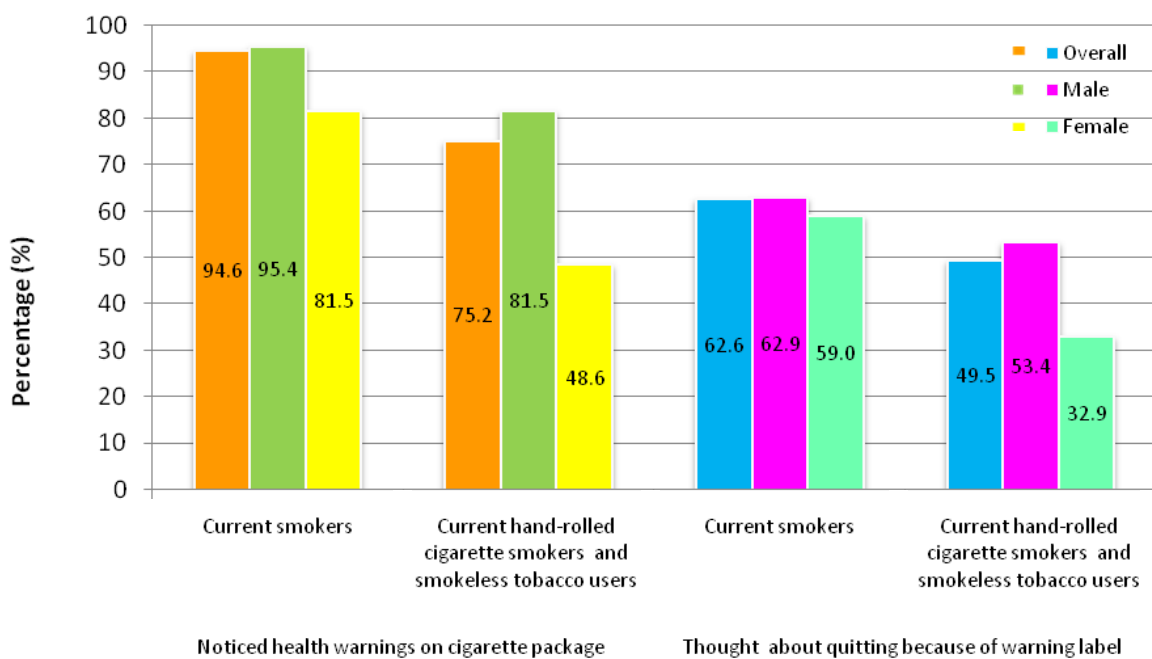
<sup>1</sup> Includes daily and occasional (less than daily) smokers of hand-rolled cigarettes

<sup>2</sup> Includes daily and occasional (less than daily) smokeless tobacco users

<sup>3</sup> During the past 30 days

**Figure 8.2** based on **Table 8.2** and **Table 8.2a** shows the percentage of both current smokers and current shredded tobacco users (hand-rolled cigarette smokers and smokeless tobacco users) aged 15 years and above who reported noticing PHWs on manufactured cigarette packets or shredded tobacco packs and thought about quitting because of the warning labels during the past 30 days. This figure reveals that the percentage of current smokers who noticed and thought about quitting because of PHWs on manufactured cigarette packets was higher than the percentage of current shredded tobacco users who noticed and thought about quitting because of PHWs on shredded tobacco packs.

**Figure 8.2:** Percentage of current smokers and current smokeless tobacco users aged 15 years and above who reported noticing health warnings on manufactured cigarette packages or shredded tobacco packs and thinking about quitting because of the warning labels during the past 30 days – GATS Thailand, 2011



### 8.1.3 Noticed cigarette marketing in various public places

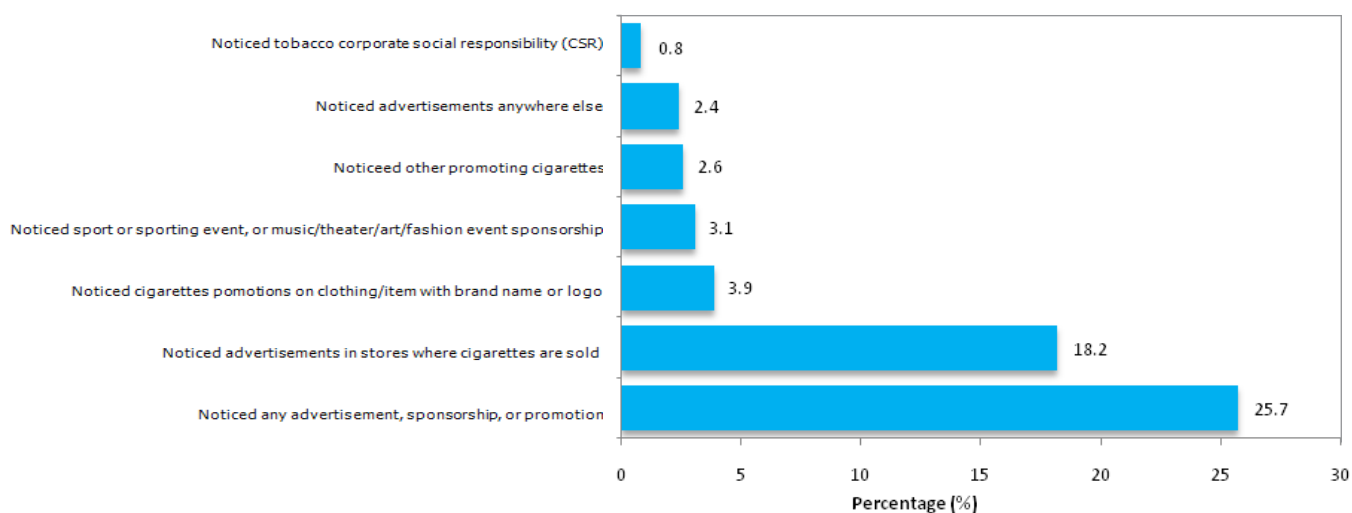
**Table 8.3** and **Figure 8.3** show the percentage of adults aged 15 years and above who noticed cigarette marketing in public places and at events in the past 30 days, including advertising in stores where cigarettes are sold, entertainment events (e.g. sport or sporting event/music/theatre/art or fashion event), cigarette promotion through clothing or items with a tobacco brand name or logo, tobacco corporate social responsibility (CSR, a term used to indicate philanthropic or social welfare activities by tobacco companies), and any advertisement, sponsorship or promotion.

Overall, 25.7% of people reported noticing any cigarette advertisement, sponsorship or promotion in the past 30 days. The most common location where cigarette marketing was noticed was in tobacco stores (18.2%). The least common place where advertising was noticed was at tobacco CSR events (0.8%). The prevalence of noticing any advertisement, sponsorship or promotion was different by gender, age and residence. More men noticed these than women (28.5% vs 23.1%), more people adults aged 15–24 years than those 25 years and above (34.2% vs 23.7%), and more adults living in urban than rural areas (29.4% vs 23.7%).



The prevalence of noticing advertisements in stores that sold cigarettes was different by age, education level, region and SES. The highest percentage of those who adults aged 15–24 years (24.5%), noticed advertisements in stores more than adults aged 25+ years. Adults with primary level education (21.9%) noticed more than adults with university education. By region it varied from 12.4% in Northern to 25.8% in southern region. A higher prevalence of noticing cigarette marketing at entertainment events was seen among those living in urban areas, those with a university level education and living in Bangkok.

**Figure 8.3:** Percentage of adults aged 15 years and above who noticed cigarette marketing in the past 30 days – GATS Thailand, 2011



**Table 8.3:** Percentage of adults aged 15 years and above who noticed cigarette marketing during the past 30 days in various places, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Noticed advertisements		Noticed at sport or sporting event, or music/theatre/art/fashion event sponsorship	Noticed cigarette promotions			Noticed any advertisement, sponsorship, or promotion
	In stores where cigarettes are sold <sup>1</sup>	Anywhere else <sup>2</sup>		Clothing/item with brand name or logo	Tobacco corporate social responsibility (CSR)	Other promotion of cigarettes <sup>3</sup>	
<b>Overall</b>	18.2 (16.4, 20.2)	2.4 (2.0, 2.8)	3.1 (2.7, 3.6)	Percentage (95% CI)			25.7 (23.7, 27.8)
<b>Gender</b>				3.9 (3.2, 4.7)	0.8 (0.6, 1.1)	2.6 (2.2, 3.0)	
Men	19.4 (17.1, 21.9)	2.7 (2.1, 3.4)	4.5 (3.9, 5.3)	4.9 (3.9, 6.1)	0.9 (0.6, 1.3)	3.1 (2.5, 3.8)	28.5 (26.1, 31.1)
Women	17.1 (15.3, 19.1)	2.1 (1.8, 2.6)	1.8 (1.5, 2.2)	2.9 (2.4, 3.6)	0.7 (0.5, 1.1)	2.0 (1.7, 2.5)	23.1 (21.1, 25.1)
<b>Age (years)</b>							
15–24	24.5 (21.2, 28.0)	4.0 (2.9, 5.3)	2.9 (2.0, 4.2)	7.2 (5.6, 9.2)	1.4 (0.8, 2.5)	4.4 (3.3, 5.9)	34.2 (30.5, 38.1)
25+	16.8 (15.0, 18.7)	2.0 (1.7, 2.4)	3.2 (2.8, 3.7)	3.1 (2.5, 3.8)	0.7 (0.5, 0.9)	2.1 (1.8, 2.5)	23.7 (21.8, 25.7)
<b>Residence</b>							
Urban	19.7 (18.3, 21.3)	3.4 (2.9, 4.0)	4.0 (3.5, 4.6)	5.3 (4.6, 6.0)	1.0 (0.7, 1.3)	3.9 (3.4, 4.5)	29.4 (27.8, 31.1)
Rural	17.4 (14.8, 20.5)	1.9 (1.4, 2.5)	2.7 (2.1, 3.3)	3.1 (2.2, 4.4)	0.7 (0.4, 1.1)	1.8 (1.4, 2.5)	23.7 (20.9, 26.8)
<b>Education level</b>							
Less than primary	12.5 (10.8, 14.3)	1.0 (0.8, 1.4)	1.5 (1.1, 2.1)	1.2 (0.8, 1.9)	0.3 (0.2, 0.5)	1.2 (0.9, 1.7)	16.3 (14.6, 18.2)
Primary	21.9 (18.6, 25.6)	2.0 (1.3, 3.0)	2.8 (2.0, 3.8)	3.7 (2.3, 5.8)	0.6 (0.3, 1.2)	2.1 (1.5, 3.0)	28.8 (25.3, 32.6)
Secondary	20.9 (18.6, 23.3)	3.0 (2.4, 3.8)	3.9 (3.2, 4.7)	5.6 (4.5, 7.0)	1.2 (0.8, 1.8)	3.2 (2.5, 4.1)	29.9 (27.4, 32.6)
University	19.6 (17.3, 22.0)	4.8 (3.7, 6.0)	5.7 (4.8, 6.8)	6.1 (5.0, 7.3)	1.2 (0.8, 1.7)	4.7 (3.7, 6.0)	32.2 (29.5, 35.0)
<b>Region</b>							
Bangkok	24.9 (22.6, 27.4)	3.7 (2.9, 4.6)	5.4 (4.6, 6.4)	7.7 (6.5, 9.2)	1.4 (0.9, 2.1)	4.9 (4.0, 6.1)	38.3 (35.6, 41.1)
Central	14.8 (12.6, 17.4)	3.6 (2.6, 4.9)	3.5 (2.6, 4.6)	2.2 (1.7, 3.0)	0.5 (0.3, 0.9)	3.4 (2.4, 4.8)	22.6 (19.9, 25.6)
Northern	12.4 (9.9, 15.5)	1.8 (1.2, 2.6)	1.6 (1.1, 2.3)	3.9 (2.5, 6.1)	1.3 (0.7, 2.5)	1.4 (0.8, 2.4)	18.2 (15.1, 21.9)
Northeastern	18.8 (14.4, 24.2)	1.8 (1.2, 2.5)	3.1 (2.3, 4.3)	4.1 (2.7, 6.3)	0.7 (0.4, 1.3)	1.9 (1.4, 2.7)	25.7 (21.1, 30.9)
Southern	25.8 (21.6, 30.3)	1.8 (1.2, 2.7)	2.9 (2.2, 3.8)	3.1 (2.2, 4.4)	0.4 (0.2, 0.7)	2.5 (1.8, 3.4)	32.1 (28.0, 36.5)
<b>Socioeconomic status</b>							
Lowest	15.4 (12.9, 18.3)	2.6 (1.8, 3.7)	2.0 (1.3, 3.0)	3.5 (2.6, 4.8)	1.0 (0.6, 1.7)	2.8 (2.0, 3.8)	22.3 (19.5, 25.4)
Low	16.8 (13.9, 20.2)	1.4 (1.0, 2.1)	1.8 (1.3, 2.6)	3.3 (2.1, 5.2)	0.7 (0.4, 1.2)	1.4 (0.9, 2.0)	22.1 (18.9, 25.5)
Middle	18.6 (15.7, 21.8)	2.2 (1.6, 3.0)	3.0 (2.3, 4.0)	3.3 (2.4, 4.6)	0.6 (0.3, 1.0)	2.5 (1.8, 3.5)	25.7 (22.5, 29.1)
High	21.7 (19.1, 24.6)	2.4 (1.8, 3.2)	4.0 (3.2, 5.0)	4.7 (3.5, 6.3)	0.8 (0.5, 1.3)	2.6 (1.9, 3.4)	29.7 (26.9, 32.7)
Highest	20.0 (18.1, 22.1)	3.7 (2.9, 4.6)	5.8 (4.8, 6.9)	4.8 (3.9, 5.8)	1.0 (0.7, 1.4)	3.9 (3.1, 4.9)	31.3 (29.0, 33.7)

<sup>1</sup> Means at point of sale (displays of cigarette brand and package)<sup>2</sup> Includes on television, radio, billboards, posters, newspapers or magazines, cinemas, internet, public transportation, pub/bar/karaoke, etc.<sup>3</sup> Includes distribution of free samples, sale prices, coupons, free gifts/discounts on other products, mail promoting cigarettes, internet promotion of cigarettes and promotion by a pretty model

**Table 8.4** presents the percentage of current smokers who noticed cigarette marketing. The percentage of current smokers who reported noticing any cigarette advertisement, sponsorship or promotion was 28.9%. The most common place where cigarette marketing was noticed by current smokers was in tobacco stores (19.8%). The least common place noticed by current smokers was tobacco CSR (0.7%). For demographic subgroups, there were no differences in the rate of noticing any cigarette marketing by gender, age group and SES status. By residence, more adults living in urban areas noticed cigarette marketing than those in rural areas (34.4% vs 26.7%).

**Table 8.4:** Percentage of current smokers aged 15 years and above who noticed cigarette marketing during the past 30 days in various places, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Noticed advertisements		Noticed at sport or sporting event, or music/theatre/art/fashion event sponsorship	Noticed cigarette promotions			Noticed any advertisement, sponsorship, or promotion
	In stores where cigarettes are sold <sup>1</sup>	Anywhere else <sup>2</sup>		Clothing/item with brand name or logo	Tobacco corporate social responsibility (CSR)	Other promotion of cigarettes <sup>3</sup>	
<b>Overall</b>	19.8 (17.0, 22.9)	3.0 (2.1, 4.2)	3.8 (3.0, 4.8)	4.2 (3.1, 5.7)	0.7 (0.4, 1.4)	3.4 (2.6, 4.4)	28.9 (25.9, 32.2)
<b>Gender</b>				<i>Percentage (95% CI)</i>			
Men	20.0 (17.1, 23.3)	2.9 (2.0, 4.1)	3.9 (3.1, 5.0)	4.3 (3.1, 5.9)	0.8 (0.4, 1.5)	3.5 (2.7, 4.5)	29.3 (26.2, 32.6)
Women	16.3 (12.0, 21.8)	4.4 (2.1, 9.1)	1.7 (0.7, 4.3)	2.6 (1.4, 4.7)	0.5 (0.1, 2.0)	2.1 (1.1, 3.9)	22.9 (17.7, 29.1)
<b>Age (years)</b>							
15–24	19.4 (14.5, 25.6)	5.8 (3.0, 11.2)	5.5 (2.8, 10.5)	7.2 (4.3, 12.0)	1.5 (0.3, 6.4)	4.4 (2.0, 9.2)	35.0 (28.2, 42.5)
25+	19.9 (17.0, 23.1)	2.4 (1.7, 3.3)	3.4 (2.7, 4.3)	3.6 (2.5, 5.0)	0.6 (0.3, 1.1)	3.2 (2.5, 4.1)	27.7 (24.6, 31.0)
<b>Residence</b>							
Urban	21.5 (19.0, 24.3)	3.4 (2.5, 4.7)	5.7 (4.6, 7.2)	7.0 (5.7, 8.7)	0.8 (0.5, 1.4)	6.2 (4.8, 7.8)	34.4 (31.5, 37.5)
Rural	19.1 (15.4, 23.5)	2.8 (1.7, 4.5)	3.0 (2.0, 4.4)	3.0 (1.7, 5.3)	0.7 (0.3, 1.8)	2.3 (1.4, 3.6)	26.7 (22.7, 31.1)
<b>Education level</b>							
Less than primary	17.9 (14.9, 21.3)	1.0 (0.6, 1.8)	1.7 (1.1, 2.6)	0.9 (0.5, 1.5)	0.2 (0.1, 0.6)	1.5 (0.9, 2.5)	21.8 (18.6, 25.3)
Primary	22.7 (17.8, 28.4)	3.4 (1.7, 6.8)	3.6 (2.1, 6.2)	4.3 (2.0, 9.2)	0.7 (0.2, 2.5)	4.0 (2.4, 6.8)	33.6 (27.9, 39.8)
Secondary	18.8 (15.6, 22.4)	4.0 (2.5, 6.2)	4.2 (2.8, 6.3)	5.8 (4.0, 8.5)	1.3 (0.5, 3.3)	3.7 (2.5, 5.6)	29.2 (25.5, 33.3)
University	21.9 (16.1, 29.1)	4.8 (2.7, 8.5)	11.2 (7.9, 15.6)	10.6 (7.4, 15.0)	1.0 (0.5, 2.1)	7.6 (5.1, 11.4)	40.4 (33.9, 47.3)
<b>Region</b>							
Bangkok	20.7 (16.9, 25.2)	5.3 (3.2, 8.7)	7.6 (5.1, 11.2)	11.5 (8.3, 15.7)	0.9 (0.4, 1.9)	7.4 (5.1, 10.7)	39.3 (34.1, 44.9)
Central	14.9 (11.3, 19.2)	4.0 (2.1, 7.6)	4.0 (2.5, 6.2)	2.2 (1.3, 3.7)	0.2 (0.0, 0.6)	5.1 (3.1, 8.3)	25.1 (20.9, 29.9)
Northern	13.4 (9.8, 18.2)	2.8 (1.3, 6.0)	2.3 (1.4, 3.7)	3.2 (1.9, 5.2)	0.5 (0.2, 1.3)	1.6 (0.8, 3.4)	20.1 (15.7, 25.4)
Northeastern	21.9 (15.5, 30.0)	2.1 (0.9, 4.7)	3.0 (1.6, 5.5)	4.9 (2.4, 9.5)	1.2 (0.4, 3.6)	2.7 (1.5, 4.7)	30.7 (23.7, 38.6)
Southern	28.3 (23.4, 33.8)	2.5 (1.2, 5.2)	5.0 (3.3, 7.3)	3.2 (2.0, 5.0)	0.7 (0.3, 1.8)	2.5 (1.6, 3.8)	34.9 (29.8, 40.3)
<b>Socioeconomic status</b>							
Lowest	14.4 (10.6, 19.3)	4.7 (2.3, 9.4)	2.6 (1.0, 6.6)	3.9 (1.9, 7.9)	1.8 (0.6, 5.6)	3.4 (1.6, 7.3)	25.3 (20.1, 31.3)
Low	20.7 (15.3, 27.3)	1.4 (0.5, 4.2)	2.5 (1.4, 4.4)	3.7 (1.6, 8.4)	0.4 (0.1, 1.4)	1.6 (0.9, 3.0)	28.1 (22.1, 35.0)
Middle	19.9 (15.8, 24.8)	2.1 (1.2, 3.4)	3.3 (2.1, 5.1)	2.7 (1.8, 4.0)	0.2 (0.0, 0.5)	2.8 (1.7, 4.6)	27.7 (23.1, 32.8)
High	22.8 (18.7, 27.6)	2.4 (1.4, 4.0)	4.3 (2.9, 6.4)	5.8 (3.7, 9.0)	0.5 (0.1, 2.1)	4.4 (2.8, 7.0)	31.5 (26.9, 36.5)
Highest	22.1 (18.2, 26.5)	5.1 (3.1, 8.4)	7.7 (5.4, 11.1)	5.6 (3.8, 8.1)	0.9 (0.5, 1.7)	5.8 (4.0, 8.2)	34.3 (30.0, 39.0)

<sup>1</sup> Means at point of sale (displays of cigarette brand and package)<sup>2</sup> Includes on television, radio, billboards, posters, newspapers or magazines, cinemas, internet, public transportation, pub/bar/karaoke, etc.<sup>3</sup> Includes distribution of free samples, sale prices, coupons, free gifts/discounts on other products, mail promoting cigarettes, internet promotion of cigarettes and promotion by a pretty model

**Table 8.5** presents the percentage of non-smokers who noticed cigarette marketing. The percentage of non-smokers who reported noticing any cigarette advertisement, sponsorship or promotion was 24.7%. The most common place where cigarette marketing was noticed by non-smokers was in tobacco stores (17.7%). The least common place was tobacco CSR (0.8%). For demographic sub-groups, differences were found in every dimension. More men noticed cigarette marketing in the past 30 days than women (27.8% vs 23.1%), and those in the 15–24 years age group compared to those 25 years and above (34.0% vs 22.4%). Non-smokers living in urban areas were more likely to report noticing cigarette marketing than those living in rural areas (28.2% vs 22.7%). Cigarette marketing was noticed the most by those with a primary and higher education levels.

**Table 8.5:** Percentage of non-smokers aged 15 years and above who noticed cigarette marketing during the past 30 days in various places, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Noticed advertisements		Noticed at sport or sporting event, or music/theater/art/fashion event sponsorship	Noticed cigarette promotions			Noticed any advertisement, sponsorship, or promotion
	In stores where cigarettes are sold <sup>1</sup>	Anywhere else <sup>2</sup>		Clothing/item with brand name or logo	Tobacco corporate social responsibility (CSR)	Other promotion of cigarettes <sup>3</sup>	
<b>Overall</b>	17.7(15.9, 19.7)	2.2(1.9, 2.6)	2.9(2.5, 3.5)	Percentage (95% CI)			24.7(22.8, 26.7)
<b>Gender</b>				3.8(3.1, 4.5)	0.8(0.6, 1.1)	2.3(1.9, 2.8)	
Men	18.9(16.5, 21.6)	2.5(2.0, 3.2)	5.1(4.1, 6.2)	5.4(4.2, 6.8)	1.0(0.7, 1.5)	2.8(2.1, 3.6)	27.8(25.2, 30.5)
Women	17.1(15.3, 19.1)	2.1(1.7, 2.5)	1.8(1.5, 2.3)	3.0(2.4, 3.6)	0.7(0.5, 1.1)	2.0(1.7, 2.5)	23.1(21.1, 25.1)
<b>Age (years)</b>							
15–24	25.8(22.4, 29.7)	3.5(2.5, 4.7)	2.2(1.5, 3.2)	7.2(5.5, 9.3)	1.4(0.8, 2.5)	4.5(3.3, 5.9)	34.0(30.1, 38.0)
25+	15.7(14.0, 17.6)	1.9(1.6, 2.3)	3.1(2.6, 3.7)	2.9(2.4, 3.6)	0.7(0.5, 0.9)	1.8(1.4, 2.1)	22.4(20.6, 24.3)
<b>Residence</b>							
Urban	19.3(17.8, 20.8)	3.4(2.9, 4.0)	3.6(3.1, 4.2)	4.8(4.2, 5.6)	1.0(0.8, 1.4)	3.4(2.9, 3.9)	28.2(26.5, 29.9)
Rural	16.8(14.2, 19.9)	1.6(1.2, 2.1)	2.6(2.0, 3.3)	3.2(2.3, 4.4)	0.7(0.4, 1.2)	1.7(1.2, 2.4)	22.7(19.9, 25.8)
<b>Education level</b>							
Less than primary	10.8(9.3, 12.5)	1.0(0.7, 1.4)	1.4(1.0, 2.1)	1.3(0.8, 2.1)	0.4(0.2, 0.6)	1.2(0.8, 1.7)	14.7(13.0, 16.5)
Primary	21.5(18.1, 25.4)	1.3(0.9, 2.0)	2.4(1.7, 3.3)	3.4(2.3, 5.1)	0.6(0.3, 1.2)	1.2(0.9, 1.7)	26.6(23.1, 30.5)
Secondary	21.5(19.0, 24.3)	2.7(2.1, 3.5)	3.8(3.0, 4.7)	5.6(4.4, 6.9)	1.2(0.8, 1.9)	3.1(2.3, 4.0)	30.2(27.4, 33.0)
University	19.2(16.8, 21.9)	4.7(3.7, 6.1)	4.9(4.0, 6.0)	5.4(4.4, 6.6)	1.2(0.8, 1.8)	4.3(3.2, 5.7)	31.0(28.1, 34.0)
<b>Region</b>							
Bangkok	25.8(23.4, 28.4)	3.3(2.6, 4.2)	4.9(4.1, 6.0)	6.9(5.8, 8.2)	1.5(0.9, 2.4)	4.4(3.6, 5.4)	38.1(35.3, 40.9)
Central	14.8(12.4, 17.6)	3.5(2.6, 4.7)	3.3(2.4, 4.6)	2.2(1.6, 3.1)	0.6(0.3, 1.1)	2.8(1.9, 4.3)	21.8(19.1, 24.8)
Northern	12.2(9.5, 15.4)	1.5(1.0, 2.2)	1.4(0.9, 2.2)	4.2(2.5, 6.7)	1.5(0.7, 3.0)	1.3(0.7, 2.3)	17.7(14.4, 21.7)
Northeastern	17.8(13.6, 22.9)	1.6(1.2, 2.3)	3.2(2.3, 4.5)	3.9(2.6, 5.8)	0.6(0.3, 1.1)	1.7(1.1, 2.5)	24.1(19.7, 29.1)
Southern	24.7(20.2, 29.7)	1.5(1.0, 2.2)	2.0(1.3, 3.0)	3.0(2.0, 4.6)	0.2(0.1, 0.6)	2.5(1.7, 3.5)	31.0(26.6, 35.8)
<b>Socioeconomic status</b>							
Lowest	15.7(13.1, 18.6)	2.1(1.5, 2.9)	1.9(1.3, 2.7)	3.5(2.5, 4.7)	0.8(0.4, 1.4)	2.6(1.9, 3.5)	21.5(18.7, 24.7)
Low	15.6(12.8, 18.8)	1.4(1.0, 2.1)	1.6(1.1, 2.5)	3.2(2.2, 4.8)	0.8(0.4, 1.5)	1.3(0.9, 1.9)	20.1(17.2, 23.4)
Middle	18.0(15.1, 21.4)	2.2(1.6, 3.1)	3.0(2.1, 4.1)	3.6(2.4, 5.4)	0.8(0.4, 1.3)	2.4(1.6, 3.6)	24.9(21.6, 28.5)
High	21.3(18.5, 24.5)	2.4(1.7, 3.3)	3.9(2.9, 5.1)	4.3(3.3, 5.7)	0.8(0.5, 1.4)	1.9(1.4, 2.7)	29.1(26.0, 32.3)
Highest	19.5(17.4, 21.7)	3.3(2.5, 4.3)	5.3(4.2, 6.6)	4.6(3.7, 5.6)	1.0(0.7, 1.4)	3.4(2.6, 4.5)	30.4(28.0, 33.0)

<sup>1</sup> Means at point of sale (displays of cigarette brand and package)

<sup>2</sup> Includes on television, radio, billboards, posters, newspapers or magazines, cinemas, internet, public transportation, pub/bar/karaoke, etc.

<sup>3</sup> Includes distribution of free samples, sale prices, coupons, free gifts/discounts on other products, mail promoting cigarettes, internet promotion of cigarettes and promotion by a pretty model

## 8.2 Comparison of media awareness-related tobacco use in 2009 and 2011

### *Comparison of the key findings between 2009 and 2011*

- *A significant decrease was found in noticing any anti-cigarette smoking information during the past 30 days – 86.9% in 2009 and 81.2% in 2011.*
- *Among current smokers of manufactured cigarettes, there was an increase in the percentage who noticed PHWs on cigarette packets (from 93.0% in 2009 to 94.6% in 2011). However, thinking about quitting because of the PHWs decreased in the past three years (from 67.0% in 2009 to 62.6% in 2011).*
- *There was a significant increase in the percentage of those who noticed PHWs on shredded tobacco packages (from 21.6% in 2009 to 75.2% in 2011) and thought about quitting because of the PHWs among current hand-rolled cigarette smokers and smokeless tobacco users (from 15.0% in 2009 to 49.5% in 2011) .*
- *There was a significant increase in the percentage of those who noticed any tobacco advertising and promotion (TAP) (from 17.8% in 2009 to 25.7% in 2011).*

The comparison of media-related tobacco use in 2009 and 2011 covers three indicators – (a) noticing anti-cigarette smoking information, (b) noticing PHWs on cigarette packages and shredded tobacco packages, and (c) noticing cigarette marketing by tobacco producers.

### **8.2.1 Noticing anti-cigarette smoking information**

**Table 8.6** presents the percentage of adults aged 15 years and above who noticed anti-cigarette smoking information during the past 30 days by location of information. Most location of information, except on leaflet/ sticker, there were significant statistical reductions in the prevalence of noticing anti-smoking information. The highest reduction of 56.2% was in locations somewhere else, followed by newspapers or magazines, campaign activities and demonstration boards, which showed reductions in prevalence of 26.4%, 20.2% and 17.8%, respectively. However, the rate of noticing anti-smoking information on the internet increased significantly – from 6.3% in 2009 to 8.4% in 2011, a 33.7% increase.

There was an overall reduction in the percentage of noticing any anti-cigarette information between 2009 and 2011 (86.9% in 2009 vs 81.2% in 2011).

**Table 8.6:** Percentage of adults aged 15 years and above who noticed anti-cigarette smoking information during the past 30 days in various places, by selected demographic characteristics – GATS Thailand, 2009 and 2011

<i>Characteristic</i>	<b>2009</b>	<b>2011</b>	<b>Relative change (%)</b>
<b>Overall</b>	<i>Percentage (95% CI)</i>		
In newspapers or in magazines	27.4 (26.0, 28.8)	20.2 (19.0, 21.4)	-26.4**
On television or the radio	77.7 (76.2, 79.2)	70.7 (68.8, 72.6)	-9.1**
On television	74.4 (72.8, 76.0)	68.1 (66.0, 70.0)	-8.6**
On the radio	33.5 (31.7, 35.3)	28.7 (26.9, 30.5)	-14.4**
On billboards	39.0 (36.9, 41.2)	32.6 (30.6, 34.5)	-16.5**
Leaflet/sticker	38.3 (36.3, 40.3)	38.1 (35.9, 40.5)	-0.4**
Internet	6.3 (5.6, 7.1)	8.4 (7.7, 9.3)	33.7**
Campaign activity	15.3 (13.7, 17.1)	12.2 (11.0, 13.6)	-20.2**
Demonstration board	30.3 (28.5, 32.3)	24.9 (23.1, 26.9)	-17.8**
Somewhere else	1.0 (0.7, 1.4)	0.4 (0.3, 0.7)	-56.2**
<b>Any location</b>	<b>86.9 (85.7, 88.1)</b>	<b>81.2 (79.7, 82.7)</b>	<b>-6.6**</b>

Note: Relative change (%) calculated by [rate of 2011– rate of 2009] \*100 / rate of 2009

\*\*  $P < 0.05$

### 8.2.2 Noticing PHWs on cigarette packages and shredded tobacco packages and thinking about quitting because of PHWs

**Table 8.7** presents the percentages of those who noticed PHWs on cigarette packages and thought about quitting because of the PHWs among current manufactured cigarette smokers in 2009 and 2011. Overall, noticing PHWs on cigarette packages increased between 2009 (93.0%) and 2011 (94.6%). However, by gender and residence, this change was not significant. It increased among people aged 60 years and those with less than primary education, in the lowest SES, and those living in the central region.

Overall, thinking about quitting because of the warning labels decreased from 67.0% in 2009 to 62.6% in 2011. It reduced significantly among men, those residing in urban areas, those with a university education, those living in the Central, Northern and Southern regions, and in the middle socioeconomic groups.

**Table 8.7:** Percentage of current smokers aged 15 years and above who noticed health warnings on cigarette packages, and considered quitting because of the warning label on cigarette packages during the past 30 days, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Current smokers <sup>1</sup>				Relative change	
	2009		2011			
	Noticed health warnings on cigarette packages <sup>2</sup>	Thought about quitting because of warning labels <sup>2</sup>	Noticed health warnings on cigarette packages <sup>2</sup>	Thought about quitting because of warning labels <sup>2</sup>	Thought about quitting because of warning labels <sup>2</sup>	
	Percentage (95% CI)					
<b>Overall</b>	93.0 (91.5, 94.2)	67.0 (64.4, 69.5)	94.6 (93.3, 95.7)	62.6 (60.0, 65.2)	1.8**	-6.5**
<b>Gender</b>						
Men	94.2 (93.1, 95.2)	67.8 (65.1, 70.4)	95.4 (94.2, 96.4)	62.9 (60.1, 65.5)	1.3	-7.3**
Women	75.5 (67.1, 82.3)	55.5 (48.2, 62.6)	81.5 (75.3, 86.4)	59.0 (52.0, 65.5)	7.9	6.2
<b>Age (years)</b>						
15-24	98.7 (97.0, 99.4)	67.3 (59.2, 74.4)	99.0 (96.0, 99.8)	59.3 (51.6, 66.5)	0.3	-11.9
25-44	97.6 (96.1, 98.5)	70.6 (67.3, 73.7)	97.7 (96.4, 98.5)	66.6 (62.5, 70.5)	0.0	-5.6
45-59	90.7 (87.8, 92.9)	66.5 (63.1, 69.7)	92.9 (90.4, 94.9)	63.5 (60.1, 66.7)	2.5	-4.5
60+	73.9 (69.5, 77.9)	55.1 (50.2, 59.8)	82.2 (78.2, 85.5)	52.0 (47.4, 56.5)	11.1**	-5.6
<b>Residence</b>						
Urban	96.6 (95.7, 97.3)	67.7 (65.5, 69.8)	97.3 (96.5, 98.0)	60.8 (57.8, 63.7)	0.8	-10.1**
Rural	91.6 (89.5, 93.2)	66.7 (63.2, 70.1)	93.5 (91.7, 95.0)	63.4 (59.8, 66.8)	2.2	-5.0
<b>Education level</b>						
Less than primary	82.6 (78.9, 85.7)	62.8 (59.2, 66.4)	86.5 (83.3, 89.1)	59.1 (55.8, 62.3)	4.7**	-5.9
Primary	97.6 (96.2, 98.4)	69.7 (64.9, 74.1)	97.6 (95.7, 98.7)	65.2 (59.8, 70.2)	0.1	-6.4
Secondary	99.2 (98.7, 99.5)	69.7 (65.1, 73.8)	98.7 (97.6, 99.3)	65.7 (61.5, 69.6)	-0.6	-5.7
University	98.2 (95.9, 99.2)	65.6 (59.4, 71.3)	99.5 (98.3, 99.9)	53.9 (46.8, 60.8)	1.3	-17.8**
<b>Region</b>						
Bangkok	97.8 (96.3, 98.7)	64.3 (60.5, 68.0)	98.2 (96.7, 99.0)	59.9 (54.9, 64.8)	0.4	-6.8
Central	94.4 (92.3, 95.9)	65.5 (61.6, 69.3)	98.0 (96.6, 98.9)	54.7 (49.3, 59.9)	3.9**	-16.6**
Northern	84.6 (78.0, 89.5)	65.1 (59.3, 70.5)	85.0 (78.9, 89.6)	55.7 (50.4, 60.9)	0.5	-14.4**
Northeastern	94.2 (92.0, 95.7)	68.1 (61.8, 73.7)	95.9 (94.1, 97.1)	72.5 (67.0, 77.5)	1.8	6.5
Southern	95.0 (93.1, 96.4)	70.2 (65.2, 74.7)	95.4 (93.6, 96.6)	61.3 (56.4, 65.9)	0.3	-12.7**
<b>Socioeconomic status</b>						
Lowest	82.0 (77.2, 86.0)	59.9 (54.4, 65.2)	89.0 (85.9, 91.5)	56.0 (49.5, 62.3)	8.5**	-6.5
Low	91.9 (89.3, 93.9)	61.6 (55.6, 67.4)	93.3 (90.4, 95.3)	61.9 (56.3, 67.1)	1.5	0.4
Middle	96.3 (94.7, 97.5)	72.4 (68.6, 76.0)	95.8 (92.8, 97.6)	62.6 (58.1, 66.9)	-0.5	-13.6**
High	97.2 (95.7, 98.1)	71.8 (67.5, 75.8)	97.6 (96.0, 98.6)	67.9 (63.7, 71.9)	0.5	-5.4
Highest	97.5 (95.7, 98.6)	69.0 (64.8, 73.0)	99.0 (98.2, 99.4)	66.1 (61.4, 70.6)	1.5**	-4.2

Note: Relative change (%) calculated by [rate of 2011 - rate of 2009] \* 100 / rate of 2009

<sup>1</sup> Includes daily and occasional (less than daily) smokers

<sup>2</sup> During the past 30 days

\*\* P<0.05



**Table 8.7a** compares the percentages in 2009 and 2011 of noticing PHWs on shredded tobacco packs and thinking about quitting because of the PHWs among current hand-rolled cigarette smokers and smokeless tobacco users.

The prevalence of noticing PHWs on shredded tobacco packs among current hand-rolled cigarette smokers and smokeless tobacco users showed a statistically significant increase, both by overall population as well as by individual demographic characteristics. The prevalence of thinking about quitting because of the PHWs also showed a statistically significant increase by the overall population and by individual demographic characteristics.

### **8.2.3 Noticing cigarette marketing by tobacco producers**

**Table 8.8** presents the percentages of those who noticed cigarette marketing advertisements during the past 30 days in stores where cigarettes are sold, and noticing any advertisement, sponsorship or promotion.

It was alarming to see that the prevalence of noticing advertisements or promotions of smoking in stores where cigarettes are sold increased two- to six-fold between 2009 and 2011, overall and by all demographic characteristics. The percentage of those who noticed advertisements in stores where cigarettes are sold increased from 6.7% in 2009 to 18.2% in 2011. The increase was significant by all demographic characteristics. All these changes were statistically significant.

The prevalence of noticing any advertisement, sponsorship and promotion also showed statistically significant increases between 2009 and 2011. Noticing any advertisement, sponsorship or promotion increased from 17.8% in 2009 to 25.7% in 2011. Significant increases were noticed by all demographic characteristics with the exception of adults with university education and those living in the Central and Northern regions. These increases, however, were not as striking as those of noticing advertisements in stores.

**Table 8.7a:** Percentage of current hand-rolled cigarette smokers and smokeless tobacco users aged 15 years and above who noticed health warnings on raw tobacco packs and considered quitting because of the health warnings during the past 30 days, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Current hand-rolled cigarette smokers <sup>1</sup> and smokeless tobacco <sup>2</sup> users					
	2009			2011		
	Noticed health warning on raw tobacco packs <sup>3</sup>	Thought about quitting because of health warnings <sup>3</sup>	Thought about quitting raw tobacco packs <sup>3</sup>	Noticed health warning on raw tobacco packs <sup>3</sup>	Thought about quitting because of health warnings <sup>3</sup>	Thought about quitting raw tobacco packs <sup>3</sup>
<b>Overall</b>	21.6 (17.9, 25.8)	15.0 (12.4, 18.1)	75.2 (72.3, 77.9)	49.5 (46.0, 53.0)	247.7**	228.9**
<b>Gender</b>						
Men	25.7 (21.3, 30.5)	17.8 (14.6, 21.4)	81.5 (78.3, 84.3)	53.4 (49.4, 57.4)	217.7**	200.8**
Women	8.3 (5.8, 11.8)	6.1 (4.0, 9.2)	48.6 (42.4, 54.8)	32.9 (27.1, 39.2)	483.3**	441.6**
<b>Age (years)</b>						
15–24	30.1 (19.7, 43.1)	22.3 (13.5, 34.6)	85.3 (76.5, 91.2)	52.4 (40.7, 63.8)	183.4**	134.6**
25–44	29.6 (23.8, 36.1)	20.1 (15.6, 25.3)	87.4 (83.4, 90.5)	58.2 (51.9, 64.1)	195.2**	190.1**
45–59	18.6 (14.7, 23.3)	13.2 (10.0, 17.2)	76.7 (72.2, 80.7)	52.7 (48.0, 57.4)	311.6**	300.4**
60+	11.4 (8.4, 15.3)	7.9 (5.7, 10.9)	52.6 (48.2, 57.0)	33.2 (29.0, 37.6)	360.0**	317.2**
<b>Residence</b>						
Urban	23.3 (19.6, 27.5)	15.4 (12.5, 18.8)	77.5 (74.0, 80.6)	48.4 (44.1, 52.6)	232.0**	214.2**
Rural	21.4 (17.2, 26.2)	15.0 (12.0, 18.6)	74.8 (71.4, 78.0)	49.7 (45.6, 53.7)	250.4**	231.3**
<b>Education level</b>						
Less than primary	15.8 (12.6, 19.5)	11.6 (9.2, 14.6)	64.2 (60.3, 67.8)	42.2 (38.7, 45.8)	306.4**	262.4**
Primary	28.3 (21.9, 35.7)	18.8 (13.9, 24.9)	88.4 (84.2, 91.5)	59.8 (53.2, 66.1)	212.1**	218.1**
Secondary	32.4 (24.9, 40.8)	21.9 (16.0, 29.2)	84.4 (79.6, 88.3)	54.8 (47.7, 61.6)	160.8**	150.3**
University	10.4 (4.9, 20.6)	5.6 (2.1, 14.2)	76.5 (61.1, 87.1)	30.9 (17.7, 48.0)	636.1**	446.7
<b>Region</b>						
Bangkok	25.6 (18.1, 34.7)	13.5 (9.1, 19.7)	86.8 (78.2, 92.3)	50.8 (41.8, 59.7)	239.6**	274.7**
Central	18.2 (13.8, 23.6)	11.0 (7.8, 15.2)	78.7 (72.3, 84.0)	43.6 (36.5, 51.1)	333.5**	297.0**
Northern	13.6 (9.2, 19.5)	10.9 (7.1, 16.2)	60.7 (51.6, 69.0)	35.5 (28.8, 42.8)	346.4**	226.4**
Northeastern	35.3 (27.3, 44.2)	24.7 (19.1, 31.4)	81.0 (77.2, 84.3)	58.6 (52.6, 64.3)	129.5**	136.8**
Southern	1.9 (0.8, 4.4)	1.6 (0.6, 3.8)	71.3 (65.1, 76.8)	47.4 (40.3, 54.5)	3694**	2897**
<b>Socioeconomic status</b>						
Lowest	16.0 (11.2, 22.2)	9.1 (6.4, 12.9)	66.6 (61.7, 71.1)	42.5 (36.6, 48.5)	317.0**	364.5**
Low	22.1 (17.3, 27.8)	16.3 (12.2, 21.5)	75.6 (70.1, 80.4)	48.9 (43.0, 54.9)	242.2**	200.0**
Middle	24.9 (18.7, 32.2)	17.7 (12.3, 24.6)	83.5 (78.4, 87.6)	55.1 (49.0, 61.1)	236.0**	212.3**
High	29.7 (21.2, 39.9)	22.2 (15.9, 30.0)	80.0 (73.9, 85.0)	55.3 (48.3, 62.1)	169.1**	149.3**
Highest	17.1 (11.2, 25.4)	12.4 (7.4, 19.9)	77.1 (68.4, 84.0)	54.1 (45.2, 62.8)	350.1**	338.1**

Note: Relative change (%) calculated by [rate of 2011 – rate of 2009] / rate of 2009

<sup>1</sup> Includes daily and occasional (less than daily) smokers of hand-rolled cigarettes

<sup>2</sup> Includes daily and occasional (less than daily) smokers of smokeless tobacco users

<sup>3</sup> During the past 30 days

\*\* P<0.05

**Table 8.8:** Percentage of adults aged 15 years and above who noticed cigarette marketing advertisements during the past 30 days in various places, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Noticed advertisements in stores where cigarettes are sold			Noticed any advertisement, sponsorship or promotion		
	2009	2011	Relative change	2009	2011	Relative change
	<i>Percentage (95% CI)</i>			<i>Percentage (95% CI)</i>		
<b>Overall</b>	6.7 (5.8, 7.7)	18.2 (16.4, 20.2)	172.5**	17.8 (16.5, 19.2)	25.7 (23.7, 27.8)	44.2**
<b>Gender</b>						
Men	6.6 (5.5, 7.8)	19.4 (17.1, 21.9)	196.0**	19.9 (18.4, 21.6)	28.5 (26.1, 31.1)	42.8**
Women	6.8 (5.8, 8.0)	17.1 (15.3, 19.1)	151.1**	15.8 (14.3, 17.4)	23.1 (21.1, 25.1)	45.9**
<b>Age (years)</b>						
15–24	11.6 (9.3, 14.3)	24.5 (21.2, 28.0)	111.1**	28.2 (25.1, 31.7)	34.2 (30.5, 38.1)	21.0**
25+	5.5 (4.7, 6.4)	16.8 (15.0, 18.7)	206.3**	15.2 (14.0, 16.5)	23.7 (21.8, 25.7)	55.8**
<b>Residence</b>						
Urban	8.0 (6.9, 9.1)	19.7 (18.3, 21.3)	148.2**	22.3 (21.0, 23.8)	29.4 (27.8, 31.1)	31.9**
Rural	6.1 (4.9, 7.6)	17.4 (14.8, 20.5)	184.8**	15.7 (14.0, 17.7)	23.7 (20.9, 26.8)	50.8**
<b>Education level</b>						
Less than primary	3.6 (2.9, 4.4)	12.5 (10.8, 14.3)	245.4**	7.5 (6.6, 8.6)	16.3 (14.6, 18.2)	117.1**
Primary	6.4 (4.9, 8.2)	21.9 (18.6, 25.6)	243.8**	15.2 (13.2, 17.4)	28.8 (25.3, 32.6)	89.6**
Secondary	9.6 (8.1, 11.3)	20.9 (18.6, 23.3)	118.0**	24.8 (22.7, 27.1)	29.9 (27.4, 32.6)	20.5**
University	8.0 (6.5, 9.7)	19.6 (17.3, 22.0)	145.5**	31.2 (28.6, 34.0)	32.2 (29.5, 35.0)	3.2
<b>Region</b>						
Bangkok	4.6 (3.7, 5.8)	24.9 (22.6, 27.4)	440.7**	19.3 (17.2, 21.6)	38.3 (35.6, 41.1)	98.1**
Central	9.4 (7.8, 11.3)	14.8 (12.6, 17.4)	57.8**	21.6 (19.1, 24.2)	22.6 (19.9, 25.6)	4.8
Northern	7.4 (5.3, 10.1)	12.4 (9.9, 15.5)	68.6**	16.7 (13.6, 20.3)	18.2 (15.1, 21.9)	9.4
Northeastern	6.0 (4.3, 8.4)	18.8 (14.4, 24.2)	213.3**	13.6 (11.1, 16.5)	25.7 (21.1, 30.9)	89.0**
Southern	4.2 (2.7, 6.7)	25.8 (21.6, 30.3)	509.4**	21.5 (19.0, 24.3)	32.1 (28.0, 36.5)	49.2**
<b>Socioeconomic status</b>						
Lowest	5.9 (4.4, 8.0)	15.4 (12.9, 18.3)	159.6**	14.0 (11.8, 16.6)	22.3 (19.5, 25.4)	59.0**
Low	6.0 (4.8, 7.6)	16.8 (13.9, 20.2)	178.6**	14.4 (12.5, 16.6)	22.1 (18.9, 25.5)	52.6**
Middle	7.1 (5.7, 8.9)	18.6 (15.7, 21.8)	161.0**	18.2 (16.2, 20.3)	25.7 (22.5, 29.1)	41.2**
High	7.9 (6.5, 9.7)	21.7 (19.1, 24.6)	173.4**	21.5 (19.3, 23.8)	29.7 (26.9, 32.7)	38.4**
Highest	7.0 (5.9, 8.4)	20.0 (18.1, 22.1)	184.0**	24.5 (22.3, 26.9)	31.3 (28.9, 33.7)	27.5**

Note: Relative change (%) calculated by [rate of 2011– rate of 2009] \*100 / rate of 2009

\*\*  $P < 0.05$



***9. Knowledge,  
attitudes and  
perceptions***

## 9. Knowledge, attitudes and perceptions

This chapter provides the findings on knowledge, attitudes and perceptions of tobacco use in two main sections. The first section describes the findings from the 2011 GATS and the second section compares the key findings of the 2009 GATS and the 2011 GATS.

### 9.1 Knowledge, attitudes and perceptions related to tobacco use in 2011

#### *Key findings in 2011*

- o 97.0% of people believed that smoking causes serious illnesses.
- o Only 48.1% of people believed that bladder cancer is caused by smoking.
- o 94.2% of people believed that exposure to second-hand smoke (SHS) causes serious illnesses in non-smokers.
- o Only 58.6% of people believed that breathing other people's smoke leads to premature births.
- o 34.3% of people thought that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes.

This section presents the knowledge, attitudes and perceptions about smoking. It is divided into seven parts: (1) belief that smoking causes serious illness and specific diseases, (2) belief that second-hand smoke (SHS) causes serious illness and specific diseases, (3) the impact of pictorial health warnings, (4) belief that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes, (5) belief that cigarettes are addictive, (6) belief that smokeless tobacco causes serious illness, and (7) belief that cigarette packages with different colours are harmful to health in different ways.

#### 9.1.1 Belief that cigarette smoking causes serious illness and specific diseases

##### *9.1.1.1 Based on all adults aged 15 years and above*

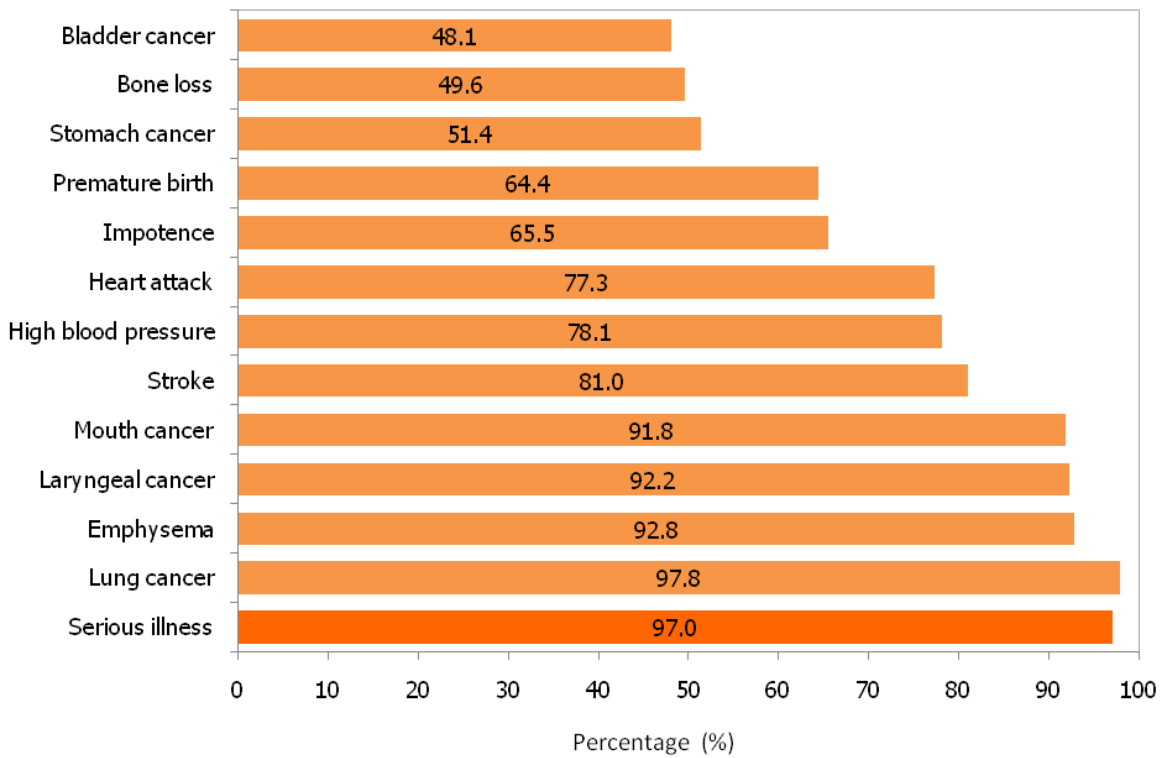
**Table 9.1 and Figure 9.1** show that, among all adults, the belief that smoking causes serious illness did not vary significantly by gender, residence, region and SES. By age group, those who were 60 years and above believed this the least as compared to the other age groups. By education level, those with less than primary education also believed this the least as compared to those with other education levels.

Among the 12 specific tobacco-related diseases identified – heart attack, lung cancer, mouth cancer, impotence, emphysema, bladder cancer, stomach cancer, premature birth, bone loss, high blood pressure and laryngeal cancer – the survey revealed that the most common belief regarding tobacco-related disease was that smoking causes lung cancer (97.8%), emphysema (92.8%), laryngeal cancer (92.2%) and mouth cancer (91.8%). By and large all category of people beliefs that smoking causes lung cancer.

Overall, less than half of people (48.1%) believed that smoking causes bladder cancer. This belief did not vary significantly by gender, age group, residence, education level and SES.

Adults believe regarding different diseases is presented in table 9.1 by demographic characteristics and the gradient is shown in Figure 9.1

**Figure 9.1:** Percentage of adults aged 15 years and above who believed that smoking causes serious illness and specific diseases – GATS Thailand, 2011



**Table 9.1:** Percentage of adults aged 15 years and above who believed that smoking causes serious illness and specific diseases, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Adults who believed that smoking causes...						
	Serious illness	Stroke	Heart attack	Lung cancer	Mouth cancer	Impotence	Emphysema
	<i>Percentage (95% CI)</i>						
<b>Overall</b>	97.0 (96.4, 97.5)	81.0 (79.7, 82.3)	77.3 (75.9, 78.6)	97.8 (97.3, 98.1)	91.8 (90.9, 92.6)	65.5 (63.8, 67.1)	92.8 (91.9, 93.5)
<b>Gender</b>							
Men	96.8 (96.0, 97.5)	81.2 (79.5, 82.8)	77.4 (75.7, 79.1)	97.7 (97.1, 98.2)	91.8 (90.6, 92.8)	68.6 (66.5, 70.7)	93.5 (92.3, 94.4)
Women	97.1 (96.5, 97.7)	80.9 (79.4, 82.2)	77.1 (75.6, 78.6)	97.8 (97.3, 98.2)	91.8 (90.8, 92.7)	62.5 (60.7, 64.4)	92.1 (91.2, 92.9)
<b>Age (years)</b>							
15–24	97.3 (96.0, 98.2)	80.3 (77.5, 82.8)	77.7 (74.9, 80.4)	98.0 (96.6, 98.8)	94.0 (92.1, 95.4)	67.8 (64.4, 71.0)	93.5 (91.4, 95.1)
25–44	97.4 (96.6, 98.1)	84.8 (83.3, 86.3)	80.0 (78.2, 81.7)	98.9 (98.5, 99.2)	94.9 (93.9, 95.8)	71.0 (68.7, 73.2)	95.7 (94.7, 96.5)
45–59	97.8 (97.1, 98.4)	80.4 (78.6, 82.1)	77.4 (75.5, 79.2)	98.2 (97.6, 98.7)	90.9 (89.5, 92.2)	64.2 (62.1, 66.1)	92.9 (91.8, 94.0)
60+	94.3 (93.0, 95.3)	73.6 (71.2, 75.9)	69.8 (67.3, 72.1)	94.1 (92.9, 95.0)	82.9 (81.0, 84.6)	51.4 (49.0, 53.8)	84.6 (82.6, 86.3)
<b>Residence</b>							
Urban	97.2 (96.6, 97.8)	82.9 (81.6, 84.1)	80.3 (79.0, 81.5)	98.3 (97.9, 98.6)	93.8 (93.1, 94.4)	69.8 (68.3, 71.2)	95.5 (94.9, 96.0)
Rural	96.8 (95.9, 97.6)	80.0 (78.1, 81.8)	75.7 (73.6, 77.6)	97.5 (96.9, 98.0)	90.7 (89.3, 91.9)	63.2 (60.8, 65.6)	91.3 (90.1, 92.4)
<b>Education level</b>							
Less than primary	95.4 (94.4, 96.3)	73.8 (71.6, 75.9)	69.9 (67.7, 72.0)	95.6 (94.7, 96.3)	84.4 (82.6, 86.1)	52.9 (50.7, 55.1)	86.1 (84.5, 87.7)
Primary	97.7 (96.7, 98.4)	81.2 (78.8, 83.3)	76.5 (73.9, 79.0)	98.0 (97.0, 98.7)	92.4 (90.9, 93.7)	63.7 (60.6, 66.6)	93.3 (91.7, 94.6)
Secondary	97.6 (96.5, 98.4)	84.6 (82.9, 86.1)	80.9 (79.0, 82.6)	99.1 (98.6, 99.4)	96.1 (95.2, 96.9)	72.5 (70.3, 74.7)	96.4 (95.5, 97.2)
University	97.9 (96.9, 98.6)	89.0 (87.2, 90.6)	86.7 (85.0, 88.2)	99.2 (98.7, 99.6)	97.2 (96.3, 97.9)	80.6 (78.4, 82.6)	98.4 (97.8, 98.9)
<b>Region</b>							
Bangkok	98.9 (98.4, 99.2)	81.3 (79.1, 83.2)	78.7 (76.6, 80.8)	98.6 (98.0, 99.0)	94.0 (92.9, 94.9)	66.9 (64.3, 69.4)	96.7 (96.0, 97.4)
Central	95.3 (93.5, 96.7)	80.4 (78.0, 82.6)	75.2 (72.5, 77.6)	97.4 (96.7, 98.0)	90.7 (89.1, 92.1)	62.7 (59.7, 65.7)	93.9 (92.5, 95.1)
Northern	96.4 (95.1, 97.4)	75.1 (70.7, 79.1)	71.6 (67.3, 75.6)	97.7 (96.4, 98.6)	88.0 (84.2, 90.9)	60.6 (55.7, 65.3)	92.7 (90.3, 94.6)
Northeastern	97.8 (96.7, 98.6)	84.4 (82.3, 86.3)	81.7 (79.4, 83.8)	98.1 (97.3, 98.6)	94.4 (93.1, 95.5)	69.4 (66.3, 72.4)	91.4 (89.7, 92.8)
Southern	97.1 (95.3, 98.2)	81.8 (78.2, 84.9)	76.6 (72.5, 80.2)	97.2 (95.3, 98.3)	90.7 (88.4, 92.6)	66.4 (62.0, 70.5)	91.1 (88.4, 93.3)
<b>Socioeconomic status</b>							
Lowest	95.7 (94.6, 96.7)	77.6 (75.4, 79.8)	73.9 (71.5, 76.2)	95.8 (94.8, 96.6)	88.9 (87.1, 90.4)	58.2 (55.3, 61.0)	88.2 (86.3, 89.8)
Low	97.0 (96.2, 97.7)	77.8 (75.0, 80.3)	73.6 (70.9, 76.2)	98.0 (97.4, 98.5)	89.8 (87.6, 91.6)	61.6 (58.5, 64.6)	91.8 (90.3, 93.1)
Middle	96.9 (95.6, 97.8)	82.4 (80.3, 84.4)	78.4 (76.1, 80.6)	98.4 (97.5, 99.0)	91.7 (90.2, 93.0)	66.4 (63.7, 69.0)	92.8 (91.3, 94.0)
High	98.1 (97.2, 98.8)	83.9 (82.1, 85.5)	80.4 (78.3, 82.4)	98.9 (98.4, 99.2)	94.7 (93.7, 95.5)	71.0 (68.7, 73.2)	96.1 (95.1, 96.8)
Highest	97.6 (96.5, 98.3)	85.7 (83.9, 87.3)	82.2 (80.2, 84.0)	98.6 (97.8, 99.0)	95.7 (94.6, 96.6)	74.7 (72.5, 76.8)	97.3 (96.5, 98.0)



**Table 9.1 (cont.):** Percentage of adults aged 15 years and above who believed that smoking causes serious illness and specific diseases, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Adults who believed that smoking causes...					
	Bladder cancer	Stomach cancer	Premature birth	Bone loss	High blood pressure	Laryngeal cancer
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	48.1 (46.3, 49.9)	51.4 (49.7, 53.2)	64.4 (62.8, 66.1)	49.6 (48.0, 51.2)	78.1 (76.7, 79.4)	92.2 (91.3, 93.1)
<b>Gender</b>						
Men	46.2 (44.1, 48.3)	49.4 (47.2, 51.5)	59.1 (56.9, 61.4)	47.5 (45.5, 49.4)	77.6 (75.8, 79.3)	92.5 (91.2, 93.6)
Women	49.8 (47.8, 51.8)	53.3 (51.4, 55.3)	69.5 (67.7, 71.2)	51.6 (49.7, 53.6)	78.5 (77.0, 80.0)	92.0 (91.0, 92.9)
<b>Age (years)</b>						
15–24	47.7 (44.4, 51.1)	50.4 (46.9, 54.0)	65.4 (62.2, 68.4)	52.4 (49.3, 55.6)	74.7 (71.7, 77.4)	94.1 (92.2, 95.5)
25–44	49.3 (47.0, 51.6)	52.8 (50.6, 54.9)	68.3 (65.9, 70.5)	51.6 (49.4, 53.8)	80.4 (78.6, 82.2)	94.9 (93.8, 95.9)
45–59	47.3 (45.0, 49.6)	51.5 (49.2, 53.8)	65.6 (63.6, 67.6)	47.8 (45.8, 49.9)	79.9 (78.1, 81.6)	92.6 (91.2, 93.7)
60+	46.5 (44.0, 49.1)	49.2 (46.7, 51.7)	52.3 (49.7, 54.9)	44.3 (41.8, 46.8)	73.6 (71.4, 75.7)	83.0 (81.1, 84.8)
<b>Residence</b>						
Urban	48.0 (46.2, 49.9)	52.4 (50.6, 54.2)	68.7 (67.2, 70.1)	52.6 (50.8, 54.4)	81.0 (79.7, 82.3)	94.9 (94.2, 95.4)
Rural	48.1 (45.5, 50.6)	50.9 (48.4, 53.4)	62.2 (59.7, 64.6)	48.0 (45.8, 50.3)	76.5 (74.5, 78.5)	90.9 (89.4, 92.2)
<b>Education level</b>						
Less than primary	46.1 (43.9, 48.4)	48.4 (46.1, 50.8)	54.8 (52.5, 57.2)	42.7 (40.6, 44.9)	73.3 (71.1, 75.4)	84.9 (83.0, 86.7)
Primary	49.0 (46.1, 51.9)	50.6 (47.7, 53.5)	63.2 (60.2, 66.1)	47.5 (44.8, 50.3)	76.8 (74.4, 79.1)	93.1 (91.6, 94.3)
Secondary	49.2 (46.7, 51.8)	53.2 (50.7, 55.6)	68.3 (65.9, 70.6)	53.7 (51.4, 55.9)	79.8 (77.8, 81.6)	96.3 (95.3, 97.1)
University	48.2 (45.0, 51.4)	55.4 (52.3, 58.5)	79.4 (77.0, 81.6)	59.0 (56.2, 61.7)	87.3 (85.4, 89.0)	98.0 (97.2, 98.6)
<b>Region</b>						
Bangkok	41.6 (38.9, 44.2)	48.3 (45.7, 50.9)	70.1 (67.9, 72.3)	51.5 (48.6, 54.3)	79.7 (77.7, 81.6)	95.6 (94.6, 96.3)
Central	41.9 (38.4, 45.4)	47.4 (43.9, 51.0)	62.3 (58.9, 65.6)	46.9 (43.5, 50.4)	74.8 (71.9, 77.5)	92.5 (91.0, 93.7)
Northern	42.2 (37.9, 46.6)	44.9 (40.5, 49.4)	59.4 (54.7, 63.8)	41.4 (37.5, 45.4)	75.5 (71.1, 79.5)	87.1 (83.0, 90.4)
Northeastern	56.9 (53.4, 60.4)	58.5 (55.1, 61.7)	67.5 (64.4, 70.5)	54.8 (52.1, 57.5)	82.5 (80.1, 84.7)	93.6 (92.1, 94.9)
Southern	50.1 (45.3, 54.9)	52.4 (47.6, 57.1)	63.2 (59.3, 66.9)	51.6 (47.1, 56.1)	75.2 (71.6, 78.5)	92.8 (90.7, 94.5)
<b>Socioeconomic status</b>						
Lowest	48.8 (45.7, 51.8)	50.4 (47.3, 53.4)	59.2 (56.3, 62.0)	46.6 (44.0, 49.1)	73.3 (70.8, 75.7)	87.8 (86.0, 89.5)
Low	45.7 (42.9, 48.5)	49.8 (46.9, 52.6)	61.3 (58.2, 64.3)	45.3 (42.8, 47.9)	75.7 (72.6, 78.5)	90.3 (88.0, 92.2)
Middle	49.9 (46.7, 53.1)	52.8 (49.7, 55.9)	64.1 (61.3, 66.8)	50.7 (48.1, 53.3)	78.6 (76.3, 80.7)	93.1 (91.6, 94.4)
High	47.8 (45.1, 50.5)	51.2 (48.5, 53.9)	67.1 (64.5, 69.6)	52.9 (50.4, 55.4)	82.0 (80.0, 83.7)	95.7 (94.8, 96.5)
Highest	48.0 (45.1, 50.9)	53.8 (51.0, 56.6)	74.2 (71.9, 76.4)	55.0 (52.3, 57.6)	83.7 (81.5, 85.7)	96.6 (95.6, 97.4)

**9.1.1.2 Based on smoking status**

**Table 9.1a** presents the beliefs among current smokers that smoking causes serious illness and 12 specific diseases. The survey found that the belief that smoking causes serious illness did not vary significantly by any of the selected demographic characteristics. Considering specific diseases, most believed that smoking causes lung cancer (96.6%). There were no significant differences by any demographic characteristic. Overall, current smokers believed the least that smoking causes bone loss (44.6%), bladder cancer (44.8%), stomach cancer (47.5%) and premature birth (53.0%).

**Table 9.1a** Percentage of current smokers aged 15 years and above who believed that smoking causes serious illness and specific diseases, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Current smokers who believed that smoking causes...						
	Serious illness	Stroke	Heart attack	Lung cancer	Mouth cancer	Impotence	Emphysema
	<i>Percentage (95% CI)</i>						
<b>Overall</b>	96.1 (94.8, 97.1)	77.9 (75.3, 80.3)	74.3 (71.8, 76.7)	96.6 (95.4, 97.5)	89.1 (87.1, 90.8)	62.9 (59.9, 65.9)	90.9 (89.0, 92.5)
<b>Gender</b>							
Men	96.3 (94.9, 97.3)	78.2 (75.6, 80.6)	74.7 (72.1, 77.1)	96.8 (95.6, 97.7)	89.7 (87.8, 91.3)	64.0 (60.8, 67.1)	91.3 (89.4, 92.9)
Women	93.0 (87.5, 96.2)	71.9 (65.3, 77.7)	68.1 (61.4, 74.1)	92.7 (88.7, 95.3)	78.6 (72.3, 83.8)	44.4 (38.0, 50.9)	84.0 (78.0, 88.6)
<b>Age (years)</b>							
15–24	95.8 (91.4, 98.0)	70.5 (63.1, 77.0)	70.4 (63.1, 76.8)	95.3 (90.2, 97.8)	88.1 (81.9, 92.3)	53.9 (45.9, 61.7)	86.9 (80.5, 91.4)
25–44	96.6 (94.7, 97.8)	83.1 (80.0, 85.8)	78.0 (74.8, 80.9)	98.7 (97.8, 99.3)	93.7 (92.0, 95.0)	68.9 (64.9, 72.6)	94.3 (92.1, 95.9)
45–59	96.8 (95.1, 97.9)	78.7 (75.2, 81.9)	75.1 (71.7, 78.3)	96.4 (94.8, 97.6)	87.7 (84.5, 90.4)	63.5 (59.4, 67.3)	91.7 (89.0, 93.8)
60+	93.6 (90.3, 95.9)	68.5 (63.6, 73.0)	65.6 (60.7, 70.2)	91.4 (88.1, 93.9)	77.7 (73.3, 81.5)	53.6 (48.8, 58.2)	83.2 (79.1, 86.7)
<b>Residence</b>							
Urban	96.9 (95.5, 97.8)	83.0 (80.7, 85.1)	79.8 (77.4, 81.9)	97.7 (96.7, 98.4)	92.8 (91.2, 94.0)	69.1 (66.4, 71.7)	95.0 (93.8, 96.1)
Rural	95.8 (94.0, 97.1)	75.7 (72.3, 78.9)	72.0 (68.6, 75.3)	96.1 (94.5, 97.3)	87.5 (84.8, 89.8)	60.3 (56.2, 64.3)	89.2 (86.5, 91.4)
<b>Education level</b>							
Less than primary	95.3 (92.7, 97.1)	72.3 (68.1, 76.2)	67.8 (63.7, 71.6)	94.4 (92.4, 95.9)	81.3 (77.5, 84.6)	55.3 (51.3, 59.3)	86.3 (82.7, 89.2)
Primary	96.8 (94.4, 98.2)	77.1 (72.2, 81.3)	71.7 (66.6, 76.2)	96.5 (93.6, 98.1)	90.0 (86.8, 92.6)	60.2 (54.7, 65.5)	90.7 (86.9, 93.4)
Secondary	95.9 (93.2, 97.5)	81.1 (77.3, 84.4)	79.6 (75.9, 83.0)	98.2 (96.8, 99.0)	94.4 (91.9, 96.2)	68.2 (63.5, 72.5)	93.9 (90.7, 96.0)
University	97.9 (94.6, 99.2)	89.8 (85.6, 92.9)	87.2 (83.1, 90.4)	98.7 (96.7, 99.5)	93.7 (88.3, 96.7)	80.7 (74.8, 85.6)	97.4 (95.2, 98.6)
<b>Region</b>							
Bangkok	97.9 (96.2, 98.8)	81.4 (76.7, 85.4)	78.1 (73.3, 82.2)	97.9 (96.0, 99.0)	92.8 (90.3, 94.7)	67.8 (62.9, 72.3)	97.3 (95.7, 98.4)
Central	94.4 (91.3, 96.4)	80.4 (76.5, 83.7)	74.6 (70.6, 78.2)	96.3 (94.8, 97.3)	90.3 (87.2, 92.6)	60.8 (55.4, 65.9)	93.6 (91.3, 95.3)
Northern	94.9 (90.0, 97.4)	63.1 (55.3, 70.3)	61.2 (53.9, 68.1)	94.1 (88.5, 97.1)	77.2 (69.3, 83.6)	51.6 (44.7, 58.5)	86.8 (79.5, 91.7)
Northeastern	96.9 (94.1, 98.4)	81.6 (76.8, 85.7)	79.8 (74.8, 84.0)	97.6 (95.4, 98.8)	94.0 (90.9, 96.1)	67.2 (60.6, 73.2)	90.6 (86.6, 93.5)
Southern	97.4 (94.6, 98.8)	79.8 (74.2, 84.4)	73.7 (68.1, 78.7)	96.6 (93.9, 98.2)	87.2 (83.4, 90.2)	65.9 (61.0, 70.5)	89.0 (84.9, 92.0)
<b>Socioeconomic status</b>							
Lowest	94.9 (91.0, 97.1)	73.8 (67.6, 79.2)	70.9 (65.1, 76.1)	93.7 (90.5, 95.8)	85.5 (81.2, 88.9)	53.0 (46.4, 59.6)	84.5 (79.9, 88.3)
Low	96.6 (94.5, 97.9)	69.7 (63.7, 75.1)	68.3 (62.7, 73.4)	97.1 (95.4, 98.1)	85.9 (80.7, 89.9)	58.8 (52.7, 64.7)	90.4 (86.8, 93.2)
Middle	94.9 (91.9, 96.8)	79.4 (75.3, 82.9)	74.2 (69.9, 78.1)	96.9 (93.8, 98.4)	88.8 (85.2, 91.5)	61.9 (56.6, 66.8)	89.9 (85.8, 92.9)
High	97.5 (95.7, 98.6)	84.5 (80.9, 87.6)	80.2 (76.3, 83.6)	98.2 (96.8, 99.0)	92.7 (90.2, 94.6)	70.8 (66.3, 74.9)	94.7 (92.5, 96.3)
Highest	97.3 (94.5, 98.7)	84.7 (80.0, 88.4)	80.4 (76.1, 84.1)	97.4 (95.3, 98.6)	94.7 (92.1, 96.5)	74.5 (69.9, 78.6)	97.4 (95.6, 98.4)

**Table 9.1a (cont.)** Percentage of current smokers aged 15 years and above who believed that smoking causes serious illness and specific diseases, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Current smokers who believed that smoking causes...					
	Bladder cancer	Stomach cancer	Premature birth	Bone loss	High blood pressure	Laryngeal cancer
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	44.8 (42.1, 47.5)	47.5 (44.7, 50.2)	53.0 (50.0, 56.1)	44.6 (42.0, 47.2)	74.4 (72.0, 76.8)	90.0 (88.0, 91.7)
<b>Gender</b>						
Men	45.3 (42.5, 48.1)	47.9 (45.1, 50.8)	53.1 (49.9, 56.2)	44.7 (42.0, 47.4)	74.7 (72.2, 77.1)	90.7 (88.8, 92.4)
Women	36.4 (29.9, 43.5)	39.1 (32.7, 46.0)	52.6 (45.5, 59.5)	43.3 (36.4, 50.5)	69.7 (62.8, 75.8)	78.1 (71.4, 83.6)
<b>Age (years)</b>						
15–24	35.0 (28.4, 42.3)	38.1 (31.2, 45.6)	48.6 (41.3, 56.0)	38.4 (31.7, 45.6)	62.6 (55.1, 69.4)	89.7 (83.5, 93.7)
25–44	47.2 (43.2, 51.3)	49.4 (45.3, 53.5)	55.7 (51.7, 59.6)	47.3 (43.5, 51.2)	77.7 (74.7, 80.5)	93.9 (92.1, 95.3)
45–59	46.9 (43.3, 50.5)	50.9 (47.1, 54.6)	56.5 (52.6, 60.3)	46.6 (42.8, 50.4)	78.2 (74.9, 81.1)	89.4 (86.3, 91.9)
60+	45.4 (40.3, 50.6)	46.5 (41.2, 51.9)	43.0 (38.2, 48.0)	39.6 (34.8, 44.6)	71.8 (67.4, 75.9)	78.7 (74.4, 82.4)
<b>Residence</b>						
Urban	43.7 (40.8, 46.6)	47.8 (45.0, 50.7)	58.3 (55.6, 61.0)	47.7 (44.7, 50.6)	78.8 (76.3, 81.1)	94.0 (92.6, 95.2)
Rural	45.3 (41.7, 48.9)	47.3 (43.7, 51.0)	50.9 (46.7, 55.0)	43.3 (39.8, 46.8)	72.6 (69.3, 75.7)	88.4 (85.6, 90.7)
<b>Education level</b>						
Less than primary	45.0 (41.5, 48.6)	47.8 (44.1, 51.6)	47.5 (43.5, 51.6)	40.7 (37.1, 44.4)	72.9 (69.0, 76.4)	82.4 (78.7, 85.7)
Primary	44.5 (39.7, 49.4)	45.3 (40.5, 50.3)	50.8 (45.6, 56.0)	44.3 (39.6, 49.1)	71.0 (66.2, 75.4)	91.6 (88.5, 94.0)
Secondary	44.9 (40.3, 49.6)	47.9 (43.2, 52.6)	57.4 (52.5, 62.2)	46.5 (42.1, 50.9)	75.7 (71.9, 79.2)	94.6 (92.0, 96.3)
University	44.3 (37.5, 51.3)	51.9 (45.0, 58.6)	64.7 (57.8, 71.0)	53.8 (47.0, 60.5)	88.1 (84.6, 91.0)	95.2 (89.5, 97.9)
<b>Region</b>						
Bangkok	39.6 (34.6, 44.8)	47.4 (42.1, 52.7)	58.2 (52.9, 63.3)	48.7 (43.4, 54.0)	77.5 (72.5, 81.8)	94.4 (92.0, 96.1)
Central	37.7 (33.1, 42.6)	43.5 (38.5, 48.7)	52.0 (47.0, 57.1)	40.5 (35.5, 45.7)	74.4 (70.4, 78.0)	91.0 (87.9, 93.4)
Northern	35.0 (29.7, 40.6)	39.9 (34.1, 45.9)	47.4 (40.6, 54.3)	33.0 (27.8, 38.7)	65.6 (58.4, 72.2)	77.8 (69.7, 84.2)
Northeastern	55.0 (49.3, 60.6)	54.6 (48.9, 60.0)	55.4 (48.6, 62.1)	50.5 (45.0, 55.9)	78.5 (73.4, 82.8)	93.9 (90.5, 96.1)
Southern	45.5 (40.8, 50.4)	45.7 (40.8, 50.8)	52.7 (48.2, 57.0)	47.7 (43.3, 52.1)	73.5 (68.7, 77.9)	90.8 (87.5, 93.4)
<b>Socioeconomic status</b>						
Lowest	41.5 (35.6, 47.6)	41.7 (35.8, 47.8)	47.4 (40.0, 54.9)	38.4 (32.5, 44.6)	66.6 (60.5, 72.2)	85.3 (81.0, 88.8)
Low	44.3 (39.4, 49.4)	48.0 (42.8, 53.3)	49.9 (44.3, 55.6)	40.9 (35.7, 46.4)	72.9 (66.9, 78.2)	86.9 (81.4, 90.9)
Middle	45.4 (40.3, 50.6)	48.6 (43.5, 53.7)	50.2 (45.1, 55.3)	45.6 (40.9, 50.3)	74.8 (70.5, 78.8)	91.2 (87.8, 93.7)
High	45.2 (40.6, 49.9)	48.5 (43.8, 53.2)	58.5 (54.1, 62.8)	49.4 (44.7, 54.0)	78.2 (74.2, 81.7)	94.0 (91.7, 95.7)
Highest	48.9 (44.0, 53.9)	52.1 (47.0, 57.1)	63.3 (58.4, 68.0)	51.3 (46.4, 56.1)	82.5 (78.4, 86.0)	94.3 (91.6, 96.2)

**Table 9.1b** presents the beliefs among non-smokers that smoking causes serious illness and 12 specific diseases. The survey revealed that those 60 years of age and above and with less than primary education believed the least that smoking causes serious illness (94.4% and 95.5%, respectively). No significant differences were observed by other selected demographic characteristics such as gender, residence, region and SES. Most non-smokers believed that smoking causes lung cancer (98.1%). Those 60 years of age and above, with less than primary education and in the lowest SES believed the least that smoking causes lung cancer (94.7%, 95.9% and 96.3%, respectively). The prevalence of those who believed that smoking causes bladder cancer was only 49.1%, and this belief did not vary by selected demographic characteristics.

**Table 9.1b:** Percentage of non-smokers aged 15 years and above who believed that smoking causes serious illness and specific diseases, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Non-smokers who believed that smoking causes...						
	Serious illness	Stroke	Heart attack	Lung cancer	Mouth cancer	Impotence	Emphysema
	<i>Percentage (95% CI)</i>						
<b>Overall</b>	97.2(96.7,97.7)	82.0(80.8,83.2)	78.2(76.9,79.5)	98.1(97.8,98.5)	92.6(91.8,93.4)	66.3(64.6,68.0)	93.3(92.6,94.0)
<b>Gender</b>							
Men	97.3(96.4,97.9)	83.8(82.1,85.4)	79.8(77.9,81.5)	98.5(97.9,99.0)	93.6(92.5,94.6)	72.7(70.4,74.8)	95.3(94.2,96.2)
Women	97.2(96.6,97.8)	81.1(79.7,82.5)	77.4(75.8,78.8)	97.9(97.5,98.3)	92.1(91.2,93.0)	63.0(61.1,64.9)	92.3(91.4,93.1)
<b>Age (years)</b>							
15–24	97.7(96.3,98.6)	83.0(80.2,85.4)	79.8(76.7,82.5)	98.7(97.3,99.4)	95.6(93.8,96.9)	71.6(68.3,74.7)	95.3(93.6,96.6)
25–44	97.7(96.9,98.3)	85.5(83.8,86.9)	80.7(78.8,82.5)	99.0(98.6,99.3)	95.4(94.2,96.3)	71.8(69.3,74.1)	96.2(95.3,96.9)
45–59	98.1(97.5,98.6)	81.0(79.2,82.7)	78.2(76.2,80.0)	98.9(98.3,99.2)	92.0(90.8,93.2)	64.4(62.2,66.6)	93.4(92.2,94.4)
60+	94.4(93.1,95.4)	74.8(72.4,77.0)	70.8(68.3,73.2)	94.7(93.5,95.7)	84.1(82.2,85.8)	50.9(48.4,53.4)	84.9(82.8,86.7)
<b>Residence</b>							
Urban	97.3(96.7,97.9)	82.9(81.6,84.1)	80.4(79.1,81.7)	98.4(98.0,98.7)	94.1(93.3,94.7)	70.0(68.4,71.5)	95.6(94.9,96.1)
Rural	97.2(96.3,97.9)	81.5(79.7,83.2)	76.9(74.9,78.8)	98.0(97.4,98.5)	91.8(90.6,92.9)	64.2(61.8,66.7)	92.1(90.9,93.1)
<b>Education level</b>							
Less than primary	95.5(94.5,96.3)	74.3(72.1,76.3)	70.5(68.3,72.6)	95.9(95.0,96.7)	85.4(83.7,86.9)	52.1(49.8,54.4)	86.1(84.4,87.6)
Primary	98.2(97.2,98.8)	83.1(80.7,85.2)	78.8(76.0,81.3)	98.7(98.0,99.2)	93.5(91.9,94.8)	65.3(61.9,68.6)	94.5(93.0,95.6)
Secondary	98.1(97.2,98.8)	85.7(84.0,87.1)	81.3(79.3,83.1)	99.4(98.9,99.7)	96.7(95.8,97.4)	73.9(71.5,76.1)	97.3(96.4,97.9)
University	97.9(96.7,98.6)	88.9(87.0,90.6)	86.6(84.7,88.3)	99.3(98.7,99.6)	97.8(97.0,98.3)	80.6(78.2,82.8)	98.6(97.9,99.1)
<b>Region</b>							
Bangkok	99.1(98.6,99.4)	81.2(79.1,83.2)	78.9(76.6,81.0)	98.7(98.1,99.1)	94.2(93.1,95.2)	66.7(64.1,69.2)	96.6(95.7,97.3)
Central	95.6(93.8,96.9)	80.4(77.7,82.8)	75.3(72.4,78.1)	97.8(96.9,98.4)	90.8(89.1,92.3)	63.3(60.2,66.4)	94.0(92.6,95.2)
Northern	96.8(95.7,97.7)	78.4(74.5,81.9)	74.5(70.6,78.1)	98.7(98.1,99.1)	91.0(88.1,93.2)	63.1(58.4,67.5)	94.4(92.7,95.7)
Northeastern	98.2(97.1,98.8)	85.3(83.4,87.1)	82.3(80.2,84.3)	98.2(97.3,98.8)	94.6(93.2,95.7)	70.2(67.0,73.2)	91.6(89.9,93.0)
Southern	97.0(95.4,98.0)	82.7(79.3,85.6)	77.8(73.9,81.2)	97.4(95.6,98.5)	92.2(90.1,93.8)	66.6(61.8,71.1)	92.1(89.6,94.0)
<b>Socioeconomic status</b>							
Lowest	96.0(94.8,96.9)	78.6(76.4,80.7)	74.7(72.2,77.0)	96.3(95.2,97.2)	89.7(88.0,91.2)	59.5(56.7,62.2)	89.1(87.3,90.7)
Low	97.2(96.3,97.9)	80.4(77.8,82.7)	75.4(72.7,77.9)	98.3(97.6,98.8)	91.0(89.2,92.6)	62.5(59.4,65.4)	92.3(90.9,93.5)
Middle	97.7(96.5,98.5)	83.6(81.4,85.7)	80.1(77.7,82.3)	99.0(98.3,99.4)	92.9(91.3,94.2)	68.2(65.4,70.9)	93.9(92.5,95.0)
High	98.4(97.3,99.0)	83.7(81.7,85.4)	80.5(78.1,82.7)	99.1(98.7,99.4)	95.4(94.4,96.3)	71.1(68.5,73.6)	96.6(95.6,97.3)
Highest	97.6(96.4,98.4)	85.9(84.1,87.6)	82.6(80.6,84.5)	98.9(98.1,99.3)	96.0(94.8,96.9)	74.8(72.3,77.1)	97.3(96.4,98.0)

**Table 9.1b (cont.)** Percentage of non-smokers aged 15 years and above who believed that smoking causes serious illness and specific diseases, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Non-smokers who believed that smoking causes...					
	Bladder cancer	Stomach cancer	Premature birth	Bone loss	High blood pressure	Laryngeal cancer
	<i>Percentage (95% CI)</i>					
Overall	49.1(47.2,51.0)	52.7(50.8,54.5)	68.0(66.4,69.6)	51.2(49.5,52.9)	79.2(77.8,80.6)	92.9(92.0,93.7)
<b>Gender</b>						
Men	47.0(44.3,49.7)	50.6(48.0,53.2)	64.4(61.9,66.8)	49.9(47.5,52.3)	80.2(78.2,82.0)	94.1(92.8,95.1)
Women	50.2(48.1,52.2)	53.7(51.7,55.7)	69.9(68.2,71.6)	51.9(49.9,53.8)	78.8(77.2,80.2)	92.3(91.4,93.2)
<b>Age (years)</b>						
15–24	51.2(47.5,54.9)	53.8(49.9,57.7)	70.0(66.7,73.1)	56.3(52.8,59.8)	78.1(75.0,80.8)	95.3(93.5,96.6)
25–44	50.0(47.5,52.6)	53.9(51.5,56.3)	72.7(70.3,75.0)	53.1(50.6,55.5)	81.4(79.4,83.3)	95.3(94.1,96.3)
45–59	47.4(44.9,49.9)	51.8(49.2,54.3)	68.8(66.6,70.8)	48.3(46.0,50.5)	80.5(78.6,82.3)	93.6(92.5,94.6)
60+	46.8(44.2,49.4)	49.8(47.2,52.4)	54.5(51.8,57.1)	45.4(42.8,48.1)	74.0(71.7,76.2)	84.0(82.1,85.8)
<b>Residence</b>						
Urban	49.2(47.3,51.1)	53.6(51.7,55.4)	71.3(69.7,72.8)	53.9(51.9,55.8)	81.6(80.3,82.9)	95.1(94.4,95.6)
Rural	49.0(46.2,51.8)	52.1(49.4,54.9)	66.2(63.7,68.5)	49.7(47.3,52.1)	77.9(75.8,79.9)	91.7(90.4,92.9)
<b>Education level</b>						
Less than primary	46.5(44.0,48.9)	48.6(46.1,51.1)	57.0(54.6,59.4)	43.4(41.1,45.7)	73.4(71.2,75.5)	85.7(83.9,87.3)
Primary	51.1(47.9,54.3)	53.1(49.9,56.3)	69.0(65.8,72.0)	49.1(46.0,52.2)	79.5(76.9,81.9)	93.8(92.2,95.0)
Secondary	50.6(47.7,53.5)	54.8(52.0,57.5)	71.8(69.3,74.1)	55.9(53.5,58.4)	81.0(78.9,83.0)	96.9(95.9,97.7)
University	48.8(45.3,52.2)	55.9(52.6,59.2)	81.6(79.3,83.7)	59.7(56.8,62.6)	87.2(85.0,89.0)	98.5(97.8,99.0)
<b>Region</b>						
Bangkok	42.0(39.4,44.7)	48.5(45.8,51.2)	72.8(70.5,75.0)	52.1(49.1,55.0)	80.2(78.2,82.2)	95.8(94.8,96.6)
Central	43.2(39.4,47.0)	48.6(44.9,52.4)	65.4(62.0,68.8)	48.9(45.2,52.6)	74.9(71.8,77.8)	92.9(91.3,94.2)
Northern	44.2(39.7,48.8)	46.3(41.7,50.9)	62.7(58.1,67.0)	43.7(39.5,48.0)	78.3(74.1,82.0)	89.7(86.4,92.3)
Northeastern	57.6(53.7,61.3)	59.8(56.1,63.3)	71.6(68.6,74.3)	56.2(53.4,59.0)	83.9(81.5,86.0)	93.6(92.0,94.8)
Southern	52.0(46.6,57.3)	55.2(50.0,60.3)	67.7(63.6,71.6)	53.2(47.9,58.4)	76.0(72.1,79.4)	93.6(91.6,95.2)
<b>Socioeconomic status</b>						
Lowest	50.6(47.7,53.6)	52.6(49.6,55.6)	62.2(59.6,64.8)	48.6(45.9,51.4)	75.0(72.6,77.3)	88.5(86.6,90.1)
Low	46.2(43.1,49.2)	50.3(47.3,53.4)	65.0(61.8,68.1)	46.8(44.0,49.6)	76.6(73.4,79.4)	91.4(89.6,92.9)
Middle	51.7(48.3,55.1)	54.5(51.0,57.9)	69.6(66.5,72.5)	52.8(49.7,55.8)	80.1(77.4,82.5)	93.9(92.2,95.2)
High	48.8(45.7,51.8)	52.2(49.2,55.2)	70.2(67.4,72.8)	54.2(51.3,57.0)	83.3(81.2,85.2)	96.3(95.3,97.2)
Highest	47.8(44.5,51.0)	54.3(51.2,57.3)	77.1(74.6,79.4)	55.9(53.1,58.7)	84.0(81.5,86.1)	97.2(96.2,98.0)

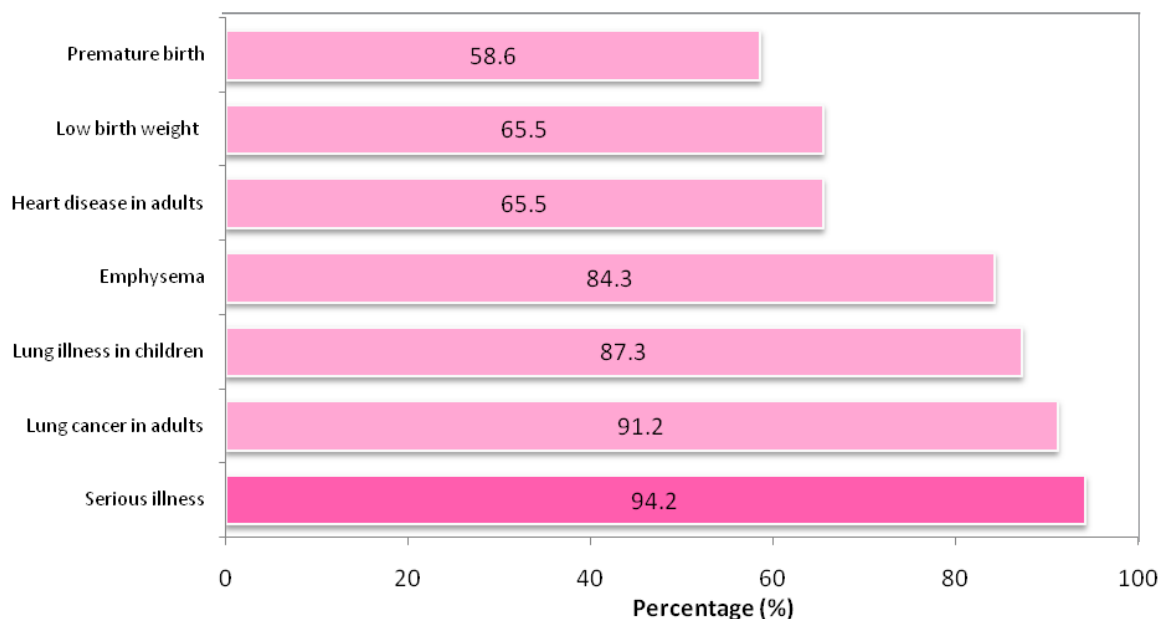
## 9.1.2 Belief that second-hand smoke causes serious illness and specific diseases

### 9.1.2.1 Based on all adults aged 15 years and above

**Table 9.2 and Figure 9.2** show that 94.2% of adults believed that breathing other people's smoke causes serious illness in non-smokers. There were no significant differences by gender. This perception increased with increasing education level and SES. In contrast, this perception decreased in the older age groups.

The belief that breathing other people's smoke causes lung cancer among non-smokers was the strongest (91.2%). Those in the oldest age group of 60 years and above, with less than a primary education, and in the lowest SES believed the least that breathing other people's smoke causes lung cancer. Only 58.6% of adults believed that premature birth is caused by breathing other people's smoke. Those in the oldest age group of 60 years and above and those living in rural areas believed the least that breathing other people's smoke causes premature birth. This belief increased with increasing education level and SES.

**Figure 9.2:** Percentage of adults aged 15 years and above who believed that breathing other people's smoke causes serious illness and specific diseases in non-smokers – GATS Thailand, 2011



**Table 9.2:** Percentage of adults aged 15 years and above who believed that breathing other people's smoke causes serious illness and specific diseases in non-smokers, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Believed that breathing other people's smoke causes the following in non-smokers:						
	Serious illness	Heart disease in adults	Lung illness in children	Lung cancer in adults	Emphysema	Low birth weight <sup>1</sup>	Premature birth <sup>2</sup>
	<i>Percentage (95% CI)</i>						
<b>Overall</b>	94.2 (93.5, 94.8)	65.5 (63.9, 67.1)	87.3 (86.4, 88.2)	91.2 (90.5, 92.0)	84.3 (83.1, 85.4)	65.5 (63.9, 67.0)	58.6 (57.0, 60.2)
<b>Gender</b>							
Men	93.8 (92.8, 94.7)	65.0 (63.0, 67.1)	86.5 (85.1, 87.9)	91.0 (89.9, 92.0)	84.4 (82.7, 86.0)	61.1 (59.0, 63.2)	53.3 (51.1, 55.4)
Women	94.5 (93.8, 95.2)	66.0 (64.2, 67.7)	88.0 (87.0, 89.0)	91.5 (90.6, 92.2)	84.1 (82.9, 85.2)	69.6 (67.9, 71.2)	63.7 (61.9, 65.4)
<b>Age (years)</b>							
15–24	96.9 (95.5, 97.9)	62.7 (59.2, 66.1)	90.4 (88.3, 92.1)	95.2 (93.7, 96.4)	86.6 (83.8, 88.9)	66.4 (63.3, 69.4)	58.1 (55.0, 61.1)
25–44	96.4 (95.5, 97.1)	67.9 (65.9, 69.9)	90.6 (89.3, 91.7)	94.3 (93.3, 95.2)	88.2 (86.8, 89.5)	71.0 (68.8, 73.1)	64.0 (61.6, 66.3)
45–59	94.1 (93.1, 95.0)	68.6 (66.5, 70.6)	87.8 (86.6, 89.0)	90.8 (89.6, 91.8)	84.1 (82.6, 85.5)	67.4 (65.3, 69.4)	59.9 (57.9, 62.0)
60+	85.5 (83.7, 87.3)	58.3 (55.8, 60.8)	75.0 (72.7, 77.1)	79.8 (77.8, 81.7)	72.3 (69.9, 74.7)	48.1 (45.7, 50.5)	44.2 (41.7, 46.7)
<b>Residence</b>							
Urban	95.7 (95.1, 96.2)	69.3 (67.8, 70.7)	89.3 (88.5, 90.2)	92.8 (92.1, 93.5)	87.2 (86.3, 88.1)	70.5 (69.0, 71.9)	63.7 (62.2, 65.2)
Rural	93.4 (92.3, 94.3)	63.5 (61.3, 65.8)	86.2 (84.8, 87.5)	90.4 (89.2, 91.5)	82.7 (81.0, 84.3)	62.8 (60.5, 65.1)	55.9 (53.5, 58.3)
<b>Education level</b>							
Less than primary	87.9 (86.4, 89.3)	59.5 (57.3, 61.8)	78.6 (76.9, 80.2)	83.2 (81.6, 84.8)	75.6 (73.7, 77.5)	53.5 (51.2, 55.8)	47.8 (45.6, 50.1)
Primary	95.2 (94.0, 96.2)	64.3 (61.1, 67.3)	87.7 (85.6, 89.5)	92.6 (91.2, 93.8)	83.1 (80.5, 85.4)	64.0 (61.0, 66.8)	57.1 (54.1, 60.0)
Secondary	97.5 (96.6, 98.1)	68.0 (65.7, 70.2)	92.0 (90.6, 93.1)	95.5 (94.5, 96.3)	89.9 (88.5, 91.1)	71.6 (69.5, 73.6)	63.5 (61.2, 65.6)
University	99.1 (98.6, 99.4)	75.3 (72.9, 77.6)	95.6 (94.6, 96.4)	97.5 (96.6, 98.1)	92.5 (91.0, 93.7)	80.7 (78.5, 82.8)	74.3 (71.8, 76.6)
<b>Region</b>							
Bangkok	96.4 (95.5, 97.1)	64.8 (62.5, 67.0)	89.6 (88.3, 90.8)	93.1 (92.0, 94.1)	87.3 (85.8, 88.8)	71.5 (69.0, 73.8)	66.1 (63.6, 68.6)
Central	92.7 (91.3, 93.9)	60.9 (57.7, 63.9)	82.6 (80.5, 84.5)	88.1 (86.3, 89.7)	83.5 (81.3, 85.5)	63.9 (61.0, 66.7)	54.7 (51.7, 57.7)
Northern	93.0 (90.9, 94.7)	62.1 (57.8, 66.1)	86.7 (84.0, 89.0)	91.4 (88.9, 93.4)	85.7 (82.8, 88.2)	58.0 (53.1, 62.7)	53.7 (48.9, 58.4)
Northeastern	95.3 (94.0, 96.3)	70.1 (67.1, 73.0)	89.1 (87.4, 90.6)	93.3 (91.9, 94.4)	83.7 (81.2, 85.9)	67.8 (64.9, 70.6)	62.0 (59.1, 64.9)
Southern	93.8 (92.2, 95.1)	67.7 (64.2, 71.0)	90.2 (88.4, 91.8)	90.2 (88.4, 91.7)	82.8 (80.4, 85.0)	68.2 (64.6, 71.5)	58.1 (54.1, 62.0)
<b>Socioeconomic status</b>							
Lowest	89.8 (88.1, 91.3)	58.1 (55.3, 60.9)	80.3 (78.2, 82.2)	86.0 (84.2, 87.6)	77.9 (75.5, 80.1)	57.8 (55.2, 60.4)	51.6 (48.9, 54.3)
Low	93.5 (92.3, 94.6)	63.7 (60.6, 66.6)	86.6 (84.9, 88.1)	90.6 (89.2, 91.9)	84.4 (82.5, 86.1)	61.9 (59.0, 64.7)	56.2 (53.3, 59.0)
Middle	94.9 (93.5, 96.0)	67.0 (64.4, 69.6)	88.9 (87.1, 90.5)	92.2 (90.7, 93.5)	83.8 (81.7, 85.7)	64.6 (61.6, 67.4)	57.9 (55.0, 60.8)
High	96.4 (95.6, 97.1)	68.9 (66.5, 71.1)	90.7 (89.2, 92.0)	93.9 (92.8, 94.9)	87.9 (86.2, 89.4)	70.8 (68.3, 73.1)	62.7 (60.1, 65.2)
Highest	98.3 (97.7, 98.8)	73.9 (71.7, 76.0)	93.3 (92.0, 94.3)	96.1 (95.2, 96.8)	90.5 (89.0, 91.9)	77.2 (75.2, 79.1)	69.1 (66.8, 71.2)

<sup>1</sup> Defined as a birth weight less than 2500 g<sup>2</sup> Defined as birth at 28–34 weeks of gestation

### 9.1.2.2 Based on smoking status

**Table 9.2a** shows that 90.9% of current smokers believed that breathing other people's smoke causes serious illness in non-smokers. There was a significant difference in this belief by gender (91.5% men vs 81.9% women). More current smokers with higher education levels and SES held this belief. In contrast, the belief declined with increasing age. As compared with **Table 9.2b**, significantly more non-smokers than current smokers believed that breathing other people's smoke cause serious illness in non-smokers (95.2% and 90.9%, respectively).



The highest percentage of both non-smokers and current smokers believed that breathing other people's smoke causes lung cancer in adults, while the lowest percentage believed that it causes premature births. However, significantly more non-smokers than current smokers believed that breathing other people's smoke causes lung cancer in adults (92.3% vs 87.7%). In addition, significantly more non-smokers than current smokers believed that breathing other people's smoke causes premature birth (62.1% vs 47.6%).

**Table 9.2a:** Percentage of current smokers aged 15 years and above who believed that breathing other people's smoke causes serious illness and specific diseases in non-smokers, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Believed that breathing other people's smoke causes the following in non-smokers:						
	Serious illness	Heart disease in adults	Lung illness in children	Lung cancer in adults	Emphysema	Low birth weight <sup>1</sup>	Premature birth <sup>2</sup>
	<i>Percentage (95% CI)</i>						
<b>Overall</b>	90.9 (89.2, 92.5)	60.3 (57.5, 63.1)	82.6 (80.4, 84.6)	87.7 (85.8, 89.4)	80.2 (77.7, 82.5)	55.1 (52.4, 57.7)	47.6 (44.9, 50.3)
<b>Gender</b>							
Men	91.5 (89.6, 93.0)	60.7 (57.8, 63.5)	83.2 (80.9, 85.3)	88.3 (86.4, 90.0)	80.9 (78.3, 83.2)	55.3 (52.6, 58.1)	47.5 (44.7, 50.3)
Women	81.9 (75.6, 86.8)	54.4 (46.8, 61.7)	72.3 (65.8, 78.0)	77.2 (70.9, 82.6)	68.4 (61.5, 74.6)	50.5 (43.7, 57.4)	49.9 (43.3, 56.5)
<b>Age (years)</b>							
15–24	93.3 (88.3, 96.2)	51.0 (43.2, 58.8)	82.6 (75.8, 87.8)	91.9 (87.0, 95.0)	76.9 (68.7, 83.5)	48.7 (41.3, 56.2)	39.1 (32.3, 46.2)
25–44	93.0 (90.2, 95.1)	64.5 (60.8, 68.1)	85.8 (82.6, 88.6)	90.7 (87.9, 93.0)	85.0 (81.9, 87.6)	60.6 (56.6, 64.4)	53.6 (49.6, 57.5)
45–59	90.6 (88.3, 92.5)	64.5 (60.5, 68.3)	83.1 (80.3, 85.5)	86.1 (83.2, 88.6)	80.0 (76.7, 83.0)	57.7 (53.5, 61.8)	49.5 (45.4, 53.5)
60+	81.5 (77.1, 85.3)	50.3 (45.4, 55.3)	70.9 (66.0, 75.3)	75.3 (70.7, 79.3)	68.7 (63.8, 73.2)	39.8 (35.4, 44.5)	35.4 (30.8, 40.2)
<b>Residence</b>							
Urban	93.9 (92.5, 95.0)	66.4 (63.6, 69.2)	87.1 (85.3, 88.7)	90.2 (88.6, 91.6)	84.5 (82.3, 86.4)	63.2 (60.6, 65.8)	53.6 (50.9, 56.3)
Rural	89.7 (87.3, 91.8)	57.8 (54.1, 61.5)	80.7 (77.7, 83.4)	86.7 (84.1, 88.9)	78.4 (75.0, 81.5)	51.7 (48.1, 55.3)	45.1 (41.6, 48.8)
<b>Education level</b>							
Less than primary	84.6 (81.2, 87.5)	54.4 (50.1, 58.6)	74.8 (71.3, 78.0)	79.9 (76.2, 83.2)	73.4 (69.6, 76.9)	46.9 (42.8, 51.0)	40.6 (36.8, 44.6)
Primary	93.2 (90.4, 95.2)	56.3 (50.7, 61.8)	84.3 (79.9, 87.8)	90.5 (87.6, 92.8)	78.5 (73.2, 82.9)	51.7 (46.6, 56.8)	44.2 (39.3, 49.3)
Secondary	93.4 (90.2, 95.7)	65.2 (60.8, 69.4)	85.9 (82.2, 88.9)	90.9 (87.6, 93.4)	85.6 (81.7, 88.8)	62.5 (58.2, 66.6)	54.0 (49.5, 58.5)
University	98.0 (95.9, 99.0)	78.0 (72.7, 82.5)	94.1 (91.4, 95.9)	95.5 (92.8, 97.2)	90.0 (86.2, 92.8)	67.8 (60.7, 74.2)	60.2 (53.3, 66.7)
<b>Region</b>							
Bangkok	92.9 (90.0, 95.0)	64.8 (59.2, 69.9)	84.4 (80.7, 87.4)	88.7 (85.3, 91.3)	82.9 (78.2, 86.8)	63.7 (58.9, 68.2)	56.1 (50.6, 61.4)
Central	89.4 (86.3, 91.9)	59.1 (54.3, 63.8)	81.0 (76.9, 84.5)	84.8 (81.3, 87.7)	81.1 (76.5, 84.9)	55.7 (51.2, 60.1)	44.7 (39.8, 49.7)
Northern	89.3 (83.1, 93.4)	53.9 (45.8, 61.7)	79.1 (72.6, 84.4)	87.2 (80.7, 91.7)	79.3 (72.0, 85.1)	45.2 (37.8, 52.8)	42.8 (36.0, 49.9)
Northeastern	92.7 (88.9, 95.3)	61.7 (56.1, 67.0)	83.5 (78.9, 87.3)	90.7 (86.7, 93.5)	79.6 (74.3, 84.1)	55.0 (49.6, 60.3)	49.0 (43.6, 54.4)
Southern	90.2 (86.8, 92.8)	63.5 (58.9, 67.9)	85.6 (82.0, 88.6)	85.8 (82.2, 88.8)	79.6 (75.4, 83.3)	60.1 (55.3, 64.8)	49.7 (44.9, 54.4)
<b>Socioeconomic status</b>							
Lowest	83.8 (78.5, 87.9)	46.3 (39.7, 52.9)	72.1 (66.2, 77.4)	80.6 (75.4, 85.0)	70.6 (64.5, 76.0)	43.6 (37.9, 49.5)	39.0 (33.3, 45.1)
Low	91.5 (88.6, 93.7)	57.9 (51.9, 63.6)	82.0 (77.8, 85.6)	88.9 (85.8, 91.5)	81.6 (77.0, 85.5)	50.4 (44.9, 55.9)	44.7 (39.5, 50.1)
Middle	90.3 (86.8, 92.9)	61.7 (56.6, 66.5)	82.4 (78.1, 86.0)	86.8 (83.2, 89.6)	77.0 (72.6, 80.9)	53.6 (48.4, 58.7)	45.4 (40.4, 50.5)
High	94.0 (91.7, 95.6)	67.0 (62.4, 71.2)	87.8 (85.1, 90.1)	90.7 (88.1, 92.7)	85.3 (82.1, 88.0)	64.0 (59.7, 68.1)	53.3 (48.8, 57.8)
Highest	97.8 (96.5, 98.6)	73.8 (69.4, 77.7)	92.2 (89.4, 94.3)	94.1 (90.9, 96.2)	90.4 (87.0, 93.0)	69.3 (64.5, 73.7)	60.7 (55.7, 65.5)

<sup>1</sup> Defined as birth weight less than 2500 g

<sup>2</sup> Defined as birth at 28–34 weeks of gestation

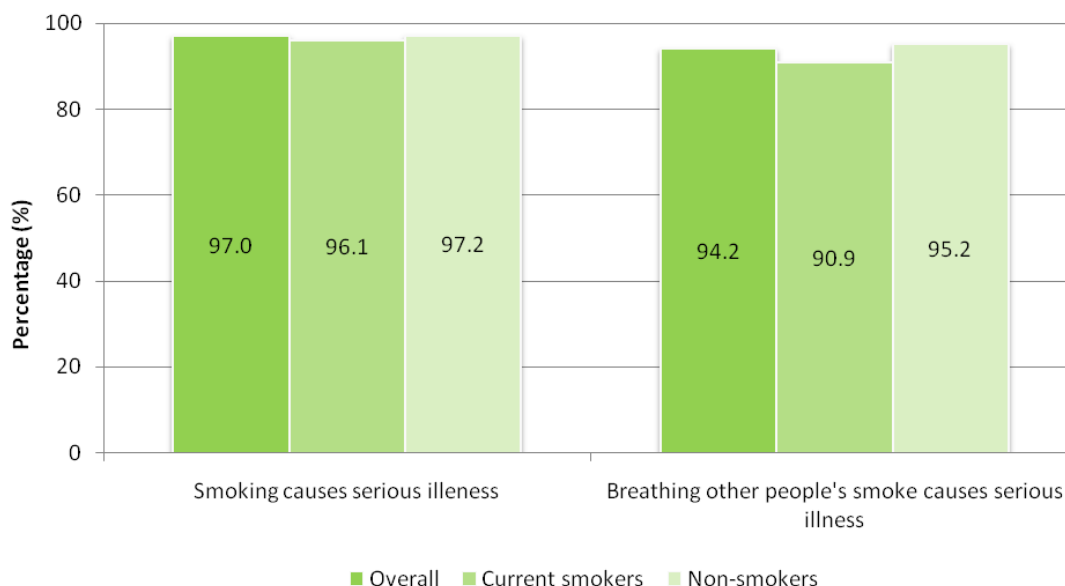
**Table 9.2b:** Percentage of non-smokers aged 15 years and above who believed that breathing other people's smoke causes serious illness and specific diseases in non-smokers, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Believed that breathing other people's smoke causes the following in non-smokers:						
	Serious illness	Heart disease in adults	Lung illness in children	Lung cancer in adults	Emphysema	Low birth weight <sup>1</sup>	Premature birth <sup>2</sup>
	<i>Percentage (95% CI)</i>						
<b>Overall</b>	95.2 (94.6, 95.7)	67.1 (65.5, 68.7)	88.8 (87.9, 89.6)	92.3 (91.6, 93.0)	85.6 (84.5, 86.5)	68.7 (67.1, 70.3)	62.1 (60.4, 63.7)
<b>Gender</b>							
Men	95.8 (94.9, 96.6)	68.8 (66.5, 71.1)	89.4 (88.0, 90.8)	93.3 (92.2, 94.3)	87.6 (86.0, 89.0)	66.1 (63.7, 68.5)	58.3 (55.8, 60.8)
Women	94.8 (94.2, 95.5)	66.3 (64.5, 68.0)	88.4 (87.4, 89.4)	91.9 (91.0, 92.6)	84.5 (83.4, 85.6)	70.1 (68.4, 71.7)	64.0 (62.2, 65.8)
<b>Age (years)</b>							
15–24	97.9 (96.6, 98.7)	66.0 (62.2, 69.5)	92.5 (90.6, 94.1)	96.2 (94.5, 97.3)	89.2 (87.1, 91.1)	71.3 (68.0, 74.4)	63.4 (60.2, 66.5)
25–44	97.6 (96.9, 98.1)	69.1 (66.9, 71.3)	92.3 (91.0, 93.4)	95.6 (94.7, 96.3)	89.3 (88.0, 90.6)	74.7 (72.5, 76.8)	67.7 (65.2, 70.0)
45–59	95.3 (94.3, 96.2)	70.0 (67.8, 72.1)	89.4 (88.1, 90.6)	92.4 (91.2, 93.4)	85.5 (83.9, 86.9)	70.7 (68.5, 72.7)	63.5 (61.4, 65.6)
60+	86.5 (84.6, 88.2)	60.2 (57.5, 62.7)	75.9 (73.6, 78.1)	80.9 (78.8, 82.8)	73.2 (70.7, 75.6)	50.0 (47.5, 52.5)	46.3 (43.8, 48.8)
<b>Residence</b>							
Urban	96.1 (95.6, 96.6)	70.0 (68.4, 71.5)	89.9 (89.0, 90.8)	93.5 (92.8, 94.1)	87.9 (87.0, 88.8)	72.3 (70.8, 73.8)	66.3 (64.7, 67.9)
Rural	94.6 (93.7, 95.4)	65.5 (63.1, 67.9)	88.1 (86.8, 89.3)	91.7 (90.6, 92.7)	84.2 (82.7, 85.7)	66.7 (64.3, 69.0)	59.7 (57.2, 62.1)
<b>Education level</b>							
Less than primary	88.9 (87.4, 90.3)	61.1 (58.7, 63.4)	79.7 (78.0, 81.4)	84.3 (82.6, 85.7)	76.3 (74.3, 78.2)	55.5 (53.2, 57.8)	50.1 (47.8, 52.3)
Primary	96.1 (95.0, 97.0)	68.0 (64.7, 71.2)	89.2 (87.1, 91.1)	93.6 (92.1, 94.8)	85.3 (82.9, 87.4)	69.7 (66.4, 72.9)	63.1 (59.7, 66.4)
Secondary	98.7 (98.3, 99.1)	68.9 (66.3, 71.3)	93.9 (92.7, 94.9)	96.9 (96.1, 97.5)	91.2 (89.9, 92.3)	74.5 (72.2, 76.6)	66.4 (64.0, 68.7)
University	99.3 (98.7, 99.6)	74.9 (72.2, 77.4)	95.8 (94.7, 96.7)	97.8 (96.9, 98.4)	92.8 (91.2, 94.2)	82.7 (80.5, 84.7)	76.4 (73.9, 78.8)
<b>Region</b>							
Bangkok	97.2 (96.4, 97.8)	64.8 (62.3, 67.2)	90.8 (89.4, 92.0)	94.1 (93.1, 95.0)	88.3 (86.9, 89.6)	73.2 (70.7, 75.6)	68.4 (65.8, 70.8)
Central	93.7 (92.4, 94.9)	61.4 (57.9, 64.7)	83.1 (80.9, 85.1)	89.1 (87.3, 90.7)	84.2 (82.1, 86.1)	66.3 (63.3, 69.2)	57.7 (54.7, 60.7)
Northern	94.1 (92.5, 95.4)	64.3 (60.5, 68.0)	88.8 (86.8, 90.6)	92.6 (90.8, 94.0)	87.5 (85.3, 89.4)	61.5 (57.1, 65.8)	56.7 (52.1, 61.2)
Northeastern	96.1 (94.9, 97.0)	72.9 (69.6, 76.0)	91.0 (89.2, 92.5)	94.1 (92.8, 95.2)	85.0 (82.7, 87.1)	72.1 (69.1, 75.0)	66.4 (63.3, 69.4)
Southern	95.4 (93.9, 96.5)	69.5 (65.7, 73.1)	92.2 (90.4, 93.7)	92.0 (90.2, 93.5)	84.1 (81.7, 86.3)	71.6 (67.7, 75.2)	61.7 (57.4, 65.8)
<b>Socioeconomic status</b>							
Lowest	91.4 (89.8, 92.7)	61.1 (58.3, 63.8)	82.4 (80.4, 84.2)	87.4 (85.6, 89.0)	79.8 (77.5, 81.8)	61.4 (58.8, 64.0)	54.8 (52.0, 57.5)
Low	94.2 (93.0, 95.3)	65.6 (62.4, 68.6)	88.1 (86.4, 89.6)	91.1 (89.7, 92.4)	85.3 (83.5, 87.0)	65.7 (62.8, 68.4)	59.9 (56.9, 62.8)
Middle	96.7 (95.6, 97.5)	69.1 (66.3, 71.8)	91.4 (89.8, 92.8)	94.3 (93.0, 95.4)	86.5 (84.4, 88.3)	68.9 (65.7, 71.9)	62.8 (59.6, 65.9)
High	97.3 (96.4, 98.0)	69.5 (66.8, 72.1)	91.8 (90.0, 93.2)	95.1 (93.9, 96.0)	88.8 (86.9, 90.5)	73.2 (70.4, 75.8)	66.0 (63.1, 68.8)
Highest	98.4 (97.7, 99.0)	73.9 (71.5, 76.2)	93.5 (92.2, 94.7)	96.6 (95.7, 97.4)	90.6 (88.7, 92.1)	79.3 (77.2, 81.2)	71.3 (68.8, 73.6)

<sup>1</sup> Defined as birth weight less than 2500 g<sup>2</sup> Defined as birth at 28–34 weeks of gestation

**Figure 9.3** compares the belief that smoking causes serious illness by smoking status (given in Tables 9.1, 9.1a and 9.1b) with the belief that breathing other people's smoke causes serious illness by smoking status (given in Tables 9.2, 9.2a and 9.2b). The belief that smoking causes serious illness did not vary significantly by smoking status – 97.0% overall, 96.1% of current smokers and 97.2% of non-smokers. However, the belief that breathing other people's smoke causes serious illness varied significantly by smoking status – 94.2% overall, 90.9% of current smokers and 95.2% of non-smokers. These percentages were lower than the percentages of those who believed that smoking causes serious illness, as previously mentioned.

**Figure 9.3:** Percentage of adults aged 15 years and above who believed that smoking causes serious illness and that breathing other people’s smoke causes serious illness, by smoking status – GATS Thailand, 2011



**9.1.3 The impact of pictorial health warnings**

On 29 March 2010, the Notification of the Ministry of Public Health *RE: Criteria, Procedures and Conditions for Displaying Labels and Statements on Labels of Cigarettes* was enacted. According to the notification, the updated set of pictorial health warning (PHWs) comprising 10 pictures should be printed on cigarette packets as given below:

Picture 1	Picture 2	Picture 3	Picture 4	Picture 5
Cigarette smoke kills people nearby	Smoking causes bad breath	Smoking causes fatal emphysema	Smoking causes lung cancer	Smoking causes oral cancer
Picture 6	Picture 7	Picture 8	Picture 9	Picture 10
Smoking causes laryngeal cancer	Smoking causes heart failure	Smoking causes stroke	Cigarette smoke causes 10 types of cancer	Smoking causes foot gangrene

**Table 9.3** provides information regarding the impact of PHWs on the desire to quit among current smokers of manufactured cigarettes or cigars among adults aged 15 years and above. According to the 10 PHWs above, the survey found that the three PHWs which had the strongest impact on their desire to quit were: Picture 5 – Smoking causes oral cancer (28.8%), Picture 6 – Smoking causes laryngeal cancer (18.9%), and Picture 4 – Smoking causes lung cancer (18.0%). By demographic characteristics, most current smokers reported that these three PHWs had the strongest influence on their desire to quit.

The three PHWs that had the least impact on the desire to quit were Picture 10 – Smoking causes foot gangrene (1.1%), Picture 2 – Smoking causes bad breath (3.1%), and Picture 3 – Smoking causes fatal emphysema (3.6%). By selected demographic characteristics, all groups of current smokers reported that Picture 10 – Smoking causes foot gangrene had the least impact on the desire to quit.

**Table 9.4** shows the impact of PHWs on the intention to continue abstinence from smoking among non-smokers aged 15 years and above. The three PHWs that had the highest influence on continued abstinence among non-smokers were Picture 5 – Smoking causes oral cancer (36.6%), Picture 4 – Smoking causes lung cancer (16.4%), and Picture 6 – Smoking causes laryngeal cancer (15.4%). By demographic characteristics, all groups of non-smokers reported that these three pictures had the greatest influence on their intention to continue abstinence from smoking. It should be noted that current cigarette smokers, cigar smokers and non-smokers all reported that these three PHWs were the most effective in creating a desire to quit among smokers and not wanting to smoke among non-smokers.

Picture 10 – Smoking causes foot gangrene, had the least impact on the desire to quit among all groups of non-smokers (0.5%).

**Table 9.3: Percentage distribution of pictorial health warnings (PHWs) that make current smokers of manufactured cigarettes or cigars aged 15 years and above want to quit the most, by selected demographic characteristics – GATS Thailand, 2011**

Characteristic	PHWs <sup>1</sup> that make current smokers <sup>2</sup> want to quit										Total	
	1	2	3	4	5	6	7	8	9	10		None of them
<b>Overall</b>	5.4(4.5,6.5)	3.1(2.2,4.2)	3.6(2.7,4.8)	18.0(15.7,20.5)	28.8(25.7,32.0)	18.9(16.7,21.3)	9.9(8.0,12.2)	4.0(2.8,5.7)	5.7(4.5,7.1)	1.1(0.7,1.7)	1.6(1.1,2.4)	100
<b>Gender</b>						Percentage (95% CI)						
Men	5.5(4.5,6.6)	3.1(2.2,4.3)	3.5(2.6,4.7)	17.7(15.4,20.3)	28.9(25.8,32.2)	19.1(16.8,21.5)	10.0(8.0,12.4)	4.1(2.9,5.8)	5.7(4.4,7.2)	1.1(0.7,1.7)	1.5(1.0,2.2)	100
Women	3.8(1.7,8.3)	2.9(1.3,6.2)	6.3(2.9,13.2)	24.0(17.0,32.7)	26.3(19.2,34.9)	14.1(9.4,20.7)	8.3(4.8,13.9)	2.4(0.9,6.2)	6.5(3.4,12.0)	1.0(0.3,3.2)	4.4(1.9,9.7)	100
<b>Age (years)</b>												
15-24	1.7(1.0,3.0)	1.8(0.8,3.9)	3.6(1.6,7.8)	16.5(11.5,23.1)	24.9(18.3,32.9)	22.4(16.5,29.8)	17.7(12.1,25.0)	4.5(2.3,8.6)	5.3(2.9,9.3)	1.2(0.4,3.6)	0.3(0.1,1.4)	100
25-44	7.3(5.7,9.4)	2.8(1.6,5.1)	2.9(1.9,4.4)	20.2(17.0,24.0)	29.2(25.3,33.4)	18.5(16.0,21.1)	7.4(5.7,9.5)	4.0(2.5,6.4)	5.1(3.6,7.1)	0.8(0.4,1.6)	1.7(1.1,2.7)	100
45-59	5.0(3.4,7.2)	3.9(2.4,6.1)	4.9(3.3,7.1)	15.3(12.3,18.8)	31.9(27.9,36.2)	18.8(15.4,22.6)	7.4(5.3,10.1)	3.4(2.3,5.0)	5.8(4.2,8.0)	0.8(0.4,1.6)	3.0(1.8,5.1)	100
60+	6.9(3.7,12.5)	7.1(3.8,13.0)	4.8(2.8,8.1)	15.8(10.5,23.2)	30.9(23.9,38.8)	7.3(4.4,11.8)	5.7(3.4,9.5)	4.1(1.9,8.7)	11.9(7.5,18.3)	3.6(1.7,7.2)	1.9(0.8,4.5)	100
<b>Residence</b>												
Urban	6.7(5.5,8.2)	3.0(2.2,4.0)	4.0(3.0,5.5)	19.2(17.1,21.6)	23.1(20.6,25.8)	20.1(17.9,22.5)	9.5(7.8,11.7)	4.0(3.1,5.2)	6.1(4.8,7.6)	1.0(0.6,1.6)	3.2(2.1,4.8)	100
Rural	4.6(3.4,6.2)	3.1(1.9,5.1)	3.3(2.1,5.1)	17.2(13.9,21.1)	32.3(27.8,37.2)	18.1(14.9,21.8)	10.1(7.3,13.8)	4.0(2.3,6.9)	5.4(3.8,7.7)	1.2(0.6,2.1)	0.7(0.3,1.6)	100
<b>Educational level</b>												
Less than primary	5.1(3.4,7.5)	4.5(2.8,7.2)	3.7(2.5,5.5)	17.9(14.1,22.4)	34.8(30.4,39.6)	14.5(11.3,18.3)	6.8(4.6,9.9)	2.4(1.4,4.0)	6.8(4.6,9.8)	1.4(0.8,2.8)	2.2(1.2,4.0)	100
Primary	4.8(3.2,7.1)	1.6(0.8,2.9)	4.0(2.0,7.8)	19.2(14.2,25.5)	31.6(25.3,38.7)	17.3(12.5,23.5)	10.3(7.0,15.0)	4.3(2.5,7.1)	4.7(2.6,8.4)	0.9(0.4,2.0)	1.2(0.6,2.5)	100
Secondary	5.5(4.1,7.3)	3.2(1.8,5.7)	3.3(2.3,4.9)	17.1(14.3,20.2)	27.0(22.7,31.7)	20.4(17.1,24.1)	10.8(8.0,14.3)	4.4(2.6,7.2)	5.5(3.9,7.7)	1.1(0.5,2.4)	1.8(1.1,2.9)	100
University	7.0(4.6,10.7)	3.8(1.7,8.1)	3.5(2.0,6.1)	18.9(13.8,25.3)	20.0(15.4,25.6)	22.9(18.2,28.4)	10.0(5.5,17.5)	4.5(2.8,7.2)	7.2(4.1,12.2)	0.8(0.2,2.9)	1.4(0.6,3.3)	100
<b>Region</b>												
Bangkok	6.2(4.5,8.5)	2.3(1.3,4.0)	3.5(2.2,5.4)	18.7(15.4,22.6)	24.4(20.4,28.9)	21.2(17.9,25.0)	9.0(6.4,12.5)	2.5(1.4,4.2)	5.2(3.5,7.7)	0.9(0.4,2.0)	6.1(3.9,9.5)	100
Central	7.8(5.6,10.6)	3.2(1.8,5.6)	5.6(3.5,8.9)	16.8(12.7,21.9)	26.7(20.3,34.3)	16.5(13.0,20.9)	9.6(6.1,14.9)	4.3(2.9,6.2)	6.2(4.1,9.3)	1.1(0.5,2.8)	2.1(1.1,4.2)	100
Northern	4.6(2.8,7.6)	3.1(1.6,6.0)	2.6(1.3,4.9)	18.6(14.5,23.7)	32.9(26.3,40.3)	15.3(11.4,20.1)	9.8(5.8,16.2)	3.3(2.0,5.6)	7.5(4.3,12.6)	2.0(0.7,5.3)	0.3(0.1,1.2)	100
Northeastern	3.7(2.3,6.0)	2.4(0.9,5.9)	2.9(1.4,6.0)	18.2(13.3,24.4)	33.1(26.7,40.3)	20.1(15.1,26.2)	10.5(6.6,16.4)	3.9(1.4,10.5)	4.1(2.1,8.0)	0.3(0.1,1.0)	0.7(0.2,2.6)	100
Southern	4.9(3.3,7.2)	4.4(2.4,8.1)	2.6(1.7,4.0)	18.4(14.4,23.2)	23.8(19.9,28.2)	21.5(17.3,26.5)	9.8(6.9,13.7)	5.4(3.3,8.7)	6.5(4.6,9.2)	1.8(0.9,3.5)	0.8(0.2,2.8)	100
<b>Socioeconomic status</b>												
Lowest	3.0(1.5,6.1)	3.6(1.2,9.7)	4.3(1.8,9.8)	20.0(13.6,28.3)	22.3(15.9,30.4)	21.4(14.4,30.7)	18.0(11.8,26.6)	2.8(0.9,8.0)	2.6(1.2,5.6)	1.2(0.4,3.7)	0.7(0.3,1.6)	100
Low	4.5(2.6,7.5)	2.9(1.5,5.8)	2.9(1.2,6.5)	18.6(13.4,25.3)	31.6(24.3,40.0)	16.0(11.5,21.7)	8.8(4.7,15.9)	6.2(2.2,15.9)	6.4(3.5,11.2)	1.1(0.3,4.0)	1.1(0.3,3.7)	100
Middle	5.5(3.8,8.0)	1.3(0.6,2.7)	4.1(2.6,6.5)	15.1(11.8,19.0)	35.0(29.2,41.2)	18.9(14.8,23.7)	8.3(5.8,11.8)	3.8(2.3,6.1)	5.5(3.3,9.1)	0.4(0.2,1.1)	2.1(1.1,4.0)	100
High	6.2(4.5,8.4)	3.9(2.3,6.4)	3.1(1.9,5.0)	18.4(14.8,22.7)	28.4(23.7,33.5)	17.8(14.2,22.0)	8.0(5.8,11.1)	3.8(2.5,5.7)	7.4(5.1,10.6)	1.1(0.5,2.4)	1.9(1.1,3.4)	100
Highest	7.6(5.4,10.4)	3.8(2.2,6.5)	3.7(2.5,5.6)	18.4(14.2,23.4)	24.9(20.3,30.2)	20.8(17.1,25.1)	7.4(5.1,10.7)	3.6(2.3,5.8)	6.0(4.3,8.3)	1.7(0.8,3.4)	2.1(1.1,4.0)	100

<sup>1</sup> PHWs : Pictorial health warning text and pictures can be found in Appendix E.

<sup>2</sup> Includes current smokers of manufactured cigarettes or cigars

Remarks on PHWs: 1 = Cigarette smoke kills people nearby, 2 = Smoking causes bad breath, 3 = Smoking causes fatal emphysema, 4 = Smoking causes lung cancer, 5 = Smoking causes oral cancer, 6 = Smoking causes laryngeal cancer, 7 = Smoking causes heart failure, 8 = Smoking causes stroke, 9 = Cigarette smoke causes 10 types of cancer, and 10 = Smoking causes foot gangrene

**Table 9.4:** Percentage distribution of pictorial health warnings (PHWs) that make non-smokers aged 15 years and above not want to smoke the most, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	PHWs <sup>1</sup> that make non-smokers <sup>2</sup> not want to smoke										Total	
	1	2	3	4	5	6	7	8	9	10		None of them
<b>Overall</b>	6.3 (5.6, 7.2)	2.8 (2.4, 3.3)	2.9 (2.5, 3.4)	16.4 (15.3, 17.5)	36.6 (34.9, 38.4)	15.4 (14.4, 16.4)	7.8 (6.1, 9.9)	3.5 (3.1, 4.0)	5.9 (5.3, 6.6)	0.5 (0.3, 0.7)	1.8 (1.4, 2.3)	100
<b>Gender</b>						Percentage (95% CI)						
Men	7.4 (6.0, 9.1)	2.6 (1.9, 3.5)	3.6 (2.7, 4.9)	19.1 (16.8, 21.6)	31.9 (29.1, 34.7)	17.1 (14.9, 19.5)	7.4 (5.5, 9.7)	3.6 (2.8, 4.6)	5.3 (4.2, 6.7)	0.5 (0.3, 1.0)	1.6 (1.1, 2.4)	100
Women	6.0 (5.2, 6.8)	2.9 (2.4, 3.5)	2.7 (2.3, 3.2)	15.5 (14.4, 16.6)	38.3 (36.4, 40.3)	14.8 (13.7, 15.9)	8.0 (6.1, 10.4)	3.5 (3.0, 4.1)	6.1 (5.4, 6.9)	0.5 (0.3, 0.7)	1.8 (1.4, 2.4)	100
<b>Age (years)</b>												
15–24	6.9 (5.3, 8.9)	2.8 (1.7, 4.5)	2.7 (1.8, 3.9)	17.6 (15.2, 20.2)	34.9 (31.3, 38.7)	15.2 (13.0, 17.7)	10.6 (7.8, 14.3)	2.5 (1.7, 3.7)	5.1 (3.8, 6.7)	0.4 (0.2, 1.2)	1.4 (0.8, 2.5)	100
25–44	7.0 (5.9, 8.3)	2.1 (1.6, 2.7)	2.5 (1.9, 3.3)	17.4 (15.8, 19.2)	34.1 (31.9, 36.4)	17.3 (15.8, 19.0)	7.9 (6.0, 10.2)	3.7 (3.1, 4.5)	5.8 (5.0, 6.8)	0.4 (0.2, 0.7)	1.8 (1.3, 2.4)	100
45–59	5.0 (4.0, 6.1)	2.8 (2.2, 3.6)	3.4 (2.7, 4.3)	14.8 (13.2, 16.5)	40.7 (38.3, 43.2)	14.4 (12.8, 16.1)	6.2 (4.6, 8.3)	3.5 (2.9, 4.4)	6.7 (5.6, 7.9)	0.5 (0.3, 0.7)	2.0 (1.5, 2.8)	100
60+	5.6 (4.2, 7.3)	5.5 (4.4, 6.8)	4.3 (3.4, 5.4)	13.5 (11.9, 15.3)	41.0 (38.1, 44.0)	10.8 (9.3, 12.5)	5.1 (3.6, 7.2)	4.7 (3.7, 6.0)	6.6 (5.3, 8.2)	0.8 (0.5, 1.3)	2.0 (1.4, 2.9)	100
<b>Residence</b>												
Urban	6.2 (5.5, 7.0)	2.9 (2.4, 3.4)	3.1 (2.6, 3.5)	16.9 (15.7, 18.1)	33.5 (32.0, 35.1)	16.5 (15.4, 17.6)	5.9 (4.9, 7.1)	4.0 (3.4, 4.6)	6.6 (5.9, 7.4)	0.5 (0.3, 0.7)	4.1 (3.1, 5.3)	100
Rural	6.4 (5.3, 7.7)	2.8 (2.1, 3.6)	2.9 (2.3, 3.6)	16.1 (14.6, 17.8)	38.5 (35.8, 41.2)	14.7 (13.3, 16.3)	8.9 (6.4, 12.3)	3.3 (2.7, 3.9)	5.5 (4.6, 6.6)	0.5 (0.3, 0.8)	0.4 (0.2, 0.9)	100
<b>Education level</b>												
Less than primary	5.2 (4.1, 6.6)	4.4 (3.4, 5.6)	3.4 (2.8, 4.2)	14.4 (13.0, 16.0)	42.8 (40.3, 45.3)	12.0 (10.8, 13.3)	5.9 (4.3, 8.0)	3.9 (3.2, 4.8)	5.9 (5.0, 7.0)	0.6 (0.4, 0.9)	1.4 (1.0, 1.9)	100
Primary	6.1 (4.5, 8.1)	2.8 (1.8, 4.3)	2.2 (1.5, 3.2)	15.9 (13.9, 18.2)	37.6 (34.3, 41.1)	16.8 (14.7, 19.1)	9.0 (6.3, 12.6)	3.1 (2.3, 4.3)	4.7 (3.6, 6.2)	0.5 (0.2, 1.0)	1.3 (0.9, 1.9)	100
Secondary	6.9 (5.8, 8.2)	2.0 (1.5, 2.7)	2.6 (2.0, 3.5)	17.5 (15.7, 19.4)	33.9 (31.3, 36.7)	15.8 (14.1, 17.6)	9.5 (7.3, 12.4)	3.3 (2.6, 4.1)	6.2 (5.1, 7.6)	0.4 (0.2, 0.8)	1.8 (1.3, 2.6)	100
University	7.2 (5.8, 8.8)	2.2 (1.6, 3.0)	3.7 (2.7, 5.1)	17.7 (15.7, 19.8)	31.7 (29.1, 34.4)	18.2 (15.9, 20.8)	5.7 (4.3, 7.6)	3.9 (3.1, 5.0)	6.6 (5.4, 8.0)	0.4 (0.2, 1.0)	2.8 (1.9, 4.1)	100
<b>Region</b>												
Bangkok	5.5 (4.5, 6.6)	2.2 (1.6, 2.9)	2.6 (2.0, 3.4)	13.5 (12.0, 15.1)	33.3 (30.9, 35.7)	17.5 (15.7, 19.4)	5.2 (3.7, 7.1)	2.8 (2.2, 3.6)	6.5 (5.5, 7.7)	0.4 (0.2, 0.7)	10.6 (8.0, 14.0)	100
Central	6.7 (5.4, 8.5)	2.5 (1.9, 3.4)	2.8 (2.1, 3.6)	15.2 (13.5, 17.1)	37.8 (34.6, 41.2)	15.9 (13.8, 18.2)	7.5 (4.9, 11.2)	4.4 (3.5, 5.5)	5.9 (4.7, 7.2)	0.4 (0.2, 0.8)	1.0 (0.5, 1.9)	100
Northern	4.5 (3.4, 5.9)	3.8 (2.7, 5.2)	2.6 (1.9, 3.6)	21.0 (18.2, 24.1)	38.6 (34.6, 42.8)	17.6 (15.3, 20.2)	2.0 (1.3, 3.2)	3.5 (2.6, 4.6)	5.3 (4.0, 7.0)	1.0 (0.5, 1.9)	0.0 (0.0, 0.3)	100
Northeastern	7.2 (5.5, 9.3)	2.7 (1.7, 4.1)	3.1 (2.3, 4.3)	15.0 (12.9, 17.3)	39.2 (35.5, 43.1)	11.6 (9.8, 13.7)	12.5 (8.2, 18.6)	2.6 (1.9, 3.6)	5.3 (4.1, 7.0)	0.1 (0.1, 0.3)	0.7 (0.2, 1.9)	100
Southern	6.8 (5.4, 8.6)	2.9 (2.2, 4.0)	3.6 (2.4, 5.3)	18.2 (15.8, 20.9)	28.2 (24.6, 32.2)	18.6 (16.5, 20.9)	7.4 (5.0, 10.9)	4.7 (3.6, 6.2)	7.9 (6.2, 10.0)	0.8 (0.5, 1.5)	0.8 (0.4, 1.6)	100
<b>Socioeconomic status</b>												
Lowest	5.9 (4.6, 7.7)	4.2 (3.0, 5.8)	3.3 (2.4, 4.4)	16.2 (14.1, 18.5)	36.4 (33.2, 39.8)	12.7 (10.9, 14.8)	9.3 (6.5, 13.3)	3.8 (2.9, 4.9)	6.0 (4.8, 7.5)	0.3 (0.1, 0.5)	1.8 (1.2, 2.8)	100
Low	5.1 (3.8, 6.6)	2.4 (1.8, 3.2)	2.3 (1.7, 3.0)	15.4 (13.5, 17.5)	39.0 (35.8, 42.3)	16.1 (14.0, 18.3)	8.1 (6.0, 10.9)	3.2 (2.5, 4.3)	6.3 (5.0, 7.8)	0.8 (0.4, 1.5)	1.4 (0.9, 2.2)	100
Middle	6.6 (5.1, 8.4)	2.8 (2.0, 3.8)	2.9 (2.1, 4.0)	17.6 (15.5, 20.0)	36.7 (33.8, 39.8)	13.8 (11.9, 15.9)	8.5 (5.9, 12.0)	3.5 (2.7, 4.6)	5.9 (4.6, 7.4)	0.5 (0.3, 0.9)	1.4 (0.9, 1.9)	100
High	7.5 (5.9, 9.4)	1.9 (1.4, 2.7)	2.6 (1.8, 3.8)	17.4 (15.3, 19.8)	36.1 (32.9, 39.3)	17.0 (14.7, 19.5)	6.3 (4.8, 8.3)	3.2 (2.5, 4.1)	5.4 (4.4, 6.6)	0.4 (0.2, 0.8)	2.2 (1.6, 3.1)	100
Highest	7.1 (5.7, 8.7)	2.2 (1.6, 3.1)	3.7 (2.8, 4.9)	15.4 (13.6, 17.4)	34.4 (31.7, 37.1)	18.7 (16.6, 21.1)	6.0 (4.5, 7.9)	3.9 (3.0, 4.9)	6.0 (4.8, 7.4)	0.5 (0.3, 1.1)	2.2 (1.6, 3.1)	100

<sup>1</sup> PHWs: Pictorial health warning text and pictures can be found in Appendix E.

<sup>2</sup> Includes former and never smokers

Remarks on PHWs: 1 = Cigarette smoke kills people nearby, 2 = Smoking causes bad breath, 3 = Smoking causes fatal emphysema, 4 = Smoking causes lung cancer, 5 = Smoking causes oral cancer, 6 = Smoking causes laryngeal cancer, 7 = Smoking causes heart failure, 8 = Smoking causes stroke, 9 = Cigarette smoke causes 10 types of cancer, and 10 = Smoking causes foot gangrene.



### 9.1.4 Belief that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes

**Table 9.5** provides information on the belief that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes by smoking status and selected demographic characteristics. About a third (34.3%) of all adults aged 15 years and above believed that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes. No significant difference was observed by smoking status.

In all categories overall, smokers and non-smokers; women believe more than men that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes. By all selected demographic characteristics among all people, a higher percentage of adults in the oldest age group of 60+ years, those living in rural areas, those with less than primary education level and in the Southern region believed that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes.

**Table 9.5:** Percentage distribution of the belief that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes among adults aged 15 years and above, by smoking status and selected demographic characteristics – GATS Thailand, 2011

Characteristic	Smoking status		
	Overall	Current smokers	Non-smokers
	<i>Percentage (95% CI)</i>		
<b>Overall</b>	34.3 (32.8, 35.9)	36.7 (33.9, 39.6)	33.6 (32.0, 35.2)
<b>Gender</b>			
Men	32.0 (30.0, 34.1)	36.1 (33.3, 39.0)	28.4 (26.3, 30.6)
Women	36.6 (34.8, 38.4)	46.5 (38.8, 54.5)	36.3 (34.5, 38.1)
<b>Age (years)</b>			
15–24	33.1 (30.0, 36.3)	28.8 (22.6, 35.8)	34.3 (31.0, 37.7)
25–44	31.3 (29.3, 33.3)	31.3 (27.8, 35.0)	31.3 (29.2, 33.5)
45–59	34.6 (32.6, 36.8)	41.6 (37.8, 45.6)	32.3 (30.1, 34.6)
60+	42.8 (40.5, 45.0)	55.6 (50.7, 60.5)	39.7 (37.3, 42.2)
<b>Residence</b>			
Urban	27.7 (26.3, 29.1)	24.8 (22.4, 27.4)	28.4 (27.0, 29.9)
Rural	37.9 (35.6, 40.2)	41.6 (37.8, 45.5)	36.5 (34.2, 39.0)
<b>Education level</b>			
Less than primary	42.1 (39.9, 44.4)	53.6 (49.7, 57.4)	38.6 (36.4, 40.9)
Primary	35.4 (32.6, 38.4)	37.7 (32.5, 43.2)	34.4 (31.3, 37.5)
Secondary	30.2 (28.2, 32.3)	24.9 (21.4, 28.7)	31.9 (29.6, 34.3)
University	24.6 (22.5, 26.9)	15.8 (11.9, 20.6)	26.0 (23.7, 28.3)
<b>Region</b>			
Bangkok	24.0 (22.1, 26.0)	17.6 (14.2, 21.6)	25.4 (23.3, 27.7)
Central	36.1 (33.1, 39.3)	37.5 (32.5, 42.8)	35.7 (32.6, 39.0)
Northern	38.0 (33.8, 42.4)	44.5 (37.4, 51.8)	36.2 (32.1, 40.5)
Northeastern	25.8 (22.9, 29.0)	26.8 (21.8, 32.6)	25.5 (22.3, 28.9)
Southern	55.3 (51.5, 59.0)	57.2 (52.9, 61.5)	54.5 (50.4, 58.5)
<b>Socioeconomic status</b>			
Lowest	36.8 (34.2, 39.4)	36.2 (30.8, 42.1)	36.9 (34.2, 39.7)
Low	38.9 (36.0, 41.8)	44.5 (38.6, 50.6)	37.1 (34.1, 40.1)
Middle	35.6 (33.0, 38.3)	40.5 (35.7, 45.5)	33.6 (30.7, 36.7)
High	30.4 (28.3, 32.5)	31.6 (27.5, 35.9)	29.9 (27.5, 32.4)
Highest	27.6 (25.4, 29.8)	26.3 (22.1, 31.1)	27.9 (25.6, 30.3)



### 9.1.5 Belief that cigarettes are addictive

**Table 9.6** presents the perception among all adults, current smokers and non-smokers that cigarettes are addictive. Overall, almost all adults aged 15 years and above believed that cigarettes are addictive (96.8%). There was a significant difference in this perception between current smokers and non-smokers (95.0% and 97.4%, respectively). By all selected demographic characteristics among all adults, current smokers and non-smokers, there were no significant differences. Moreover, those in each sub-group strongly believed that cigarettes are addictive (93.2% and above).

**Table 9.6:** Percentage of adults aged 15 years and above who believed that cigarettes are addictive, by smoking status and selected demographic characteristics – GATS Thailand, 2011

Characteristic	Adults who believed that cigarettes are addictive		
	Overall	Current smokers	Non-smokers
	<i>Percentage (95% CI)</i>		
<b>Overall</b>	96.8 (96.3, 97.3)	95.0 (93.7, 96.0)	97.4 (97.0, 97.8)
<b>Gender</b>			
Men	95.6 (94.6, 96.4)	95.0 (93.7, 96.1)	96.1 (94.9, 97.0)
Women	98.0 (97.6, 98.3)	93.6 (90.3, 95.9)	98.1 (97.7, 98.4)
<b>Age (years)</b>			
15–24	96.7 (95.3, 97.7)	93.9 (89.6, 96.5)	97.5 (95.8, 98.5)
25–44	97.0 (96.3, 97.6)	95.0 (93.0, 96.4)	97.8 (97.2, 98.2)
45–59	97.2 (96.6, 97.8)	95.7 (93.9, 97.0)	97.8 (97.1, 98.2)
60+	95.8 (94.8, 96.6)	94.8 (92.3, 96.5)	96.0 (95.0, 96.9)
<b>Residence</b>			
Urban	96.6 (96.1, 97.1)	94.1 (92.7, 95.3)	97.3 (96.8, 97.7)
Rural	96.9 (96.1, 97.5)	95.3 (93.6, 96.6)	97.5 (96.8, 98.0)
<b>Education level</b>			
Less than primary	96.4 (95.7, 97.1)	96.1 (94.5, 97.3)	96.5 (95.7, 97.2)
Primary	97.2 (96.1, 98.0)	94.7 (91.7, 96.6)	98.4 (97.6, 98.9)
Secondary	97.0 (96.1, 97.7)	94.4 (91.7, 96.3)	97.8 (97.0, 98.4)
University	96.7 (95.7, 97.5)	93.5 (90.7, 95.5)	97.2 (96.2, 97.9)
<b>Region</b>			
Bangkok	96.7 (95.9, 97.3)	94.2 (92.1, 95.8)	97.2 (96.4, 97.8)
Central	95.8 (94.2, 97.0)	93.2 (89.2, 95.8)	96.6 (95.4, 97.6)
Northern	96.6 (95.4, 97.5)	94.4 (91.0, 96.6)	97.2 (96.3, 97.9)
Northeastern	97.7 (96.8, 98.3)	96.3 (94.0, 97.7)	98.1 (97.2, 98.8)
Southern	96.8 (95.8, 97.6)	95.5 (93.6, 96.9)	97.4 (96.3, 98.2)
<b>Socioeconomic status</b>			
Lowest	96.6 (95.5, 97.4)	94.3 (91.1, 96.4)	97.2 (96.1, 98.0)
Low	97.2 (96.2, 97.9)	95.7 (93.7, 97.1)	97.6 (96.5, 98.4)
Middle	96.0 (94.6, 97.0)	93.8 (90.5, 96.1)	96.8 (95.6, 97.7)
High	97.5 (96.8, 98.1)	96.2 (94.5, 97.5)	98.0 (97.2, 98.6)
Highest	96.9 (96.1, 97.6)	94.8 (92.2, 96.5)	97.4 (96.6, 98.1)

### 9.1.6 Belief that smokeless tobacco causes serious illness

**Table 9.7** shows that significantly more non-users of smokeless tobacco believed that smokeless tobacco causes serious illness than current smokeless tobacco users (72.8% vs 60.9%). Among all adults, there was a significant difference in this belief by gender (74.1% women vs 70.6% men), but not by residence. The oldest age group of 60+ years and the youngest age group of 15–24 years believed this the least as compared the other age groups. This belief increased with increasing education level and SES.

Among current smokeless tobacco users, there was no significant difference in the belief that smokeless tobacco causes serious illness by gender, residence, education level and SES. A lower percentage of those living in the Central or Northern region reported this belief than those living in other regions. Overall none users believed more than smokeless tobacco users that smokeless tobacco causes serious illness

**Table 9.7:** Percentage of adults aged 15 years and above who believed that smokeless tobacco use causes serious illness, by smoking status and selected demographic characteristics – GATS Thailand, 2011

Characteristic	Adults who believed that smokeless tobacco use causes serious illness		
	Overall	Current smokeless users	Non-smokeless users
		<i>Percentage (95% CI)</i>	
<b>Overall</b>	72.4 (70.8, 73.9)	60.9 (54.4, 67.1)	72.8 (71.2, 74.3)
<b>Gender</b>			
Men	70.6 (68.5, 72.6)	50.1 (37.3, 62.9)	70.8 (68.8, 72.8)
Women	74.1 (72.5, 75.7)	63.1 (56.6, 69.1)	74.7 (73.1, 76.3)
<b>Age (years)</b>			
15–24	68.0 (64.5, 71.4)	*	68.1 (64.5, 71.5)
25–44	74.8 (73.0, 76.5)	69.4 (48.7, 84.4)	74.8 (73.0, 76.5)
45–59	73.8 (72.0, 75.6)	68.3 (53.9, 79.9)	74.4 (72.6, 76.2)
60+	67.1 (64.5, 69.6)	58.1 (52.2, 63.8)	70.7 (68.3, 72.9)
<b>Residence</b>			
Urban	71.9 (70.2, 73.5)	55.9 (47.9, 63.5)	72.1 (70.5, 73.7)
Rural	72.7 (70.4, 74.8)	61.8 (54.3, 68.9)	73.2 (70.9, 75.3)
<b>Education level</b>			
Less than primary	69.5 (67.3, 71.5)	60.0 (53.5, 66.2)	70.5 (68.3, 72.5)
Primary	73.7 (70.9, 76.2)	65.1 (40.8, 83.5)	73.7 (71.0, 76.3)
Secondary	72.3 (70.0, 74.5)	*	72.3 (70.0, 74.4)
University	77.7 (75.4, 79.8)	*	77.7 (75.4, 79.8)
<b>Region</b>			
Bangkok	70.6 (68.1, 73.0)	72.3 (50.9, 86.8)	70.6 (68.0, 73.0)
Central	63.6 (60.1, 66.9)	43.1 (30.9, 56.2)	64.0 (60.4, 67.3)
Northern	72.4 (68.3, 76.2)	43.7 (30.1, 58.4)	73.6 (69.6, 77.2)
Northeastern	80.2 (77.3, 82.8)	72.1 (63.5, 79.3)	80.6 (77.7, 83.2)
Southern	70.3 (66.8, 73.6)	66.4 (55.3, 76.0)	70.4 (66.8, 73.8)
<b>Socioeconomic status</b>			
Lowest	69.7 (66.9, 72.4)	60.5 (53.6, 67.0)	70.4 (67.6, 73.1)
Low	72.2 (69.4, 74.8)	62.9 (50.4, 73.9)	72.5 (69.8, 75.2)
Middle	72.5 (69.8, 75.0)	56.0 (42.2, 68.9)	72.8 (70.1, 75.4)
High	73.5 (71.1, 75.7)	54.4 (31.8, 75.3)	73.6 (71.3, 75.9)
Highest	75.6 (73.5, 77.6)	85.7 (61.9, 95.7)	75.6 (73.5, 77.5)

\* Unweighted sample size less than 25

### 9.1.7 Belief that cigarette packages with different colours are harmful to health in different ways

**Table 9.8** presents data on the belief that cigarette packages with different colours are harmful to health in different ways. Overall, 11.6% believed that cigarette packages with different colours are harmful to health in different ways. The results did not vary significantly by smoking status (13.5% of current smokers and 10.9% of non-smokers) and by various selected demographic characteristics; the prevalence of this belief was less than 20% in all demographic categories.

**Table 9.8:** Percentage of adults aged 15 years and above who believed that cigarette packages with different colours are harmful to health in different ways, by smoking status and selected demographic characteristics – GATS Thailand, 2011

Characteristic	Adults who believed that cigarette packages with different colours are harmful to health in different ways		
	Overall	Current smokers	Non-smokers
		<i>Percentage (95% CI)</i>	
<b>Overall</b>	11.6 (10.7, 12.5)	13.5 (11.9, 15.3)	10.9 (10.0, 12.0)
<b>Gender</b>			
Men	12.2 (11.0, 13.5)	13.5 (11.9, 15.4)	11.0 (9.5, 12.7)
Women	11.0 (9.9, 12.1)	13.6 (9.9, 18.6)	10.9 (9.8, 12.0)
<b>Age (years)</b>			
15–24	14.0 (11.9, 16.5)	17.4 (12.6, 23.6)	13.1 (10.9, 15.7)
25–44	10.8 (9.6, 12.1)	12.8 (10.5, 15.4)	10.0 (8.8, 11.4)
45–59	11.0 (9.9, 12.3)	12.6 (10.3, 15.3)	10.5 (9.2, 11.9)
60+	11.4 (10.1, 13.0)	12.9 (10.0, 16.4)	11.1 (9.6, 12.8)
<b>Residence</b>			
Urban	11.1 (10.2, 12.1)	12.7 (11.0, 14.6)	10.7 (9.7, 11.9)
Rural	11.8 (10.5, 13.2)	13.9 (11.8, 16.3)	11.1 (9.7, 12.6)
<b>Education level</b>			
Less than primary	11.7 (10.5, 13.1)	14.2 (11.9, 16.8)	11.0 (9.6, 12.5)
Primary	11.8 (10.1, 13.8)	13.3 (10.2, 17.2)	11.2 (9.4, 13.3)
Secondary	11.6 (10.2, 13.1)	12.4 (9.9, 15.5)	11.3 (9.8, 13.0)
University	10.6 (9.1, 12.4)	16.6 (11.3, 23.7)	9.7 (8.1, 11.5)
<b>Region</b>			
Bangkok	10.0 (8.8, 11.3)	10.7 (8.2, 13.7)	9.9 (8.6, 11.3)
Central	10.4 (8.6, 12.4)	13.0 (10.2, 16.5)	9.6 (7.8, 11.7)
Northern	11.1 (9.0, 13.5)	10.3 (7.3, 14.3)	11.3 (9.1, 13.9)
Northeastern	11.9 (10.2, 14.0)	14.4 (11.2, 18.5)	11.1 (9.2, 13.3)
Southern	14.6 (12.5, 16.9)	16.9 (13.8, 20.5)	13.6 (11.4, 16.1)
<b>Socioeconomic status</b>			
Lowest	14.0 (12.1, 16.0)	16.9 (13.0, 21.7)	13.2 (11.2, 15.4)
Low	10.6 (9.1, 12.3)	13.8 (10.2, 18.2)	9.5 (8.0, 11.2)
Middle	11.0 (9.5, 12.7)	12.9 (10.2, 16.3)	10.3 (8.8, 12.0)
High	10.8 (9.5, 12.3)	12.2 (9.5, 15.5)	10.3 (8.9, 12.0)
Highest	10.6 (9.2, 12.2)	11.0 (8.5, 14.2)	10.5 (8.9, 12.4)

## 9.2 Comparison of knowledge, attitudes and perceptions related to tobacco use in 2009 and 2011

### Comparison of the key findings between 2009 and 2011

- o A significant decrease was found among adults who thought smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes – 38.1% in 2009 and 34.3% in 2011.
- o There was a significant increase in the belief that smoking manufactured cigarettes and hand-rolled cigarettes are equally harmful (39.1% in 2009 and 42.2% in 2011).

Comparison of knowledge, attitudes and perceptions related to tobacco use in 2009 and 2011 focused on the percentage of those who believed that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes.

**Table 9.9** presents the percentages of those who believed that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes in 2009 and 2011 by sociodemographic characteristics. This misbelief has improved by all sociodemographic characters with exception of people with primary education, in highest and low SES and in central and northern region.

**Table 9.9:** Percentage who believed that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes among adults aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Belief that smoking hand-rolled cigarettes is less harmful than smoking manufactured cigarettes		
	2009	2011	Relative change (%)
	<i>Percentage (95% CI)</i>		
<b>Overall</b>	38.1 (36.5, 39.7)	34.3 (32.8, 35.9)	-9.9 **
<b>Gender</b>			
Men	36.0 (34.2, 37.8)	32.0 (30.0, 34.1)	-11.1**
Women	40.1 (38.1, 42.2)	36.6 (34.8, 38.4)	-8.9**
<b>Age (years)</b>			
15–24	39.4 (36.0, 42.8)	33.1 (30.0, 36.3)	-16.0**
25–44	34.8 (32.9, 36.8)	31.3 (29.3, 33.3)	-10.2**
45–59	37.5 (35.5, 39.6)	34.6 (32.6, 36.8)	-7.7**
60+	46.3 (43.9, 48.7)	42.8 (40.5, 45.0)	-7.6**
<b>Residence</b>			
Urban	31.4 (30.1, 32.7)	27.7 (26.3, 29.1)	-11.8**
Rural	41.2 (38.9, 43.4)	37.9 (35.6, 40.2)	-8.0**
<b>Education level</b>			
Less than primary	44.8 (42.7, 46.9)	42.1 (39.9, 44.4)	-5.9**
Primary	38.6 (35.6, 41.7)	35.4 (32.6, 38.4)	-8.2
Secondary	34.6 (32.3, 36.9)	30.2 (28.2, 32.3)	-12.6**
University	28.5 (26.1, 31.0)	24.6 (22.5, 26.9)	-13.5**
<b>Region</b>			
Bangkok	27.5 (25.6, 29.5)	24.0 (22.1, 26.0)	-12.7**
Central	39.7 (36.5, 43.0)	36.1 (33.1, 39.3)	-9.0
Northern	41.8 (37.5, 46.1)	38.0 (33.8, 42.4)	-9.0
Northeastern	29.3 (26.3, 32.5)	25.8 (22.9, 29.0)	-11.9**
Southern	60.9 (57.7, 64.0)	55.3 (51.5, 59.0)	-9.2**
<b>Socioeconomic status</b>			
Lowest	42.4 (39.3, 45.6)	36.8 (34.2, 39.4)	-13.3**
Low	40.1 (37.2, 43.0)	38.9 (36.0, 41.8)	-3.0
Middle	40.0 (37.7, 42.4)	35.6 (33.0, 38.3)	-11.0**
High	35.2 (32.9, 37.5)	30.4 (28.3, 32.5)	-13.7**
Highest	28.8 (26.4, 31.3)	27.6 (25.4, 29.8)	-4.2

Note: Relative change (%) calculated by [rate of 2011– rate of 2009] \*100 / rate of 2009

\*\* P<0.05

**Table 9.10** presents the percentages of those who believed that that smoking manufactured/hand-rolled cigarettes is equally harmful in 2009 and 2011 by sociodemographic characteristics. This belief has improved significantly by all selected demographic characteristics with exception of people in age group 25-44 and 60+ years, rural population, among people with less than primary level education and central and northeastern region, and among people in low, lowest and highest SES.

**Table 9.10:** Percentage distribution of the belief that smoking manufactured/hand-rolled cigarettes is equally harmful among adults aged 15 years and above, by selected demographic characteristics – GATS Thailand, 2009 and 2011

Characteristic	Belief that smoking manufactured/hand-rolled cigarettes are equally harmful		
	2009	2011	Relative change
	<i>Percentage (95% CI)</i>		
<b>Overall</b>	39.1 (37.3, 40.8)	42.2 (40.4, 43.9)	8.0 **
<b>Gender</b>			
Men	35.5 (33.6, 37.5)	38.8 (36.8, 40.9)	9.3 **
Women	42.4 (40.2, 44.6)	45.3 (43.3, 47.3)	6.9 **
<b>Age (years)</b>			
25–44	42.0 (40.0, 44.0)	44.2 (42.1, 46.3)	5.3
45–59	41.5 (39.4, 43.7)	44.4 (42.3, 46.6)	7.0 **
60+	33.8 (31.6, 36.1)	36.0 (33.8, 38.2)	6.4
<b>Residence</b>			
Urban	40.6 (39.0, 42.2)	44.4 (42.7, 46.0)	9.3 **
Rural	38.4 (35.9, 40.9)	41.0 (38.5, 43.5)	6.9
<b>Education level</b>			
Less than primary	37.6 (35.5, 39.7)	39.8 (37.7, 41.9)	5.8
Primary	42.3 (39.1, 45.5)	42.7 (39.6, 45.8)	1.0
Secondary	38.5 (35.9, 41.1)	43.2 (40.8, 45.6)	12.2 **
University	39.1 (36.6, 41.7)	44.4 (41.6, 47.3)	13.4 **
<b>Region</b>			
Bangkok	43.4 (40.9, 45.9)	47.7 (44.9, 50.5)	10.0 **
Central	40.1 (37.0, 43.2)	39.3 (36.4, 42.4)	-1.9
Northern	36.0 (32.5, 39.8)	41.2 (37.5, 45.0)	14.3 **
Northeastern	46.8 (42.6, 51.0)	50.0 (46.1, 53.8)	6.8
Southern	18.5 (16.5, 20.6)	24.9 (21.3, 28.9)	34.9 **
<b>Socioeconomic status</b>			
Lowest	36.5 (33.2, 40.0)	40.2 (37.1, 43.3)	10.0
Low	40.5 (37.3, 43.8)	41.4 (38.5, 44.4)	2.2
Middle	38.0 (35.5, 40.6)	43.1 (40.4, 45.9)	13.4 **
High	40.1 (37.6, 42.6)	43.2 (40.9, 45.6)	7.8 **
Highest	41.1 (38.5, 43.7)	43.9 (41.3, 46.5)	6.8

Note: Relative change (%) calculated by [rate of 2011– rate of 2009] \*100 / rate of 2009

\*\*  $P < 0.05$



## ***10. Conclusion and Recommendations***

## 10. Conclusion and Recommendations

### 10.1 Conclusion

The Global Adult Tobacco Survey (GATS) uses a standard protocol that ensures quality over time as well as international comparability. A similar multi-stage, geographically clustered sample design was used to produce nationally representative data in both 2009 and 2011. The primary sampling units (PSUs) which were the enumeration areas (EAs) in 2009 were used as the PSUs in 2011. New sampled households were selected.

A total household count of 22 144 in 2009 and 21 488 in 2011 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 20 566 in 2009, and 20 606 in 2011 individual surveys were completed with an overall response rate of 94.2% and 96.3%, respectively.

To produce the most reliable results through GATS 2011, the experience and the lessons learned during GATS 2009 were used. We adopted the following steps during GATS 2011:

1. **Selection of an experienced survey team:**
  - a) In selecting field interviewers (FIs) for the GATS 2011, priority was given to those who had experience in the GATS 2009. Moreover, all interviewers were fixed-term staff of the National Statistical Office (NSO) who had routine responsibility for household listing and enumeration in at least 10 national-level projects per person per year. Not only did they have good skills, but they were also familiar with the survey areas.
  - b) The selection of 79 provincial technical officers (PTOs) and 10 field supervisors (FSs) from the central office was almost entirely from the GATS 2009, except those who were new staff, accounting for 35.5% and 40.0%, respectively. They received a separate comprehensive training.
2. **Capacity building of field staff:** The factors for the success of capacity building for this GATS were as follows:
  - a) A two-day refreshed training course was provided for staff who had experience in the GATS 2009 and a comprehensive three-day training course for new staff.
  - b) All trainers were from the GATS core team of GATS 2009 who had advanced understanding of and experience in the survey process. Also, in-country as well as international experts in sampling, questionnaires and field implementation served as the resource persons for training.
  - c) Training was imparted mostly in the Thai language. Part of the training given in English was translated into the Thai language for better understanding of the trainees.
  - d) Each session was interactive with question and answers.
  - e) The training process gave emphasis to the clear explanation of the questionnaire, including building up skills by practising, checking accuracy in making code records, training on how to ask each question to get the most reliable answer, and developing training modules.
  - f) Assessment of the effectiveness of training was done by the interactive checking of questions during training, and by checking the level of understanding of the questionnaire and steps of household enumeration.



3. **The application program for data recording:** The development of the survey program not only helped the survey team understand the questionnaire in depth, but it also helped in developing a more complex program to improve program efficiency in the dimension of consistency within a record. The outcome was a reduction in workload and time saved during the process of data cleaning. However, the development of the program could not be too complex because the pocket PCs used had a low technical specification after two years of use. The large program affected the speed in opening the GATS program and saving data at the end of the survey.
4. **Monitoring the quality of work in the field:** Regular and continuous monitoring in the field, especially during the first one to two weeks of the survey, was a very important activity to check how well the FIs understood each question, whether the questions were good enough to obtain reliable answers, and whether there were any problems detected in the field in order to make any immediate corrections.

The process of monitoring field work was undertaken by PTOs and FSs, using several methods, for example, physical field visits, communicating by telephone and electronic mail, and small group meetings every week.

Four main areas of monitoring were (1) progress in data collection, in terms of the number of completed interviews, comparing the amount of work done during the past one week with the target, and any reasons that were causing irregularity in data collection; (2) problems in accessing households and respondents; (3) problems with the pocket PC; and (4) problems with transferring data and quality checking of weekly transferred data.

5. **Other precautions:** Other examples of unexpected problems or problems beyond control:
  - a) Illness or absence of survey staff: There was a lesson learned that in every selected area, there should be some trained substitutes who are ready to replace the original FI when he/she cannot perform the task. In case of Thailand, PTOs who had been trained were used as substitutes.
  - b) Heavy floods in many provinces of Thailand during the field survey period were the main cause of delay of the survey. Moreover, cooperation from respondents was lower during this tragic situation. In order to solve the problem, the PTOs, as senior officers, were sent into areas ahead of the FI to seek cooperation from respondents and ask for their permission to send FIs to interview them. With this approach, the team received satisfactory cooperation.

## 10.2 Recommendations

The comparison of the results of GATS 2009 with those of the GATS 2011, as presented in Chapters 4–9, can be summarized by saying that during the past two years, although many tobacco use indicators do not show a significant statistical difference, tobacco use in Thailand shows an increasing trend. This reflects that the implementation of tobacco control in the country has not been effective enough to reduce the prevalence of tobacco use and exposure to second-hand smoke (SHS). Surrounded by aggressive advertisement and the tobacco industry's use of new complex strategies, tobacco control efforts become much more difficult. With this situation, more effective control strategies are required. If nothing is done, the situation will get worse. The following recommendations based on the MPOWER strategy may make it possible to reverse the trend of the tobacco use situation in Thailand.

### **M:** Monitor

<b>Key messages:</b>	<ol style="list-style-type: none"> <li>1) Tobacco use remains high.</li> <li>2) Youth initiate tobacco use at a younger age.</li> </ol>
<b>Policy goal:</b>	To decrease the prevalence of tobacco use, especially among men, youth, people residing in rural areas, those with a primary education level, and those in the Southern region
<b>Recommendations:</b>	<ol style="list-style-type: none"> <li>a) Seek and intensify the cooperation and commitment of all offices or organizations working for children and youth in the communities to limit their accessibility to tobacco.</li> <li>b) Systematically develop the process of monitoring violations of the tobacco control legislation and acts, and interference by the tobacco industry at the national and local levels through active participation of civil society.</li> <li>c) Launch campaigns to create awareness consistently and continuously through social and community networking.</li> <li>d) Continue systematic monitoring of tobacco use and key tobacco control measures through national surveys and integrate standard tobacco questions into ongoing surveys.</li> <li>e) Limit access to tobacco products by enforcing laws prohibiting sales to children/youth and improving laws to prevent selling of loose cigarettes and production of cheap cigarettes.</li> </ol>
<b>Possible problems or obstacles in implementing recommendations:</b>	
	<ol style="list-style-type: none"> <li>a) Violation of laws by tobacco sellers for whom their business profit is more important than the health of children and the youth.</li> <li>b) Tobacco control has been given a lower priority as compared to the control of other addictive substances; thus, there is no concrete strategy for tobacco control among organizations working for the youth.</li> <li>c) The situation of smoking among youth has been underestimated, as it is believed that smoking once or twice will not be addictive. However, it has now become a problem as many youth who were occasional smokers have become daily smokers.</li> </ol>

**P: Protect**

<b>Key messages:</b>	Exposure to SHS at public places and workplaces remains high.
<b>Policy goal:</b>	To decrease exposure to SHS at public places and workplaces
<b>Recommendations:</b>	<p>a) Strengthen the present system of providing general public health education on the harmful health and economic effects of exposure to tobacco smoke; and conduct more operational research to make public health education more effective.</p> <p>b) Allocate more resources towards public health education.</p> <p>c) Conduct gender-specific interventions to make women understand how to protect themselves and their children from tobacco smoke.</p> <p>d) Strengthen participation and build the capacity for implementation of all related organizations at the local level to build tobacco-free environments. This would create a sense of ownership for a continued and sustainable tobacco-free environment through a multisectoral approach.</p> <p>e) Continuously and consistently provide information and establish tobacco-free zones through several channels and target responsible persons in each of the areas or buildings.</p> <p>f) Develop appropriate and effective communication strategies for the media so that specific groups can be targeted, and empower the socially disadvantaged population who are exposed to SHS with the knowledge that they have the right to be protected.</p> <p>g) Improve the Non-smokers' Health Protection Act, particularly by increasing the authority of the responsible tobacco control staff to enable them to enforce strict implementation of the law. The current law allows staff to only inspect the sites and give warnings. Other forms of punishment may have to be explored, for example, confiscation of business licenses from owners of places that do not abide by the law.</p>
<b>Possible problems or obstacles in implementing recommendations:</b>	
	<p>a) Responsible staff do not give importance to law enforcement, especially for those who violate the Non-smokers' Health Protection Act.</p> <p>b) Most people do not protect their own rights when they observe someone smoking in public places and are not aware of the dangers of exposure to SHS.</p> <p>c) Business owners are not interested in implementing the laws and make the excuse that they do not know what kind of places should be smoke free.</p>

**O: Offer help**

<b>Key messages:</b>	<ol style="list-style-type: none"> <li>1) There is a decreasing interest in quitting tobacco use and fewer people attempt to quit tobacco use.</li> <li>2) An increasing percentage of health staffs ask about tobacco use and provide advice.</li> </ol>
<b>Policy goals:</b>	<ol style="list-style-type: none"> <li>1) To strengthen integration of tobacco cessation services at all levels of health facilities</li> <li>2) To increase the number of quitters</li> </ol>
<b>Recommendations:</b>	<ol style="list-style-type: none"> <li>a) Integrate tobacco cessation services into the National Health Service System.</li> <li>b) Expand tobacco cessation services to cover the 5As (Ask, Advise Assess, Assist, and Arrange) in all health service facilities and have attached tobacco cessation clinics at these health facilities.</li> <li>c) Strengthen the efficiency and accessibility of tobacco cessation services to cover both smokers who come to a health facility for this service and for other services, by proactively increasing the number of tobacco cessation services in communities or arranging mobile cessation clinics for target groups, including business places.</li> </ol>
<b>Possible problems or obstacles in implementing recommendations:</b>	
	<ol style="list-style-type: none"> <li>a) Health facility staff do not realize the importance of the risks of smoking on health and most health facilities are short of skilled staff to provide tobacco cessation services.</li> <li>b) Smokers feel that it is a burden to visit health facilities for tobacco cessation services and expect to receive medicines more than advice.</li> <li>c) Many factors favouring tobacco use still exist, such as convenience in buying cigarettes from general shops or stores, and the availability of cheap cigarettes and flavoured shredded tobacco that make smokers not want to quit smoking, even with the increasing price of cigarettes.</li> </ol>

**W:** Warn

<b>Key messages:</b>	<ol style="list-style-type: none"> <li>1) Coloured pictorial health warnings (PHWs) on cigarette packets still have an impact on smokers' thinking about quitting smoking, although this trend is decreasing.</li> <li>2) Black and white PHWs on shredded tobacco packs have had a greater impact on thinking about quitting the use of shredded tobacco during the past two years.</li> </ol>
<b>Policy goals:</b>	<ol style="list-style-type: none"> <li>1) To increase the rate of noticing PHWs on tobacco product packages, especially shredded tobacco products used for hand-rolled cigarettes and smokeless tobacco</li> <li>2) To increase the rate of quitting the use of tobacco because of noticing PHWs</li> </ol>
<b>Recommendations:</b>	<ol style="list-style-type: none"> <li>a) Improve the use of PHWs on tobacco product packets by making them most effective. For example, (1) provide new PHWs in rotation every 12–36 months, (2) avoid using PHWs that have already been used, even if these are a couple of pictures only, (3) increase the size of the PHWs or plan on using plain packaging, (4) use clear, simple, direct warnings and well-defined pictures that are recognizable and easily identifiable, and (5) use simple language in the text to influence readability, help understanding and lessen confusion.</li> <li>b) Integrate pack imagery for use in other media (e.g. TV and social media). This would reinforce the warnings and heighten the impact in general.</li> <li>c) Increase the application of coloured PHWs to cover all types and all forms of sale of tobacco products.</li> <li>d) Increase channels of support for tobacco cessation such as adding the quit-line number on all types of tobacco products.</li> </ol>
<b>Possible problems or obstacles in implementing recommendations:</b>	
	<ol style="list-style-type: none"> <li>a) Sale of cigarettes in loose form is common and that of cigarette packs without PHWs is increasing.</li> <li>b) Inefficient law enforcement for printing PHWs because most shredded tobacco is produced as a small-scale industry. The products are sold in different forms, i.e. pack, roll, hand-rolled, sheet or by kilogram.</li> </ol>

**E: Enforce**

<b>Key messages:</b>	There is an increasing rate of noticing tobacco advertising, promotions and sponsorships (TAPS), especially by displaying cigarette packets, cigarette brands and prices in many shops that sell cigarettes.
<b>Policy goal:</b>	To improve the efficiency in controlling any TAPS by the tobacco industry
<b>Recommendations:</b>	<ul style="list-style-type: none"> <li>a) Amend the Tobacco Control Product Act, 1992 according to the international guideline of the WHO FCTC 13 and ensure comprehensive tobacco control legislation.</li> <li>b) Develop capacity for existing social networks to consistently and continuously take part in conducting surveillance of the tobacco industry in their respective areas in order to understand the new strategies of the tobacco industry.</li> <li>c) Develop systematic monitoring of interference by the tobacco industry to determine the magnitude of the interference.</li> <li>d) Ensure effective and vigorous law enforcement to eliminate advertising by the tobacco industry.</li> <li>e) Improve continuity in launching anti-tobacco campaigns to understand any counter-campaign tactics.</li> </ul>
<b>Possible problems or obstacles in implementing recommendations:</b>	
	Lack of participation by communities in conducting surveillance of the tobacco industry's tactics, as they are not interested in its importance because of a lack of awareness of the seriousness of the direct and indirect impact of new tobacco marketing on individuals and societies.

**R: Raise taxes on tobacco**

<b>Key messages:</b>	<ol style="list-style-type: none"> <li>1) Youth aged 15–17 years can still easily access tobacco products; 83.3% could easily buy loose cigarettes.</li> <li>2) There was an increase in the sale of cigarette packs without any PHW.</li> <li>3) Cheap cigarettes had about 35% of the market share.</li> <li>4) 10% of smokers' income is spent on cigarettes.</li> </ol>
<b>Policy goal:</b>	To decrease the accessibility of tobacco products, especially among minors
<b>Recommendations:</b>	<ol style="list-style-type: none"> <li>a) Raising cigarette taxes is still an important strategy but should be implemented together with the control of a lower ceiling on cigarette prices to prevent the production of cheap cigarettes that counter the tax-raising strategy.</li> <li>b) Formulate effective strategies to prohibit the sale of cigarettes in loose form nationwide. For example, increase the level of public concern about selling cigarettes in loose form to minors and strictly enforce the law on any store that sells cigarettes in loose form.</li> <li>c) Strengthen and generate awareness among the community to monitor stores where cigarettes are sold to ensure that minors cannot access tobacco products.</li> <li>d) Coordinate with related offices/organizations in controlling the sale of cigarette packs without PHWs to prevent them from making an impact on smoking behaviour.</li> <li>e) Advocate with authorized organizations and the Ministry of Finance to effectively implement tobacco taxes on all kinds of tobacco products. For example, revise the whole excise tax structure, not only for cigarettes but also for cigarette packs without PHWs. Increase the fines on the latter type of cigarettes along with strict inspection and arrest.</li> <li>f) Improve the efficiency of law enforcement. Confiscate tobacco sale licenses of those who sell cigarettes to the youth or in loose form.</li> </ol>
<b>Possible problems or obstacles in implementing recommendations:</b>	
	<ol style="list-style-type: none"> <li>a) Cigarette sellers are more interested in making profits than in the adverse impact of tobacco use on youth in the future.</li> <li>b) The production and import of cheap tobacco products has increased.</li> <li>c) There is still widespread use of cigarette packs without PHWs, especially in the border provinces and on the internet, which youth can easily access.</li> </ol>





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# *Appendix*

## **Appendix A: Questionnaire**

**Global Adult Tobacco Survey (GATS)  
Core Questionnaire,  
Optional Questions and  
Specific Questions**

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**THAILAND, 2011**

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## GATS Core Questionnaire Formatting Conventions

Text in **RED FONT** = Programming logic and skip instructions.

Text in **BLUE ITALICS** = Instructions for country-adaptations and wording fills.

Text in [BRACKETS] = Specific question instructions for interviewers—not to be read to the respondents.

Text surrounded by \*asterisks\* = Words that interviewers should emphasize when reading to respondents.

Item number in **YELLOW MARKER** = Selected optional questionnaires.

Item number in **GREEN MARKER** = Specific questionnaires.



## Household Questionnaire

Questionnaire	2009	2011
TIME HH INTERVIEW STARTED _____ : _____ [24 HOUR CLOCK] HRS MINS		
<p><b>INTRO.</b> [THE HOUSEHOLD SCREENING RESPONDENT SHOULD BE 18 YEARS OF AGE OR OLDER AND YOU MUST BE CONFIDENT THAT THIS PERSON CAN PROVIDE ACCURATE INFORMATION ABOUT ALL MEMBERS OF THE HOUSEHOLD. IF NEEDED, VERIFY THE AGE OF THE HOUSEHOLD SCREENING RESPONDENT TO MAKE SURE HE/SHE IS 18 YEARS OF AGE OR OLDER.</p> <p>THE HOUSEHOLD SCREENING RESPONDENT CAN BE LESS THAN 18 YEARS OLD, ONLY IF NO HOUSEHOLD MEMBERS ARE 18 YEARS OF AGE OR OLDER.]</p>		
<p><b>INTRO1.</b> An important survey of adult tobacco use behavior is being conducted by <i>[the offices/ organizations in and out of the Ministry of Public Health]</i> throughout <i>[Thailand]</i> and your household has been selected to participate. All houses selected were chosen from a scientific sample and it is very important to the success of this project that each participates in the survey. All information gathered will be kept strictly confidential. I have a few questions to find out who in your household is eligible to participate.</p>		
<p><b>HH1.</b> First, I'd like to ask you a few questions about your household. In total, how many persons live in this household?</p> <p>[INCLUDE ANYONE WHO CONSIDERS THIS HOUSEHOLD THEIR USUAL PLACE OF RESIDENCE]</p> <p><input type="text"/> <input type="text"/></p>	✓	✓
<p><b>HH2.</b> How many of these household members are 15 years of age or older?</p> <p><input type="text"/> <input type="text"/></p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p><b>[IF HH2 = 00 (NO HOUSEHOLD MEMBERS &gt; 15 IN HOUSEHOLD)]</b></p> <p>[THERE ARE NO ELIGIBLE HOUSEHOLD MEMBERS.</p> <p>THANK THE RESPONDENT FOR HIS/HER TIME.</p> <p>THIS WILL BE RECORDED IN THE RECORD OF CALLS AS A CODE 201.]</p> </div>	✓	✓
<p><b>HH3.</b> How many male/female household members are 15 years of age or older?</p> <p><input type="text"/> <input type="text"/> PERSONS</p> <p>IF <b>HH3 = 00</b> (NO ELIGIBLE MALES/FEMALES IN HOUSEHOLD), END INTERVIEW AND GO TO PAGE 5 TO RECORD THE TIME THE INTERVIEW ENDED. ENTER RESULT CODE 201.</p>	✓	-

Questionnaire		2009	2011
<b>HH4.</b>	<p>I now would like to collect information about only these persons that live in this household who are 15 years of age or older. Let's start listing them from oldest to youngest.</p> <p><b>HH4a.</b> What is the {oldest/next oldest} person's first name? _____</p> <p><b>HH4b.</b> What is this person's age? [IF RESPONDENT DOESN'T KNOW, PROBE FOR AN ESTIMATE]</p> <p><input type="text"/> <input type="text"/> <input type="text"/></p> <p><b>[IF REPORTED AGE IS 15 THROUGH 17, BIRTH DATE IS ASKED]</b></p> <p><b>HH4c.</b> What is the month of this person's date of birth?</p> <p><input type="text"/> <input type="text"/></p> <p><b>HH4cYEAR.</b> What is the year of this person's date of birth? [IF DON'T KNOW, ENTER 7777 IF REFUSED, ENTER 9999]</p> <p><input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>	✓	✓
<b>HH4e1.</b>	<p>Does this person currently smoke tobacco, including <i>[cigarettes, hand-rolled cigarettes, pipes, and cigars]</i>?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW .. <input type="checkbox"/> 7</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓
<b>HH4e2.</b>	<p>Does this person currently use smokeless tobacco, including <i>[snuff by mouth, snuff which had a component of tobacco by nose, chewing tobacco. and betel quit with tobacco]</i>?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW .. <input type="checkbox"/> 7</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>	-	✓
<b>HH5.</b>	<p><b>[REPEAT HH4a – HH4e FOR EACH PERSON REPORTED IN HH2]</b></p> <p>[HOUSEHOLD ROSTER NUMBER AND NAME OF THE SELECTED ELIGIBLE PERSON IS: <b>{FILL SELECTED HH MEMBER'S FIRST NAME}</b></p> <p>ASK IF <b>{FILL SELECTED HH MEMBER'S FIRST NAME}</b> IS AVAILABLE AND IF SO, PROCEED TO THE INDIVIDUAL QUESTIONNAIRE.</p> <p>IF <b>{FILL SELECTED HH MEMBER'S FIRST NAME}</b> IS NOT AVAILABLE, MAKE AN APPOINTMENT AND RECORD IT AS A COMMENT ON RECORD OF CALLS.]</p> <p><input type="text"/> <input type="text"/></p>	✓	✓
<b>HH6.</b>	<p>FILL IN QUESTIONNAIRE ID NUMBER</p> <p>QUESTIONNAIRE ID NUMBER: _____ - _____</p>	✓	-

## Individual Questionnaire

Questionnaire	2009	2011
<p><b>CONSENT1.</b> [SELECT THE APPROPRIATE AGE CATEGORY BELOW. IF NEEDED, CHECK THE AGE OF SELECTED RESPONDENT FROM THE “CASE INFO” SCREEN IN THE TOOLS MENU.]</p> <p>15-17 ..... <input type="checkbox"/> 1 → <a href="#">GO TO CONSENT2</a></p> <p>18 OR OLDER ..... <input type="checkbox"/> 2 → <a href="#">GO TO CONSENT5</a></p> <p>EMANCIPATED MINOR (15-17)..... <input type="checkbox"/> 3 → <a href="#">GO TO CONSENT5</a></p>	✓	✓
<p><b>CONSENT2.</b> Before starting the interview, I need to obtain consent from a parent or guardian of [NAME OF RESPONDENT] and from [NAME OF RESPONDENT].</p> <p>[IF BOTH SELECTED RESPONDENT AND PARENT/GUARDIAN ARE AVAILABLE, CONTINUE WITH INTERVIEW.</p> <p>IF PARENT/GUARDIAN IS NOT AVAILABLE, BREAK-OFF INTERVIEW AND SCHEDULE AN APPOINTMENT TO RETURN.</p> <p>IF MINOR RESPONDENT IS NOT AVAILABLE, CONTINUE WITH OBTAINING PARENTAL CONSENT.]</p>	✓	✓
<p><b>CONSENT3.</b> [READ THE FOLLOWING TO THE PARENT/GUARDIAN AND SELECTED RESPONDENT (IF AVAILABLE):]</p> <p>I am working with <a href="#">[National Statistical Office]</a>. This institution is collecting information about tobacco use in <a href="#">[Thailand]</a>. This information will be used for public health purposes by the Ministry of Health.</p> <p>Your household and [NAME OF RESPONDENT] have been selected at random. [NAME OF RESPONDENT] responses are very important to us and the community, as these answers will represent many other persons.</p> <p>The interview will last around 30 minutes. [NAME OF RESPONDENT] participation in this survey is entirely voluntary. The information that [NAME OF RESPONDENT] will provide will be kept strictly confidential and [NAME OF RESPONDENT] will not be identified by his/her responses. Personal information will not be shared with anyone else, not even other family members including you. [NAME OF RESPONDENT] can withdraw from the study at any time, and may refuse to answer any question.</p> <p>We will leave the necessary contact information with you. If you have any questions about this survey, you can contact the telephone numbers listed.</p> <p>If you agree with [NAME OF RESPONDENT]’s participation in this survey, we will conduct a private interview with him/her.</p> <p>[ASK PARENT/GUARDIAN:] Do you agree with [NAME OF RESPONDENT]’s participation?</p> <p>YES ..... <input type="checkbox"/> 1 → <a href="#">GO TO CONSENT4</a></p> <p>NO ..... <input type="checkbox"/> 2 → <a href="#">END INTERVIEW</a></p>	✓	✓

Questionnaire		2009	2011
<b>CONSENT4.</b>	[WAS THE SELECTED MINOR RESPONDENT PRESENT?]  PRESENT ..... <input type="checkbox"/> 1 → <u>GO TO CONSENT6</u> NOT PRESENT ..... <input type="checkbox"/> 2 → <u>GO TO CONSENT5</u>	✓	✓
<b>CONSENT5.</b>	[READ TO THE SELECTED RESPONDENT:]  I am working with [ <i>National Statistical Office</i> ]. This institution is collecting information about tobacco use in [ <i>Thailand</i> ]. This information will be used for public health purposes by the Ministry of Health.  Your household and you have been selected at random. Your responses are very important to us and the community, as these answers will represent many other persons. The interview will last around 30 minutes. Your participation in this survey is entirely voluntary. The information that you will provide us will be kept strictly confidential, and you will not be identified by your responses. Personal information will not be shared with anyone else, not even other family members. You can withdraw from the study at any time, and may refuse to answer any question.  We will leave the necessary contact information with you. If you have any questions about this survey, you can contact the telephone numbers listed.  {FILL IF CONSENT4=2: Your parent/guardian has given his/her permission for you to participate in this study}  If you agree to participate, we will conduct a private interview with you.	✓	✓
<b>CONSENT6.</b>	[ASK SELECTED RESPONDENT:] Do you agree to participate?  YES ..... <input type="checkbox"/> 1 → <u>PROCEED WITH INTERVIEW</u> NO ..... <input type="checkbox"/> 2 → <u>END INTERVIEW</u>	✓	✓
<b>INTLANG.</b>	[INTERVIEW LANGUAGE]  [THAI] ..... <input type="checkbox"/> 1 [NORTHERN DIALECT] ..... <input type="checkbox"/> 2 [NORTHEASTERN DIALECT] ..... <input type="checkbox"/> 3 [SOUTHERN DIALECT] ..... <input type="checkbox"/> 4 [PATTANI – MALAY] ..... <input type="checkbox"/> 5 [OTHER, SPECIFY] ..... <input type="checkbox"/> 6	✓	✓

**SECTION A. BACKGROUND CHARACTERISTICS**

Questionnaire	2009	2011
<b>A00.</b> I am going to first ask you a few questions about your background.		
<b>A01.</b> [RECORD GENDER FROM OBSERVATION. ASK IF NECESSARY.]  MALE ..... <input type="checkbox"/> 1 FEMALE..... <input type="checkbox"/> 2	✓	✓
<b>A02a.</b> What is the month of your date of birth?  01..... <input type="checkbox"/> 1 02..... <input type="checkbox"/> 2 03..... <input type="checkbox"/> 3 04..... <input type="checkbox"/> 4 05..... <input type="checkbox"/> 5 06..... <input type="checkbox"/> 6 07..... <input type="checkbox"/> 7 08..... <input type="checkbox"/> 8 09..... <input type="checkbox"/> 9 10..... <input type="checkbox"/> 10 11..... <input type="checkbox"/> 11 12..... <input type="checkbox"/> 12 DON'T KNOW ..... <input type="checkbox"/> 77 REFUSED ..... <input type="checkbox"/> 99	✓	✓
<b>A02b.</b> What is the year of your date of birth?  [IF DON'T KNOW, ENTER 7777 IF REFUSED, ENTER 9999]  <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto;"></div> <u>[IF MONTH=77/99 OR YEAR=7777/9999, ASK A03. OTHERWISE SKIP TO A04.]</u>	✓	✓
<b>A03.</b> How old are you?  [IF RESPONDENT IS UNSURE, PROBE FOR AN ESTIMATE AND RECORD AN ANSWER. IF REFUSED, BREAK-OFF AS WE CANNOT CONTINUE INTERVIEW WITHOUT AGE]  <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto;"></div>	✓	✓
<b>A03a.</b> [WAS RESPONSE ESTIMATED?]  YES ..... <input type="checkbox"/> 1 NO..... <input type="checkbox"/> 2 DON'T KNOW ..... <input type="checkbox"/> 7	✓	✓

Questionnaire	2009	2011
<p><b>A04.</b> What is the highest level of education you have completed?</p> <p>[SELECT ONLY ONE CATEGORY]</p> <p>NO EDUCATION/ILLITERATE ..... <input type="checkbox"/> 1</p> <p>LESS THAN PRIMARY SCHOOL COMPLETED ..... <input type="checkbox"/> 2</p> <p>PRIMARY SCHOOL COMPLETED (GRADE 6) ..... <input type="checkbox"/> 3</p> <p>MORE THAN GRADE 6 BUT LESS THAN GRADE 9 ..... <input type="checkbox"/> 4</p> <p>GRADE 9 COMPLETED ..... <input type="checkbox"/> 5</p> <p>MORE THAN GRADE 9 BUT LESS THAN GRADE 12 ..... <input type="checkbox"/> 6</p> <p>GRADE 12 COMPLETED/ VOCATIONAL EDUCATION ..... <input type="checkbox"/> 7</p> <p>CERTIFICATE/VOCATIONAL EDUCATION ..... <input type="checkbox"/> 8</p> <p>BACHELOR DEGREE ..... <input type="checkbox"/> 9</p> <p>HIGHER THAN BACHELOR DEGREE ..... <input type="checkbox"/> 10</p> <p>OTHER (SPECIFY)..... <input type="checkbox"/> 11</p> <p>DON'T KNOW ..... <input type="checkbox"/> 77</p> <p>REFUSED ..... <input type="checkbox"/> 99</p>	✓	✓
<p><b>A05.</b> Which of the following best describes your *main* work status over the past 12 months? Government employee, non-government employee, self-employed, student, homemaker, retired, unemployed-able to work, or unemployed-unable to work?</p> <p>[INCLUDE SUBSISTENCE FARMING AS SELF-EMPLOYED]</p> <p>GOVERNMENT EMPLOYEE ..... <input type="checkbox"/> 1</p> <p>NON-GOVERNMENT EMPLOYEE..... <input type="checkbox"/> 2</p> <p>SELF-EMPLOYED ..... <input type="checkbox"/> 3</p> <p>STUDENT..... <input type="checkbox"/> 4</p> <p>HOMEMAKER ..... <input type="checkbox"/> 5</p> <p>RETIRED ..... <input type="checkbox"/> 6</p> <p>UNEMPLOYED, ABLE TO WORK ..... <input type="checkbox"/> 7</p> <p>UNEMPLOYED, UNABLE TO WORK ..... <input type="checkbox"/> 8</p> <p>DON'T KNOW ..... <input type="checkbox"/> 77</p> <p>REFUSED ..... <input type="checkbox"/> 99</p>	✓	✓

Questionnaire		2009	2011																																																																					
<p><b>AA5_1.</b> (Ask both employed and unemployed) How much do you get average income monthly?                      If "has not", record "0"</p> <p>(a) Total In-cash income..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p> <p>(a1) Wages/ Salaries ..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p> <p>(a2) OT..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p> <p>(a3) Income from pensions ..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p> <p>(a4) Net profit from business/ farming ..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p> <p>(a5) Income from other people outside household..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p> <p>(a6) Income from government or other organization for elderly and disability ..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p> <p>(a7) Income from rent of accommodation, land or other Properties ..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p> <p>(a8) Others (e.g. lottery winnings, commission, gambling, or saving interests etc) ..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p> <p>(b) Total In-kind income ..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month                      If "has not", record "0"</p> <p>(b1) Rental estimated of free-occupied house (include own house) ..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p> <p>(b2) Unpaid of goods and services ..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p> <p>(b3) Unpaid of food and beverages..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> THB/month</p>	<p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p>																																																																						
<p><b>A06.</b> Please tell me whether this household or any person who lives in the household has the following items:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">READ EACH ITEM:</th> <th style="width: 10%;">YES</th> <th style="width: 10%;">NO</th> <th style="width: 10%;">DON'T KNOW</th> <th style="width: 10%;">REFUSED</th> </tr> <tr> <th></th> <th style="text-align: center;">▼</th> <th style="text-align: center;">▼</th> <th style="text-align: center;">▼</th> <th style="text-align: center;">▼</th> </tr> </thead> <tbody> <tr> <td>a. Electricity?.....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>b. Flush toilet?.....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>c. Fixed telephone?.....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>d. Cell telephone? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>e. Television? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>f. Radio? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>g. Refrigerator? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>h. Car? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>i. Moped/scooter/motorcycle?....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>j. Washing machine? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>k. Air conditioning?.....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>l. Computer? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> </tbody> </table>	READ EACH ITEM:	YES	NO	DON'T KNOW	REFUSED		▼	▼	▼	▼	a. Electricity?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	b. Flush toilet?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	c. Fixed telephone?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	d. Cell telephone? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	e. Television? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	f. Radio? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	g. Refrigerator? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	h. Car? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	i. Moped/scooter/motorcycle?....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	j. Washing machine? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	k. Air conditioning?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	l. Computer? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	<p>✓</p>	<p>✓</p>
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g. Refrigerator? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9																																																																				
h. Car? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9																																																																				
i. Moped/scooter/motorcycle?....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9																																																																				
j. Washing machine? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9																																																																				
k. Air conditioning?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9																																																																				
l. Computer? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9																																																																				
<p><b>A11.</b> What is your marital status? Would you say single, married, separated, divorced, or widowed?</p> <p>SINGLE ..... <input type="checkbox"/> 1</p> <p>MARRIED ..... <input type="checkbox"/> 2</p> <p>SEPARATED ..... <input type="checkbox"/> 3</p> <p>DIVORCED ..... <input type="checkbox"/> 4</p> <p>WIDOWED ..... <input type="checkbox"/> 5</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>	<p>✓</p>	<p>✓</p>																																																																						



**SECTION B. TOBACCO SMOKING**

Questionnaire		2009	2011
<b>B00.</b>	<p>I would now like to ask you some questions about *smoking* tobacco, including [<i>cigarettes, hand-rolled cigarettes, cigars, pipes and water pipes</i>].</p> <p>Please do not answer about smokeless tobacco at this time.</p>		
<b>B01.</b>	<p>Do you *currently* smoke tobacco on a daily basis, less than daily, or not at all?</p> <p>DAILY ..... <input type="checkbox"/> 1 → <a href="#">SKIP TO B04</a></p> <p>LESS THAN DAILY ..... <input type="checkbox"/> 2</p> <p>NOT AT ALL ..... <input type="checkbox"/> 3 → <a href="#">SKIP TO B03</a></p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → <a href="#">SKIP TO NEXT SECTION</a></p> <p>REFUSED ..... <input type="checkbox"/> 9 → <a href="#">SKIP TO NEXT SECTION</a></p>	✓	✓
<b>B02.</b>	<p>Have you smoked tobacco daily in the past?</p> <p>YES ..... <input type="checkbox"/> 1 → <a href="#">SKIP TO B08</a></p> <p>NO ..... <input type="checkbox"/> 2 → <a href="#">SKIP TO B10</a></p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → <a href="#">SKIP TO B10</a></p> <p>REFUSED ..... <input type="checkbox"/> 9 → <a href="#">SKIP TO B10</a></p>	✓	✓
<b>B03.</b>	<p>In the *past*, have you smoked tobacco on a daily basis, less than daily, or not at all?</p> <p>[IF RESPONDENT HAS DONE BOTH "DAILY" AND "LESS THAN DAILY" IN THE PAST, CHECK "DAILY"]</p> <p>DAILY ..... <input type="checkbox"/> 1 → <a href="#">SKIP TO B11</a></p> <p>LESS THAN DAILY ..... <input type="checkbox"/> 2 → <a href="#">SKIP TO B13</a></p> <p>NOT AT ALL ..... <input type="checkbox"/> 3 → <a href="#">SKIP TO NEXT SECTION</a></p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → <a href="#">SKIP TO NEXT SECTION</a></p> <p>REFUSED ..... <input type="checkbox"/> 9 → <a href="#">SKIP TO NEXT SECTION</a></p>	✓	✓

Questionnaire				2009	2011
<b>[CURRENT DAILY SMOKERS]</b>					
<b>B04.</b>	How old were you when you first started smoking tobacco *daily*?				
	[IF DON'T KNOW OR REFUSED, ENTER 99]			✓	✓
	<input type="text"/> <input type="text"/>				
	<u>[IF B04 = 99, ASK B05. OTHERWISE SKIP TO B06.]</u>				
<b>B05.</b>	How many years ago did you first start smoking tobacco *daily*?				
	[IF REFUSED, ENTER 99]			✓	✓
	<input type="text"/> <input type="text"/>				
<b>B06.</b>	On average, how many of the following products do you currently smoke each day? Also, let me know if you smoke the product, but not every day.				
	[IF RESPONDENT REPORTS SMOKING THE PRODUCT BUT NOT EVERY DAY, ENTER 888]				
	IF RESPONDENT REPORTS IN PACKS OR CARTONS, PROBE TO FIND OUT HOW MANY ARE IN EACH AND CALCULATE TOTAL NUMBER]				
	READ EACH ITEM:				
a.	Manufactured cigarettes?				PER DAY
a1.	[IF B06a=888] On average, how many manufactured cigarettes do you currently smoke each week?				PER WEEK
b.	Hand-rolled cigarettes?				PER DAY
b1.	[IF B06b=888] On average, how many hand-rolled cigarettes do you currently smoke each week?				PER WEEK
d.	Pipes full of tobacco?				PER DAY
d1.	[IF B06d=888] On average, how many pipes full of tobacco do you currently smoke each week?				PER WEEK
e.	Cigars?				PER DAY
e1.	[IF B06e=888] On average, how many cigars, cheroots, or cigarillos do you currently smoke each week?				PER WEEK
f.	Number of water pipe sessions per day?				PER DAY
f1.	[IF B06f=888] On average, how many water pipe sessions do you currently participate in each week?				PER WEEK
g.	Any others? (→ g1. Please specify the other type you currently smoke each day: _____)				PER DAY
g2.	[IF B06g=888] On average, how many [FILL PRODUCT] do you currently smoke each week?				PER WEEK
				✓	✓

Questionnaire	2009	2011
<p><b>B07.</b> How soon after you wake up do you usually have your first smoke? Would you say within 5 minutes, 6 to 30 minutes, 31 to 60 minutes, or more than 60 minutes?</p> <p>WITHIN 5 MINUTES ..... <input type="checkbox"/> 1</p> <p>6 TO 30 MINUTES ..... <input type="checkbox"/> 2</p> <p>31 TO 60 MINUTES ..... <input type="checkbox"/> 3</p> <p>MORE THAN 60 MINUTES..... <input type="checkbox"/> 4</p> <p>REFUSED ..... <input type="checkbox"/> 9</p> <p><b>[SKIP TO NEXT SECTION]</b></p>	✓	✓

Questionnaire	2009	2011																														
<p><b>[CURRENT LESS THAN DAILY SMOKERS]</b></p> <p><b>B08.</b> How old were you when you first started smoking tobacco *daily*?</p> <p>[IF DON'T KNOW OR REFUSED, ENTER 99]</p> <div style="border: 1px solid black; width: 80px; height: 25px; margin: 5px 0;"></div> <p><u>[IF B08 = 99, ASK B09. OTHERWISE SKIP TO B10.]</u></p>	✓	✓																														
<p><b>B09.</b> How many years ago did you first start smoking tobacco *daily*?</p> <p>[IF REFUSED, ENTER 99]</p> <div style="border: 1px solid black; width: 80px; height: 25px; margin: 5px 0;"></div>	✓	✓																														
<p><b>B10.</b> How many of the following do you currently smoke during a usual week?</p> <p>[IF RESPONDENT REPORTS DOING THE ACTIVITY *WITHIN THE PAST 30 DAYS*, BUT LESS THAN ONCE PER WEEK, ENTER 888</p> <p>IF RESPONDENT REPORTS IN PACKS OR CARTONS, PROBE TO FIND OUT HOW MANY ARE IN EACH AND CALCULATE TOTAL NUMBER]</p> <p>READ EACH ITEM:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">a. Manufactured cigarettes? .....</td> <td style="width: 10%; border: 1px solid black; text-align: center;"> </td> <td style="width: 10%; border: 1px solid black; text-align: center;"> </td> <td style="width: 10%; border: 1px solid black; text-align: center;"> </td> <td style="width: 20%;">PER WEEK</td> </tr> <tr> <td>b. Hand-rolled cigarettes? .....</td> <td style="border: 1px solid black; text-align: center;"> </td> <td style="border: 1px solid black; text-align: center;"> </td> <td style="border: 1px solid black; text-align: center;"> </td> <td>PER WEEK</td> </tr> <tr> <td>d. Pipes full of tobacco? .....</td> <td style="border: 1px solid black; text-align: center;"> </td> <td style="border: 1px solid black; text-align: center;"> </td> <td style="border: 1px solid black; text-align: center;"> </td> <td>PER WEEK</td> </tr> <tr> <td>e. Cigars? .....</td> <td style="border: 1px solid black; text-align: center;"> </td> <td style="border: 1px solid black; text-align: center;"> </td> <td style="border: 1px solid black; text-align: center;"> </td> <td>PER WEEK</td> </tr> <tr> <td>f. Number of water pipe (hookah or shisha) sessions per week? .....</td> <td style="border: 1px solid black; text-align: center;"> </td> <td style="border: 1px solid black; text-align: center;"> </td> <td style="border: 1px solid black; text-align: center;"> </td> <td>PER WEEK</td> </tr> <tr> <td>g. Any others? .....</td> <td style="border: 1px solid black; text-align: center;"> </td> <td style="border: 1px solid black; text-align: center;"> </td> <td style="border: 1px solid black; text-align: center;"> </td> <td>PER WEEK</td> </tr> </table> <p>→ g1. Please specify the other type you currently smoke during a usual week:</p> <p>_____</p> <p><u>[SKIP TO NEXT SECTION]</u></p>	a. Manufactured cigarettes? .....				PER WEEK	b. Hand-rolled cigarettes? .....				PER WEEK	d. Pipes full of tobacco? .....				PER WEEK	e. Cigars? .....				PER WEEK	f. Number of water pipe (hookah or shisha) sessions per week? .....				PER WEEK	g. Any others? .....				PER WEEK	✓	✓
a. Manufactured cigarettes? .....				PER WEEK																												
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f. Number of water pipe (hookah or shisha) sessions per week? .....				PER WEEK																												
g. Any others? .....				PER WEEK																												

Questionnaire	2009	2011
<p><b>[FORMER SMOKERS]</b></p> <p><b>B11.</b> How old were you when you first started smoking tobacco *daily*?</p> <p>[IF DON'T KNOW OR REFUSED, ENTER 99]</p> <p style="text-align: center;"><input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/></p> <p><u>[IF B11 = 99, ASK B12. OTHERWISE SKIP TO B13a.]</u></p>	✓	✓
<p><b>B12.</b> How many years ago did you first start smoking tobacco *daily*?</p> <p>[IF REFUSED, ENTER 99]</p> <p style="text-align: center;"><input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/></p>	✓	✓
<p><b>B13a.</b> How long has it been since you stopped smoking?</p> <p>[ONLY INTERESTED IN WHEN RESPONDENT STOPPED SMOKING REGULARLY — DO NOT INCLUDE RARE INSTANCES OF SMOKING]</p> <p>ENTER UNIT ON THIS SCREEN AND NUMBER ON NEXT SCREEN]</p> <p>YEARS ..... <input type="checkbox"/> 1</p> <p>MONTHS ..... <input type="checkbox"/> 2</p> <p>WEEKS ..... <input type="checkbox"/> 3</p> <p>DAYS..... <input type="checkbox"/> 4</p> <p>LESS THAN 1 DAY ..... <input type="checkbox"/> 5 → SKIP TO B14</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → SKIP TO BB19</p> <p>REFUSED..... <input type="checkbox"/> 9 → SKIP TO BB19</p>	✓	✓
<p><b>B13b.</b> [ENTER NUMBER OF (YEARS/MONTHS/WEEKS/DAYS)]</p> <p style="text-align: center;"><input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/></p> <p><u>[IF B13a/b &lt; 1 YEAR (&lt; 12 MONTHS), THEN CONTINUE WITH B14. OTHERWISE SKIP TO BB19]</u></p>	✓	✓

Questionnaire		2009	2011																																								
<b>B14.</b>	<p>Have you visited a doctor or other health care provider in the past 12 months?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → SKIP TO B18</p> <p>REFUSED..... <input type="checkbox"/> 9 → SKIP TO B18</p>	✓	✓																																								
<b>B15.</b>	<p>How many times did you visit a doctor or health care provider in the past 12 months? Would you say 1 or 2 times, 3 to 5 times, or 6 or more times?</p> <p>1 OR 2..... <input type="checkbox"/> 1</p> <p>3 TO 5..... <input type="checkbox"/> 2</p> <p>6 OR MORE ..... <input type="checkbox"/> 3</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓																																								
<b>B16.</b>	<p>During any visit to a doctor or health care provider in the past 12 months, were you asked if you smoke tobacco?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → SKIP TO B18</p> <p>REFUSED..... <input type="checkbox"/> 9 → SKIP TO B18</p>	✓	✓																																								
<b>B17.</b>	<p>During any visit to a doctor or health care provider in the past 12 months, were you advised to quit smoking tobacco?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓																																								
<b>B18.</b>	<p>During the past 12 months, did you use any of the following to try to stop smoking tobacco?</p> <p>READ EACH ITEM:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>REFUSED</th> </tr> <tr> <th></th> <th>▼</th> <th>▼</th> <th>▼</th> </tr> </thead> <tbody> <tr> <td>a. Counseling, including at a smoking cessation clinic? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>b. Nicotine replacement therapy, such as the patch or gum? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>c. Other prescription medications?.....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>d. Traditional medicines, for example <i>local herb</i>?.....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>e. A quit line or a smoking telephone support line? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>f. Switching to smokeless tobacco?.....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>g. On my own/ willpower .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>h. Anything else? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 9</td> </tr> </tbody> </table> <p>→ h1. h1. Please specify what you used to try to stop smoking:</p>		YES	NO	REFUSED		▼	▼	▼	a. Counseling, including at a smoking cessation clinic? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	b. Nicotine replacement therapy, such as the patch or gum? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	c. Other prescription medications?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	d. Traditional medicines, for example <i>local herb</i> ?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	e. A quit line or a smoking telephone support line? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	f. Switching to smokeless tobacco?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	g. On my own/ willpower .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	h. Anything else? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	✓	✓
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h. Anything else? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9																																								
<b>BB19.</b>	<p>What was the most important factor which pushed you quit smoking successfully? Would you say cigarette price, health problem, family asked for quitting, campaign for not smoking, difficult to find smoking places, and others?</p> <p>CIGARETTE PRICE ..... <input type="checkbox"/> 2</p> <p>HEALTH PROBLEM..... <input type="checkbox"/> 2</p> <p>FAMILY ASKED FOR QUITTING ..... <input type="checkbox"/> 3</p> <p>CAMPAIGN FOR NOT SMOKING..... <input type="checkbox"/> 4</p> <p><span style="border: 1px solid black;">DIFFICULT TO FIND SMOKING PLACES</span>..... <input type="checkbox"/> 5</p> <p>OTHERS ..... <input type="checkbox"/> 6 → BB19a. Please specify .....</p>	✓	✓																																								
<p><b>Note :</b> Added answer code "5" for 2011 GATS and change answer code of others from "5" in 2009 GATS to "6" in 2011 GATS</p>																																											

**SECTION C. SMOKELESS TOBACCO**

Questionnaire	2009	2011
<p><b>C00.</b> The next questions are about using smokeless tobacco, such as <i>[snuff by mouth, snuff which had a component of tobacco by nose, chewing tobacco, and betel quid with tobacco]</i>. <u>Smokeless tobacco is tobacco that is not smoked, but is sniffed through the nose, held in the mouth, or chewed.</u></p>		
<p><b>C01.</b> Do you <i>*currently*</i> use smokeless tobacco on a daily basis, less than daily, or not at all?</p> <p>[IF RESPONDENT DOES NOT KNOW WHAT SMOKELESS TOBACCO IS, EITHER PRESENT A SHOWCARD OR READ DEFINITION FROM QXQ SCREEN]</p> <p>DAILY..... <input type="checkbox"/> 1 → <u>SKIP TO C04</u></p> <p>LESS THAN DAILY..... <input type="checkbox"/> 2</p> <p>NOT AT ALL ..... <input type="checkbox"/> 3 → <u>SKIP TO C03</u></p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → <u>SKIP TO NEXT SECTION</u></p> <p>REFUSED..... <input type="checkbox"/> 9 → <u>SKIP TO NEXT SECTION</u></p>	✓	✓
<p><b>C02.</b> Have you used smokeless tobacco daily in the past?</p> <p>YES..... <input type="checkbox"/> 1 → <u>SKIP TO C08</u></p> <p>NO ..... <input type="checkbox"/> 2 → <u>SKIP TO C10</u></p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → <u>SKIP TO C10</u></p> <p>REFUSED..... <input type="checkbox"/> 9 → <u>SKIP TO C10</u></p>	✓	✓
<p><b>C03.</b> In the <i>*past*</i>, have you used smokeless tobacco on a daily basis, less than daily, or not at all?</p> <p>[IF RESPONDENT HAS DONE BOTH "DAILY" AND "LESS THAN DAILY" IN THE PAST, CHECK "DAILY"]</p> <p>DAILY..... <input type="checkbox"/> 1 → <u>SKIP TO C11</u></p> <p>LESS THAN DAILY..... <input type="checkbox"/> 2 → <u>SKIP TO C13</u></p> <p>NOT AT ALL ..... <input type="checkbox"/> 3 → <u>SKIP TO NEXT SECTION</u></p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → <u>SKIP TO NEXT SECTION</u></p> <p>REFUSED..... <input type="checkbox"/> 9 → <u>SKIP TO NEXT SECTION</u></p>	✓	✓



Questionnaire				2009	2011
<b>[CURRENT DAILY SMOKELESS TOBACCO USERS]</b>					
<b>C04.</b>	How old were you when you first started using smokeless tobacco *daily*?				
	[IF DON'T KNOW OR REFUSED, ENTER 99]			✓	✓
	<input type="text"/> <input type="text"/>				
	<u>[IF C04 = 99, ASK C05. OTHERWISE SKIP TO C06.]</u>				
<b>C05.</b>	How many years ago did you first start using smokeless tobacco *daily*?				
	[IF REFUSED, ENTER 99]			✓	✓
	<input type="text"/> <input type="text"/>				
<b>C06.</b>	On average, how many times a day do you use the following products? Also, let me know if you use the product, but not every day.				
	[IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, ENTER 888]				
	READ EACH ITEM:				
a.	Snuff, by keeping mouth?			PER DAY	
a1.	[IF C06a=888] On average, how many times a week do you currently use snuff, by keeping mouth?			PER WEEK	
b.	Snuff (which had tobacco component), by nose?			PER DAY	
b1.	[IF C06b=888] On average, how many times a week do you currently use snuff (which had tobacco component), by nose?			PER WEEK	✓
c.	Chewing tobacco?			PER DAY	
c1.	[IF C06c=888] On average, how many times a week do you currently use chewing tobacco?			PER WEEK	
d.	Betel quid with tobacco?			PER DAY	
d1.	[IF C06d=888] On average, how many times a week do you currently use betel quid with tobacco?			PER WEEK	
e.	Any others? (⇒ e1. Please specify the other type you currently use each day:_____)			PER DAY	
e2.	[IF C06e=888] On average, how many times a week do you currently use [FILL PRODUCT]?			PER WEEK	

Questionnaire		2009	2011
<b>C07.</b>	How soon after you wake up do you usually use smokeless tobacco for the first time? Would you say within 5 minutes, 6 to 30 minutes, 31 to 60 minutes, or more than 60 minutes?		
	WITHIN 5 MINUTES..... <input type="checkbox"/> 1		
	6 TO 30 MINUTES..... <input type="checkbox"/> 2	✓	✓
	31 TO 60 MINUTES..... <input type="checkbox"/> 3		
	MORE THAN 60 MINUTES..... <input type="checkbox"/> 4		
	REFUSED..... <input type="checkbox"/> 9		
<u>[SKIP TO NEXT SECTION]</u>			

Questionnaire	2009	2011																									
<p><b>[CURRENT LESS THAN DAILY SMOKELESS TOBACCO USERS]</b></p> <p><b>C08.</b> How old were you when you first started using smokeless tobacco *daily*?                      [IF DON'T KNOW OR REFUSED, ENTER 99]</p> <p><input type="text"/> <input type="text"/></p> <p><b>[IF C08 = 99, ASK C09. OTHERWISE SKIP TO C10.]</b></p>	✓	✓																									
<p><b>C09.</b> How many years ago did you first start using smokeless tobacco *daily*?                      [IF REFUSED, ENTER 99]</p> <p><input type="text"/> <input type="text"/></p>	✓	✓																									
<p><b>C10.</b> How many times a week do you usually use the following?                      [IF RESPONDENT REPORTS DOING THE ACTIVITY *WITHIN THE PAST 30 DAYS*, BUT LESS THAN ONCE PER WEEK, ENTER 888]</p> <p><b>READ EACH ITEM:</b></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 45%;">a. Snuff, by mouth? .....</td> <td style="width: 10%;"><input type="text"/></td> <td style="width: 10%;"><input type="text"/></td> <td style="width: 10%;"><input type="text"/></td> <td style="width: 15%;">TIMES PER WEEK</td> </tr> <tr> <td>b. Snuff (which had tobacco component), by nose? .....</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>TIMES PER WEEK</td> </tr> <tr> <td>c. Chewing tobacco?.....</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>TIMES PER WEEK</td> </tr> <tr> <td>d. Betel quid with tobacco (which had component with shredded tobacco)?.....</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>TIMES PER WEEK</td> </tr> <tr> <td>e. Any others? .....</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>TIMES PER WEEK</td> </tr> </table> <p>→ e1. Please specify the other type you currently use during a usual week:</p>	a. Snuff, by mouth? .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	TIMES PER WEEK	b. Snuff (which had tobacco component), by nose? .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	TIMES PER WEEK	c. Chewing tobacco?.....	<input type="text"/>	<input type="text"/>	<input type="text"/>	TIMES PER WEEK	d. Betel quid with tobacco (which had component with shredded tobacco)?.....	<input type="text"/>	<input type="text"/>	<input type="text"/>	TIMES PER WEEK	e. Any others? .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	TIMES PER WEEK	✓	✓
a. Snuff, by mouth? .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	TIMES PER WEEK																							
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e. Any others? .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	TIMES PER WEEK																							
<p><b>C19.</b> <b>[ADMINISTER IF B01=2 AND C01=2. ELSE GO TO NEXT SECTION.]</b></p> <p>You mentioned that you smoke tobacco, but not every day and that you also use smokeless tobacco, but not every day. Thinking about both smoking tobacco and using smokeless tobacco, would you say you use tobacco on a daily basis or less than daily?</p> <p>DAILY..... <input type="checkbox"/> 1                      LESS THAN DAILY..... <input type="checkbox"/> 2                      REFUSED..... <input type="checkbox"/> 9</p>	-	✓																									

Questionnaire	2009	2011
<p><b>[FORMER SMOKELESS TOBACCO USERS]</b></p> <p><b>C11.</b> How old were you when you first started using smokeless tobacco *daily*?</p> <p>[IF DON'T KNOW OR REFUSED, ENTER 99]</p> <p><input type="text"/> <input type="text"/></p> <p><u>[IF C11 = 99, ASK C12. OTHERWISE SKIP TO C13a.]</u></p>	✓	✓
<p><b>C12.</b> How many years ago did you first start using smokeless tobacco *daily*?</p> <p>[IF REFUSED, ENTER 99]</p> <p><input type="text"/> <input type="text"/></p>	✓	✓
<p><b>C13a.</b> How long has it been since you stopped using smokeless tobacco?</p> <p>[ONLY INTERESTED IN WHEN RESPONDENT STOPPED USING SMOKELESS TOBACCO REGULARLY — DO NOT INCLUDE RARE INSTANCES OF USING SMOKELESS TOBACCO]</p> <p>ENTER UNIT ON THIS SCREEN AND NUMBER ON NEXT SCREEN]</p> <p>YEARS..... <input type="checkbox"/> 1</p> <p>MONTHS ..... <input type="checkbox"/> 2</p> <p>WEEKS ..... <input type="checkbox"/> 3</p> <p>DAYS ..... <input type="checkbox"/> 4</p> <p>LESS THAN 1 DAY ..... <input type="checkbox"/> 5 → <b>SKIP TO C14</b></p> <p>DON'T KNOW..... <input type="checkbox"/> 7 → <b>SKIP TO NEXT SECTION</b></p> <p>REFUSED..... <input type="checkbox"/> 9 → <b>SKIP TO NEXT SECTION</b></p>	✓	✓
<p><b>C13b.</b> [ENTER NUMBER OF (YEARS/MONTHS/WEEKS/DAYS)]</p> <p><input type="text"/> <input type="text"/> <input type="text"/></p> <p><u>[IF C13a/b &lt; 1 YEAR (&lt; 12 MONTHS), THEN CONTINUE. OTHERWISE SKIP TO NEXT SECTION.]</u></p>	✓	✓

Questionnaire		2009	2011																																				
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p><u>IF B14 HAS NOT BEEN ASKED</u> → <u>CONTINUE WITH C14</u></p> <p><u>IF B14 = YES</u> → <u>SKIP TO C16</u></p> <p><u>IF B14 = NO OR REFUSED</u> → <u>SKIP TO C18</u></p> </div> <p><b>C14.</b> Have you visited a doctor or other health care provider in the past 12 months?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → <u>SKIP TO C18</u></p> <p>REFUSED ..... <input type="checkbox"/> 9 → <u>SKIP TO C18</u></p>		✓	✓																																				
<p><b>C15.</b> How many times did you visit a doctor or health care provider in the past 12 months? Would you say 1 or 2 times, 3 to 5 times, or 6 or more times?</p> <p>1 OR 2 ..... <input type="checkbox"/> 1</p> <p>3 TO 5 ..... <input type="checkbox"/> 2</p> <p>6 OR MORE ..... <input type="checkbox"/> 3</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>		✓	✓																																				
<p><b>C16.</b> During any visit to a doctor or health care provider in the past 12 months, were you asked if you use smokeless tobacco?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → <u>SKIP TO C18</u></p> <p>REFUSED ..... <input type="checkbox"/> 9 → <u>SKIP TO C18</u></p>		✓	✓																																				
<p><b>C17.</b> During any visit to a doctor or health care provider in the past 12 months, were you advised to stop using smokeless tobacco?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>		✓	✓																																				
<p><b>C18.</b> During the past 12 months, did you use any of the following to try to stop using smokeless tobacco?</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">READ EACH ITEM:</th> <th style="border: 1px solid black; text-align: center; padding: 2px;">YES ▼</th> <th style="border: 1px solid black; text-align: center; padding: 2px;">NO ▼</th> <th style="border: 1px solid black; text-align: center; padding: 2px;">REFUSED ▼</th> </tr> </thead> <tbody> <tr> <td>a. Counseling, including at a cessation clinic? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>b. Nicotine replacement therapy, such as the patch or gum?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>c. Other prescription medications? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>d. Traditional medicines, for example <i>local herb</i>? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>e. A quit line or a telephone support line? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>f. Switching to smoking tobacco? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>g. On my own/ willpower .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>h. Anything else?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> </tbody> </table> <p>→ h1. Please specify what you used to try to stop using smokeless tobacco:</p>		READ EACH ITEM:	YES ▼	NO ▼	REFUSED ▼	a. Counseling, including at a cessation clinic? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	b. Nicotine replacement therapy, such as the patch or gum?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	c. Other prescription medications? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	d. Traditional medicines, for example <i>local herb</i> ? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	e. A quit line or a telephone support line? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	f. Switching to smoking tobacco? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	g. On my own/ willpower .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	h. Anything else?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	✓	✓
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**SECTION D1. CESSATION – TOBACCO SMOKING**

Questionnaire	2009	2011																																				
<p><b>IF B01 = 1 OR 2 (RESPONDENT CURRENTLY SMOKES TOBACCO), CONTINUE WITH THIS SECTION.</b>  <b>IF B01 = 3, 7, OR 9 (RESPONDENT DOES NOT CURRENTLY SMOKE TOBACCO), SKIP TO NEXT SECTION.</b></p>																																						
<p><b>D01.</b> The next questions ask about any attempts to stop smoking that you might have made during the past 12 months. Please think about tobacco smoking.</p> <p>During the past 12 months, have you tried to stop smoking?</p> <p>YES ..... <input type="checkbox"/> 1          NO ..... <input type="checkbox"/> 2 → SKIP TO INSTRUCTION BEFORE D04          REFUSED ..... <input type="checkbox"/> 9 → SKIP TO INSTRUCTION BEFORE D04</p>	✓	✓																																				
<p><b>D02a.</b> Thinking about the last time you tried to quit, how long did you stop smoking?</p> <p>[ENTER UNIT ON THIS SCREEN AND NUMBER ON NEXT SCREEN]</p> <p>MONTHS ..... <input type="checkbox"/> 1          WEEKS ..... <input type="checkbox"/> 2          DAYS ..... <input type="checkbox"/> 3          LESS THAN 1 DAY (24 HOURS) ..... <input type="checkbox"/> 4 → SKIP TO D03          DON'T KNOW ..... <input type="checkbox"/> 7 → SKIP TO D03          REFUSED ..... <input type="checkbox"/> 9 → SKIP TO D03</p>	✓	✓																																				
<p><b>D02b.</b> [ENTER NUMBER OF (MONTHS/WEEKS/DAYS)]</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div>																																						
<p><b>D03.</b> During the past 12 months, did you use any of the following to try to stop smoking tobacco?</p> <p>READ EACH ITEM:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 10%; text-align: center;">YES ▼</th> <th style="width: 10%; text-align: center;">NO ▼</th> <th style="width: 10%; text-align: center;">REFUSED ▼</th> </tr> </thead> <tbody> <tr> <td>a. Counseling, including at a smoking cessation clinic? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>b. Nicotine replacement therapy, such as the patch or gum? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>c. Other prescription medications? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>d. Traditional medicines, for example <i>local herb</i>? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>e. A quit line or a smoking telephone support line? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>f. Switching to smokeless tobacco? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>g. On my own/ willpower .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>h. Anything else? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> </tbody> </table> <p>→ h1. Please specify what you used to try to stop smoking:</p>		YES ▼	NO ▼	REFUSED ▼	a. Counseling, including at a smoking cessation clinic? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	b. Nicotine replacement therapy, such as the patch or gum? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	c. Other prescription medications? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	d. Traditional medicines, for example <i>local herb</i> ? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	e. A quit line or a smoking telephone support line? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	f. Switching to smokeless tobacco? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	g. On my own/ willpower .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	h. Anything else? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 9	✓	✓
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Questionnaire	2009	2011
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p><u>IF C14 HAS NOT BEEN ASKED</u> → <u>CONTINUE WITH D04</u></p> <p><u>IF C14 = YES</u> → <u>SKIP TO D06</u></p> <p><u>IF C14 = NO OR REFUSED</u> → <u>SKIP TO D08</u></p> </div> <p><b>D04.</b> Have you visited a doctor or other health care provider in the past 12 months?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → <u>SKIP TO D08</u></p> <p>REFUSED..... <input type="checkbox"/> 9 → <u>SKIP TO D08</u></p>	✓	✓
<p><b>D05.</b> How many times did you visit a doctor or health care provider in the past 12 months? Would you say 1 or 2 times, 3 to 5 times, or 6 or more times?</p> <p>1 OR 2..... <input type="checkbox"/> 1</p> <p>3 TO 5..... <input type="checkbox"/> 2</p> <p>6 OR MORE..... <input type="checkbox"/> 3</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>D06.</b> During any visit to a doctor or health care provider in the past 12 months, were you asked if you smoke tobacco?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → <u>SKIP TO D08</u></p> <p>REFUSED..... <input type="checkbox"/> 9 → <u>SKIP TO D08</u></p>	✓	✓
<p><b>D07.</b> During any visit to a doctor or health care provider in the past 12 months, were you advised to quit smoking tobacco?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>D08.</b> Which of the following best describes your thinking about quitting smoking? I am planning to quit within the next month, I am thinking about quitting within the next 12 months, I will quit someday but not within the next 12 months, or I am not interested in quitting?</p> <p>QUIT WITHIN THE NEXT MONTH ..... <input type="checkbox"/> 1</p> <p>THINKING WITHIN THE NEXT 12 MONTHS..... <input type="checkbox"/> 2</p> <p>QUIT SOMEDAY, BUT NOT NEXT 12 MONTHS. .... <input type="checkbox"/> 3</p> <p>NOT INTERESTED IN QUITTING ..... <input type="checkbox"/> 4</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓

**SECTION D2. CESSATION – SMOKELESS TOBACCO**

Questionnaire	2009	2011																																				
<p><u>IF C01 = 1 OR 2 (RESPONDENT CURRENTLY USES SMOKELESS TOBACCO), CONTINUE WITH THIS SECTION.</u></p> <p><u>IF C01 = 3, 7, OR 9 (RESPONDENT DOES NOT CURRENTLY USE SMOKELESS TOBACCO), SKIP TO NEXT SECTION.</u></p>																																						
<p><b>D09.</b> The next questions ask about any attempts to stop using smokeless tobacco that you might have made during the past 12 months. Please think about your use of smokeless tobacco.</p> <p>During the past 12 months, have you tried to stop using smokeless tobacco?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → <u>SKIP TO INSTRUCTION BEFORE D12</u></p> <p>REFUSED..... <input type="checkbox"/> 9 → <u>SKIP TO INSTRUCTION BEFORE D12</u></p>	✓	✓																																				
<p><b>D10a.</b> Thinking about the last time you tried to quit, how long did you stop using smokeless tobacco?</p> <p>[ENTER UNIT ON THIS SCREEN AND NUMBER ON NEXT SCREEN]</p> <p>MONTHS..... <input type="checkbox"/> 1</p> <p>WEEKS ..... <input type="checkbox"/> 2</p> <p>DAYS ..... <input type="checkbox"/> 3</p> <p>LESS THAN 1 DAY (24 HOURS)..... <input type="checkbox"/> 4 → <u>SKIP TO D11</u></p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → <u>SKIP TO D11</u></p> <p>REFUSED ..... <input type="checkbox"/> 9 → <u>SKIP TO D11</u></p>	✓	✓																																				
<p><b>D10b.</b> [ENTER NUMBER OF (MONTHS/WEEKS/DAYS)]</p> <div style="border: 1px solid black; width: 100px; height: 30px; margin: 10px auto;"></div>	✓	✓																																				
<p><b>D11.</b> During the past 12 months, have you used any of the following to try and stop using smokeless tobacco?</p> <p>READ EACH ITEM:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">YES ▼</th> <th style="width: 10%; text-align: center;">NO ▼</th> <th style="width: 10%; text-align: center;">REFUSED ▼</th> </tr> </thead> <tbody> <tr> <td>a. Counseling, including at a cessation clinic? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1.....</td> <td style="text-align: center;"><input type="checkbox"/> 2 ...</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>b. Nicotine replacement therapy, such as the patch or gum?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1.....</td> <td style="text-align: center;"><input type="checkbox"/> 2 ...</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>c. Other prescription medications? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1.....</td> <td style="text-align: center;"><input type="checkbox"/> 2 ...</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>d. Traditional medicines, for example <i>local herb</i>?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1.....</td> <td style="text-align: center;"><input type="checkbox"/> 2 ...</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>e. A quit line or a telephone support line? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1.....</td> <td style="text-align: center;"><input type="checkbox"/> 2 ...</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>f. Switching to smoking tobacco? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1.....</td> <td style="text-align: center;"><input type="checkbox"/> 2 ...</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>g. On my own/ will power .....</td> <td style="text-align: center;"><input type="checkbox"/> 1.....</td> <td style="text-align: center;"><input type="checkbox"/> 2 ...</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>h. Anything else? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1.....</td> <td style="text-align: center;"><input type="checkbox"/> 2 ...</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> </tbody> </table> <p>→ h1. Please specify what you used to try to stop using smokeless tobacco:</p>		YES ▼	NO ▼	REFUSED ▼	a. Counseling, including at a cessation clinic? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2 ...	<input type="checkbox"/> 9	b. Nicotine replacement therapy, such as the patch or gum?.....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2 ...	<input type="checkbox"/> 9	c. Other prescription medications? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2 ...	<input type="checkbox"/> 9	d. Traditional medicines, for example <i>local herb</i> ?.....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2 ...	<input type="checkbox"/> 9	e. A quit line or a telephone support line? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2 ...	<input type="checkbox"/> 9	f. Switching to smoking tobacco? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2 ...	<input type="checkbox"/> 9	g. On my own/ will power .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2 ...	<input type="checkbox"/> 9	h. Anything else? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2 ...	<input type="checkbox"/> 9	✓	✓
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Questionnaire	2009	2011
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p><b>IF BOTH B14 AND D04 HAVE NOT BEEN ASKED → CONTINUE WITH D12</b></p> <p><b>IF B14 OR D04 = YES → SKIP TO D14</b></p> <p><b>IF B14 OR D04 = NO OR REFUSED → SKIP TO D16</b></p> </div> <p><b>D12.</b> Have you visited a doctor or other health care provider in the past 12 months?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → <a href="#">SKIP TO D16</a></p> <p>REFUSED..... <input type="checkbox"/> 9 → <a href="#">SKIP TO D16</a></p>	✓	✓
<p><b>D13.</b> How many times did you visit a doctor or health care provider in the past 12 months? Would you say 1 or 2 times, 3 to 5 times, or 6 or more times?</p> <p>1 OR 2..... <input type="checkbox"/> 1</p> <p>3 TO 5..... <input type="checkbox"/> 2</p> <p>6 OR MORE..... <input type="checkbox"/> 3</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>D14.</b> During any visit to a doctor or health care provider in the past 12 months, were you asked if you use smokeless tobacco?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → <a href="#">SKIP TO D16</a></p> <p>REFUSED..... <input type="checkbox"/> 9 → <a href="#">SKIP TO D16</a></p>	✓	✓
<p><b>D15.</b> During any visit to a doctor or health care provider in the past 12 months, were you advised to stop using smokeless tobacco?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>D16.</b> Which of the following best describes your thinking about quitting smokeless tobacco? I am planning to quit within the next month, I am thinking about quitting within the next 12 months, I will quit someday but not within the next 12 months, or I am not interested in quitting?</p> <p>QUIT WITHIN THE NEXT MONTH ..... <input type="checkbox"/> 1</p> <p>THINKING WITHIN THE NEXT 12 MONTHS..... <input type="checkbox"/> 2</p> <p>QUIT SOMEDAY, BUT NOT NEXT 12 MONTHS. .... <input type="checkbox"/> 3</p> <p>NOT INTERESTED IN QUITTING ..... <input type="checkbox"/> 4</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓

**SECTION E. SECONDHAND SMOKE**

Questionnaire	2009	2011
<p><b>E01.</b> I would now like to ask you a few questions about smoking in various places.</p> <p>Which of the following best describes the rules about smoking inside of your home: Smoking is allowed inside of your home, smoking is generally not allowed inside of your home but there are exceptions, smoking is never allowed inside of your home, or there are no rules about smoking in your home?</p> <p>ALLOWED ..... <input type="checkbox"/> 1</p> <p>NOT ALLOWED, BUT EXCEPTIONS..... <input type="checkbox"/> 2</p> <p>NEVER ALLOWED ..... <input type="checkbox"/> 3 → SKIP TO E04</p> <p>NO RULES ..... <input type="checkbox"/> 4 → SKIP TO E03</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → SKIP TO E03</p> <p>REFUSED..... <input type="checkbox"/> 9 → SKIP TO E03</p>	<p>✓</p>	<p>✓</p>
<p><b>E02.</b> Inside your home, is smoking allowed in every room?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	<p>✓</p>	<p>✓</p>
<p><b>E03.</b> How often does *anyone* smoke inside your home? Would you say daily, weekly, monthly, less than monthly, or never?</p> <p>DAILY ..... <input type="checkbox"/> 1</p> <p>WEEKLY ..... <input type="checkbox"/> 2</p> <p>MONTHLY ..... <input type="checkbox"/> 3</p> <p>LESS THAN MONTHLY ..... <input type="checkbox"/> 4</p> <p>NEVER ..... <input type="checkbox"/> 5</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	<p>✓</p>	<p>✓</p>
<p><b>EE3_1.</b> [IF B1=1 OR 2, ADMINISTER. ELSE, SKIP TO E4]</p> <p>Do you think that not being allowed to smoke in your home would make quitting easier?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	<p>✓</p>	<p>✓</p>
<p><b>E04.</b> Do you currently work outside of your home?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO/DON'T WORK..... <input type="checkbox"/> 2 → SKIP TO E09</p> <p>REFUSED..... <input type="checkbox"/> 9 → SKIP TO E09</p>	<p>✓</p>	<p>✓</p>

Questionnaire	2009	2011
<p><b>E05.</b> Do you usually work indoors or outdoors?</p> <p>INDOORS ..... <input type="checkbox"/> 1 → SKIP TO E07</p> <p>OUTDOORS ..... <input type="checkbox"/> 2</p> <p>BOTH ..... <input type="checkbox"/> 3 → SKIP TO E07</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>E06.</b> Are there any indoor areas at your work place?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → SKIP TO E09</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → SKIP TO E09</p> <p>REFUSED ..... <input type="checkbox"/> 9 → SKIP TO E09</p>	✓	✓
<p><b>E07.</b> Which of the following best describes the indoor smoking policy where you work: Smoking is allowed anywhere, smoking is allowed only in some indoor areas, smoking is not allowed in any indoor areas, or there is no policy?</p> <p>ALLOWED ANYWHERE ..... <input type="checkbox"/> 1</p> <p>ALLOWED ONLY IN SOME INDOOR AREAS ..... <input type="checkbox"/> 2</p> <p>NOT ALLOWED IN ANY INDOOR AREAS ..... <input type="checkbox"/> 3</p> <p>THERE IS NO POLICY ..... <input type="checkbox"/> 4</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>E08.</b> During the past 30 days, did anyone smoke in indoor areas where you work?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>E09.</b> During the past 30 days, did you visit any government buildings or government offices?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → SKIP TO E11</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → SKIP TO E11</p> <p>REFUSED ..... <input type="checkbox"/> 9 → SKIP TO E11</p>	✓	✓
<p><b>E10.</b> Did anyone smoke inside of any government buildings or government offices that you visited in the past 30 days?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>E11.</b> During the past 30 days, did you visit any health care facilities?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → SKIP TO E13</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → SKIP TO E13</p> <p>REFUSED ..... <input type="checkbox"/> 9 → SKIP TO E13</p>	✓	✓

Questionnaire	2009	2011
<p><b>E12.</b> Did anyone smoke inside of any health care facilities that you visited in the past 30 days?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO..... <input type="checkbox"/> 2</p> <p>DON'T KNOW..... <input type="checkbox"/> 7</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>E13.</b> During the past 30 days, did you visit any restaurants ?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO..... <input type="checkbox"/> 2 → <a href="#">SKIP TO E15</a></p> <p>DON'T KNOW..... <input type="checkbox"/> 7 → <a href="#">SKIP TO E15</a></p> <p>REFUSED ..... <input type="checkbox"/> 9 → <a href="#">SKIP TO E15</a></p> <p><b>Note :</b> * The meaning of a restaurant in 2011GATS were difference meaning as compare with 2009 GATS</p>		✓
<p><b>E14.</b> Did anyone smoke inside of any restaurants that you visited in the past 30 days?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO..... <input type="checkbox"/> 2</p> <p>DON'T KNOW..... <input type="checkbox"/> 7</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>E15.</b> During the past 30 days, did you use any public transportation?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO..... <input type="checkbox"/> 2 → <a href="#">SKIP TO E17</a></p> <p>DON'T KNOW..... <input type="checkbox"/> 7 → <a href="#">SKIP TO E17</a></p> <p>REFUSED ..... <input type="checkbox"/> 9 → <a href="#">SKIP TO E17</a></p>	✓	✓
<p><b>E16.</b> Did anyone smoke inside of any public transportation that you used in the past 30 days?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO..... <input type="checkbox"/> 2</p> <p>DON'T KNOW..... <input type="checkbox"/> 7</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>E17.</b> Based on what you know or believe, does breathing other people's smoke cause serious illness in non-smokers?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO..... <input type="checkbox"/> 2 → <a href="#">SKIP TO E19</a></p> <p>DON'T KNOW..... <input type="checkbox"/> 7 → <a href="#">SKIP TO E19</a></p> <p>REFUSED ..... <input type="checkbox"/> 9 → <a href="#">SKIP TO E19</a></p>	✓	✓

Questionnaire		2009	2011																																								
<b>E18.</b>	<p>Based on what you know or believe, does breathing smoke from other people's cigarettes cause any of the following?</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DON'T KNOW</th> <th>REFUSED</th> </tr> <tr> <th></th> <th>▼</th> <th>▼</th> <th>▼</th> <th>▼</th> </tr> </thead> <tbody> <tr> <td>a. Heart disease in adults? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>b. Lung illnesses in children? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>c. Lung cancer in adults? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>d. Emphysema? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>e. Low birth weight (&lt; 2.5 kilograms)? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>f. Premature birth (28 - 34 weeks)? .....</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> </tbody> </table>		YES	NO	DON'T KNOW	REFUSED		▼	▼	▼	▼	a. Heart disease in adults? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	b. Lung illnesses in children? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	c. Lung cancer in adults? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	d. Emphysema? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	e. Low birth weight (< 2.5 kilograms)? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	f. Premature birth (28 - 34 weeks)? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	✓	✓
	YES	NO	DON'T KNOW	REFUSED																																							
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a. Heart disease in adults? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9																																							
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f. Premature birth (28 - 34 weeks)? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9																																							
<b>E19.</b>	<p>During the past 30 days, did you visit any schools?</p> <p>YES.....<input type="checkbox"/> 1</p> <p>NO .....<input type="checkbox"/> 2 → SKIP TO E21</p> <p>DON'T KNOW .....<input type="checkbox"/> 7 → SKIP TO E21</p> <p>REFUSED.....<input type="checkbox"/> 9</p>	✓	✓																																								
<b>E20.</b>	<p>Did anyone smoke inside of any schools that you visited in the past 30 days?</p> <p>YES.....<input type="checkbox"/> 1</p> <p>NO .....<input type="checkbox"/> 2</p> <p>DON'T KNOW .....<input type="checkbox"/> 7</p> <p>REFUSED.....<input type="checkbox"/> 9</p>	✓	✓																																								
<b>E21.</b>	<p>During the past 30 days, did you visit any universities?</p> <p>YES.....<input type="checkbox"/> 1</p> <p>NO .....<input type="checkbox"/> 2 → SKIP TO E25</p> <p>DON'T KNOW .....<input type="checkbox"/> 7 → SKIP TO E25</p> <p>REFUSED.....<input type="checkbox"/> 9</p>	✓	✓																																								
<b>E22.</b>	<p>Did anyone smoke inside of any universities that you visited in the past 30 days?</p> <p>YES.....<input type="checkbox"/> 1</p> <p>NO .....<input type="checkbox"/> 2</p> <p>DON'T KNOW .....<input type="checkbox"/> 7</p> <p>REFUSED.....<input type="checkbox"/> 9</p>	✓	✓																																								
<b>E25.</b>	<p>During the past 30 days, did you visit any bars or night clubs?</p> <p>YES.....<input type="checkbox"/> 1</p> <p>NO .....<input type="checkbox"/> 2 → SKIP TO EE26_1</p> <p>DON'T KNOW .....<input type="checkbox"/> 7 → SKIP TO EE26_1</p> <p>REFUSED.....<input type="checkbox"/> 9</p>	✓	✓																																								

Questionnaire	2009	2011
<p><b>E26.</b> Did anyone smoke inside of any bars or night clubs that you visited in the past 30 days?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>EE26_1.</b> During the past 30 days, did you visit any markets?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → SKIP TO E29b</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → SKIP TO E29b</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>EE26_2.</b> Did anyone smoke in any markets you visited in the past 30 days?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>E29g.</b> Do you support the law that prohibits smoking absolutely (100%) in universities?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<p><b>EE26_3.</b> Do you support the law that prohibits smoking absolutely (100%) in petrol stations?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	-	✓
<p><b>EE26_4.</b> Do you support the law that prohibits smoking absolutely (100%) in international airports in Thailand?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	-	✓
<p><b>E29b.</b> Do you support the law that prohibits smoking inside of private workplaces which do not have air-conditioning?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	-
<p><b>E29h.</b> Do you support the law that prohibits smoking absolutely (100%) in of religious places?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	-

**SECTION F. ECONOMICS – MANUFACTURED CIGARETTES**

Questionnaire	2009	2011
<p><u>IF [B01 = 1 OR 2 (RESPONDENT CURRENTLY SMOKES DAILY OR LESS THAN DAILY)]</u>  <u>AND</u>  <u>[(B06a OR B10a) &gt; 0 OR = 888 (RESPONDENT SMOKES MANUFACTURED CIGARETTES)],</u>  <u>THEN CONTINUE WITH THIS SECTION.</u>  <u>OTHERWISE, SKIP TO NEXT SECTION.</u></p> <p><b>F01a.</b> The next few questions are about the last time you purchased cigarettes for yourself to smoke.</p> <p>The last time you bought cigarettes for yourself, how many cigarettes did you buy?</p> <p>[ENTER UNIT ON THIS SCREEN AND NUMBER ON NEXT SCREEN]</p> <p>CIGARETTES..... <input type="checkbox"/> 1            PACKS..... <input type="checkbox"/> 2            CARTONS..... <input type="checkbox"/> 3            OTHER (SPECIFY) ..... <input type="checkbox"/> 4 → F01c. [SPECIFY THE UNIT]: _____            NEVER BOUGHT CIGARETTES..... <input type="checkbox"/> 5 → <u>SKIP TO NEXT SECTION</u>            REFUSED..... <input type="checkbox"/> 9 → <u>SKIP TO F03</u></p>		✓
<p><b>F01b.</b> [ENTER NUMBER OF (CIGARETTES/PACKS/CARTONS/OTHER)]</p> <p><input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/></p>		✓
<p><b>F01d.</b> <u>[IF F01a=OTHER, GO TO F01dA]</u></p> <p>Did each (pack/carton) contain (10/100) cigarettes, (20/200) cigarettes, or another amount?</p> <p>10/100..... <input type="checkbox"/> 1            20/200..... <input type="checkbox"/> 2            OTHER AMOUNT..... <input type="checkbox"/> 7 → F01dA. How many cigarettes were in each (pack/carton/other)?            REFUSED..... <input type="checkbox"/> 9</p>		✓
<p><b>F02.</b> In total, how much money did you pay for this purchase?</p> <p>[IF DON'T KNOW OR REFUSED, ENTER 9999]</p> <p><input style="width: 60px; height: 20px;" type="text"/> [ADJUST RANGE AND DK/REF VALUE FOR SPECIFIC COUNTRY]</p>	✓	✓

**Remark :** F01a – F01b – F01d were difference number as compare with 2009 GATS but the same meaning as compare with F01 of 2009 GATS

Questionnaire		2009	2011
<b>F03.</b>	<p>What brand did you buy the last time you purchased cigarettes for yourself?</p> <p>KRONGTHIP ..... <input type="checkbox"/> 1    SAI-FON ..... <input type="checkbox"/> 2</p> <p>KRUNGTHONG ..... <input type="checkbox"/> 3    SAMIT ..... <input type="checkbox"/> 4</p> <p>ROYAL ..... <input type="checkbox"/> 5    WANDER ..... <input type="checkbox"/> 6</p> <p>MARLBORO ..... <input type="checkbox"/> 7    L&amp;M ..... <input type="checkbox"/> 8</p> <p>WINSTON ..... <input type="checkbox"/> 9    MORE ..... <input type="checkbox"/> 10</p> <p>DUNHILL ..... <input type="checkbox"/> 11    SMS ..... <input type="checkbox"/> 12</p> <p>SHOOT ..... <input type="checkbox"/> 13    BREAK ..... <input type="checkbox"/> 14</p> <p>FAVOR CIGARETTES ..... <input type="checkbox"/> 15</p> <p>OTHERS ..... <input type="checkbox"/> 16 → F03a. [SPECIFY BRAND]: _____</p> <p>DON'T REMEMBER/ UNKNOWN ..... <input type="checkbox"/> 77</p> <p>REFUSED ..... <input type="checkbox"/> 99</p> <p><b>Note :</b> * answer in 12, 13, 14 and 15 added for GATS 2011</p>	✓	✓
<b>F04.</b>	<p>The last time you purchased cigarettes for yourself, where did you buy them?</p> <p>VENDING MACHINE ..... <input type="checkbox"/> 1</p> <p>GROCERY ..... <input type="checkbox"/> 2</p> <p>CONVENIENT SHOP ..... <input type="checkbox"/> 3</p> <p>WHOLESALE SHOP/ DEPARTMENT STORE ..... <input type="checkbox"/> 4</p> <p>STREET VENDOR ..... <input type="checkbox"/> 5</p> <p>HAWKERS ..... <input type="checkbox"/> 6</p> <p>FLEA MARKET ..... <input type="checkbox"/> 7</p> <p>MILITARY STORE ..... <input type="checkbox"/> 8</p> <p>DUTY-FREE SHOP ..... <input type="checkbox"/> 9</p> <p>OUTSIDE THE COUNTRY ..... <input type="checkbox"/> 10</p> <p>INTERNET ..... <input type="checkbox"/> 11</p> <p>FROM ANOTHER PERSON ..... <input type="checkbox"/> 12</p> <p>OTHERS ..... <input type="checkbox"/> 13 → F04a. [SPECIFY LOCATION]: _____</p> <p>DON'T REMEMBER ..... <input type="checkbox"/> 77</p> <p>REFUSED ..... <input type="checkbox"/> 99</p>	✓	✓



Questionnaire		2009	2011
<b>F05.</b>	<p>Were these cigarettes filtered or non-filtered?</p> <p>FILTERED ..... <input type="checkbox"/> 1</p> <p>NON-FILTERED ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<b>F06.</b>	<p>Were these cigarettes labeled as light, mild, or low tar?</p> <p>LIGHT ..... <input type="checkbox"/> 1</p> <p>MILD..... <input type="checkbox"/> 2</p> <p>LOW TAR ..... <input type="checkbox"/> 3</p> <p>NONE OF THE ABOVE..... <input type="checkbox"/> 4</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	-
<b>FF7.</b>	<p>The last time you purchased cigarettes for yourself, did the cigarette package have a pictorial health warning?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<b>FF8.</b>	<p>Which of the following statements comes closest to your opinion on cigarette prices? Would you say cigarettes are too expensive and I cannot afford to buy as many as I needed, cigarettes are expensive, but I can still buy as many as I needed, cigarettes are a reasonable price, cigarettes are very cheap, or cigarettes are so cheap I smoke more than I should?</p> <p>CIGARETTES ARE TOO EXPENSIVE AND I CANNOT AFFORD TO BUY AS MANY AS I NEEDED ..... <input type="checkbox"/> 1</p> <p>CIGARETTES ARE EXPENSIVE, BUT I CAN STILL BUY AS MANY AS I NEEDED ..... <input type="checkbox"/> 2</p> <p>CIGARETTES ARE A REASONABLE PRICE ..... <input type="checkbox"/> 3</p> <p>CIGARETTES ARE VERY CHEAP ..... <input type="checkbox"/> 4</p> <p>CIGARETTES ARE SO CHEAP I SMOKE MORE THAN I SHOULD ..... <input type="checkbox"/> 5</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓

**SECTION G. MEDIA**

**STRUCTURE #1 – ASKING ABOUT ONLY ONE PRODUCT (E.G., CIGARETTES)**

Questionnaire	2009	2011																																																		
<p><b>G01intro.</b> The next few questions ask about your exposure to the media and advertisements in the last 30 days</p>																																																				
<p><b>G01.</b> In the last 30 days, have you noticed *information* about the dangers of smoking cigarettes or that encourages quitting in any of the following places?</p> <p style="text-align: center;">READ EACH ITEM:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">YES ▼</th> <th style="text-align: center;">NO ▼</th> <th style="text-align: center;">NOT APPLICABLE ▼</th> <th style="text-align: center;">REFUSED ▼</th> </tr> </thead> <tbody> <tr> <td>a. In newspapers or in magazines?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 7</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>b. On television? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 7</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>c. On the radio?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 7</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>d. On billboards? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 7</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>e. Leaflet/ Sticker?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 7</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>f. Internet?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 7</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>g. Campaign activity in public places?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 7</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>h. Demonstration board in other places ...</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 7</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>i. Somewhere else? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 7</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> </tbody> </table> <p>[DO NOT INCLUDE HEALTH WARNINGS ON CIGARETTE PACKAGES]</p> <p>→ i1. Please specify where: _____</p>		YES ▼	NO ▼	NOT APPLICABLE ▼	REFUSED ▼	a. In newspapers or in magazines?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	b. On television? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	c. On the radio?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	d. On billboards? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	e. Leaflet/ Sticker?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	f. Internet?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	g. Campaign activity in public places?.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	h. Demonstration board in other places ...	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	i. Somewhere else? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	✓	✓
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<p><b>G02.</b> In the last 30 days, did you notice any health warnings on cigarette packages?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → SKIP TO G04</p> <p>DID NOT SEE ANY CIGARETTE PACKAGES ..... <input type="checkbox"/> 3 → SKIP TO G04</p> <p>REFUSED..... <input type="checkbox"/> 9 → SKIP TO G04</p>	✓	✓																																																		
<p><b>GG3_1</b> [ADMINISTER IF B1 = 1 OR 2. ELSE GO TO G04]</p> <p>Did the health warnings make you concerned or think about the dangers of cigarettes on health?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓																																																		
<p><b>G03.</b> In the past 30 days, have warning labels on cigarette packages led you to think about quitting?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → SKIP TO GG3_4</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7 → SKIP TO GG3_4</p> <p>REFUSED..... <input type="checkbox"/> 9 → SKIP TO GG3_4</p>	✓	✓																																																		

Questionnaire		2009	2011																																																																	
<b>GG3_2</b>	<p>Do the health warnings on cigarette packages make you more likely to try to quit smoking? Would you say yes a lot, yes a little, or not at all?</p> <p>YES A LOT ..... <input type="checkbox"/> 1                      YES A LITTLE ..... <input type="checkbox"/> 2                      NOT AT ALL ..... <input type="checkbox"/> 3                      REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓																																																																	
<b>GG3_3</b>	<p>In your opinion, should the cigarette packet have a quit line number, that is a number people can call to get advice on quitting smoking?</p> <p>YES ..... <input type="checkbox"/> 1                      NO ..... <input type="checkbox"/> 2                      DON'T KNOW ..... <input type="checkbox"/> 7                      REFUSED ..... <input type="checkbox"/> 9</p>	✓	-																																																																	
<b>GG3_4</b>	<p>Did you notice a quit line number 1600 on the cigarette packet?</p> <p>YES ..... <input type="checkbox"/> 1                      NO ..... <input type="checkbox"/> 2 → SKIP TO G04                      DON'T KNOW ..... <input type="checkbox"/> 7 → SKIP TO G04                      REFUSED ..... <input type="checkbox"/> 9 → SKIP TO G04</p>	-	✓																																																																	
<b>GG3_5</b>	<p>Have you used a quit line number 1600 on the cigarette packet?</p> <p>YES ..... <input type="checkbox"/> 1                      NO ..... <input type="checkbox"/> 2                      DON'T KNOW ..... <input type="checkbox"/> 7                      REFUSED ..... <input type="checkbox"/> 9</p>	-	✓																																																																	
<b>G04.</b>	<p>In the last 30 days, have you noticed any *advertisements or signs promoting* cigarettes in the following places?</p> <p>READ EACH ITEM:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>NOT APPLICABLE</th> <th>REFUSED</th> </tr> <tr> <th></th> <th>▼</th> <th>▼</th> <th>▼</th> <th>▼</th> </tr> </thead> <tbody> <tr> <td>a. In stores where cigarettes are sold .....</td> <td><input type="checkbox"/> 1..</td> <td><input type="checkbox"/> 2 .....</td> <td><input type="checkbox"/> 7 .....</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>b. On television?.....</td> <td><input type="checkbox"/> 1..</td> <td><input type="checkbox"/> 2 .....</td> <td><input type="checkbox"/> 7 .....</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>c. On the radio? .....</td> <td><input type="checkbox"/> 1..</td> <td><input type="checkbox"/> 2 .....</td> <td><input type="checkbox"/> 7 .....</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>d. On billboards? .....</td> <td><input type="checkbox"/> 1..</td> <td><input type="checkbox"/> 2 .....</td> <td><input type="checkbox"/> 7 .....</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>e. On posters? .....</td> <td><input type="checkbox"/> 1..</td> <td><input type="checkbox"/> 2 .....</td> <td><input type="checkbox"/> 7 .....</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>f. In newspapers or magazines? .....</td> <td><input type="checkbox"/> 1..</td> <td><input type="checkbox"/> 2 .....</td> <td><input type="checkbox"/> 7 .....</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>g. In cinemas? .....</td> <td><input type="checkbox"/> 1..</td> <td><input type="checkbox"/> 2 .....</td> <td><input type="checkbox"/> 7 .....</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>h. On the internet?.....</td> <td><input type="checkbox"/> 1..</td> <td><input type="checkbox"/> 2 .....</td> <td><input type="checkbox"/> 7 .....</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>i. On public transportation vehicles or stations? .....</td> <td><input type="checkbox"/> 1..</td> <td><input type="checkbox"/> 2 .....</td> <td><input type="checkbox"/> 7 .....</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>j. Pub/ Bar/ Karaoke? .....</td> <td><input type="checkbox"/> 1..</td> <td><input type="checkbox"/> 2 .....</td> <td><input type="checkbox"/> 7 .....</td> <td><input type="checkbox"/> 9</td> </tr> <tr> <td>k. Anywhere else? .....</td> <td><input type="checkbox"/> 1..</td> <td><input type="checkbox"/> 2 .....</td> <td></td> <td><input type="checkbox"/> 9</td> </tr> </tbody> </table> <p>→ k1. Please specify where: _____</p>		YES	NO	NOT APPLICABLE	REFUSED		▼	▼	▼	▼	a. In stores where cigarettes are sold .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	b. On television?.....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	c. On the radio? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	d. On billboards? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	e. On posters? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	f. In newspapers or magazines? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	g. In cinemas? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	h. On the internet?.....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	i. On public transportation vehicles or stations? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	j. Pub/ Bar/ Karaoke? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	k. Anywhere else? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....		<input type="checkbox"/> 9	✓	✓
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<b>G05.</b>	<p>In the last 30 days, have you noticed any sport or sporting event that is associated with cigarette brands or cigarette companies?</p> <p>YES ..... <input type="checkbox"/> 1                      NO ..... <input type="checkbox"/> 2                      DON'T KNOW ..... <input type="checkbox"/> 7                      REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓																																																																	

Questionnaire		2009	2011																																																		
<b>GG5.</b>	<p>In the last 30 days, have you noticed any music, theatre, art, or fashion events that are associated with cigarette brands or cigarette companies?</p> <p>YES ..... <input type="checkbox"/> 1                      NO ..... <input type="checkbox"/> 2                      DON'T KNOW ..... <input type="checkbox"/> 7                      REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓																																																		
<b>GG5_1.</b>	<p>In the last 30 days, did you see a live program of sport racing from abroad which had brands or symbol cigarette companies?</p> <p>YES ..... <input type="checkbox"/> 1                      NO ..... <input type="checkbox"/> 2                      DON'T KNOW ..... <input type="checkbox"/> 7                      REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓																																																		
<b>G06.</b>	<p>In the past 30 days, did you see the cigarette sale promotion in these following forms?</p> <p>READ EACH ITEM:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">YES ▼</th> <th style="text-align: center;">NO ▼</th> <th style="text-align: center;">DON'T KNOW ▼</th> <th style="text-align: center;">REFUSED ▼</th> </tr> </thead> <tbody> <tr> <td>a. Free samples of cigarettes? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1..</td> <td style="text-align: center;"><input type="checkbox"/> 2 .....</td> <td style="text-align: center;"><input type="checkbox"/> 7 .....</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>b. Cigarettes at sale prices?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1..</td> <td style="text-align: center;"><input type="checkbox"/> 2 .....</td> <td style="text-align: center;"><input type="checkbox"/> 7 .....</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>c. Coupons for cigarettes? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1..</td> <td style="text-align: center;"><input type="checkbox"/> 2 .....</td> <td style="text-align: center;"><input type="checkbox"/> 7 .....</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>d. Free gifts or special discount offers on other products when buying cigarettes? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1..</td> <td style="text-align: center;"><input type="checkbox"/> 2 .....</td> <td style="text-align: center;"><input type="checkbox"/> 7 .....</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>e. Clothing or other items with a cigarette brand name or logo? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1..</td> <td style="text-align: center;"><input type="checkbox"/> 2 .....</td> <td style="text-align: center;"><input type="checkbox"/> 7 .....</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>f. Cigarette promotions in the mail? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1..</td> <td style="text-align: center;"><input type="checkbox"/> 2 .....</td> <td style="text-align: center;"><input type="checkbox"/> 7 .....</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>g. Internet promotion cigarettes?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1..</td> <td style="text-align: center;"><input type="checkbox"/> 2 .....</td> <td style="text-align: center;"><input type="checkbox"/> 7 .....</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>h. Tobacco Corporate Social Responsibility (CSR)? .....</td> <td style="text-align: center;"><input type="checkbox"/> 1..</td> <td style="text-align: center;"><input type="checkbox"/> 2 .....</td> <td style="text-align: center;"><input type="checkbox"/> 7 .....</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>i. Pretty sale promotion models?.....</td> <td style="text-align: center;"><input type="checkbox"/> 1..</td> <td style="text-align: center;"><input type="checkbox"/> 2 .....</td> <td style="text-align: center;"><input type="checkbox"/> 7 .....</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> </tbody> </table> <p><b>Note :</b> answer code "i" added for 2011 GATS</p>		YES ▼	NO ▼	DON'T KNOW ▼	REFUSED ▼	a. Free samples of cigarettes? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	b. Cigarettes at sale prices?.....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	c. Coupons for cigarettes? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	d. Free gifts or special discount offers on other products when buying cigarettes? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	e. Clothing or other items with a cigarette brand name or logo? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	f. Cigarette promotions in the mail? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	g. Internet promotion cigarettes?.....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	h. Tobacco Corporate Social Responsibility (CSR)? .....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	i. Pretty sale promotion models?.....	<input type="checkbox"/> 1..	<input type="checkbox"/> 2 .....	<input type="checkbox"/> 7 .....	<input type="checkbox"/> 9	✓	✓
	YES ▼	NO ▼	DON'T KNOW ▼	REFUSED ▼																																																	
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**SECTION H. KNOWLEDGE, ATTITUDES & PERCEPTIONS**

Questionnaire		2009	2011								
<b>H01.</b>	<p>The next question is asking about *smoking* tobacco.</p> <p>Based on what you know or believe, does smoking tobacco cause serious illness?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓								
<b>H02.</b>	<p>Based on what you know or believe, does smoking tobacco cause the following...</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>YES</th> <th>NO</th> <th>DON'T KNOW</th> <th>REFUSED</th> </tr> <tr> <th style="text-align: center;">▼</th> <th style="text-align: center;">▼</th> <th style="text-align: center;">▼</th> <th style="text-align: center;">▼</th> </tr> </thead> </table> <p>a. Stroke (blood clots in the brain that may cause paralysis)? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p>b. Heart attack? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p>c. Lung cancer? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p>d. High blood pressure? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p>e. Cancer in the mouth? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p>f. Laryngeal cancer? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p>g. Impotent? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p>h. Emphysema? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p>i. Bladder cancer? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p>j. Stomach cancer? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p>k. Premature birth? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p>l. Bone loss? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9</p> <p><b>Note :</b> * answer in i, j, k and l added for 2011 GATS</p>	YES	NO	DON'T KNOW	REFUSED	▼	▼	▼	▼	✓	✓
YES	NO	DON'T KNOW	REFUSED								
▼	▼	▼	▼								
<b>H02_3.</b>	<p>Do you believe cigarettes are addictive?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED ..... <input type="checkbox"/> 9</p>	✓	✓								
<b>H03.</b>	<p>Based on what you know or believe, does using *smokeless tobacco* cause serious illness?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 7</p>	-	✓								







Questionnaire		2009	2011
<b>HH4.</b>	<p>According to your knowledge or beliefs, does tobacco product which specifies low nicotine or mild/light, less harmful, more harmful or about the same as general tobacco products?</p> <p>LESS HARMFUL..... <input type="checkbox"/> 1</p> <p>MORE HARMFUL..... <input type="checkbox"/> 2</p> <p>ABOUT THE SAME ..... <input type="checkbox"/> 3</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	-
<b>HH4_1.</b>	<p>According to your knowledge or beliefs, does tobacco product which specifies low nicotine or mild/light, less harmful, more harmful or about the same as general tobacco products?</p> <p>LESS HARMFUL..... <input type="checkbox"/> 1</p> <p>MORE HARMFUL..... <input type="checkbox"/> 2</p> <p>ABOUT THE SAME ..... <input type="checkbox"/> 3</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	-	✓
<b>HH4_2.</b>	<p>According to your knowledge or beliefs, does cigarette package which different color such as green blue and red has difference harmful to your health?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	-	✓

SECTION I. PICTORIAL HEALTH WARNINGS

Questionnaire					2009	2011
TAKE OUT THE FOLLOWING PICTURES AND SHOW THEM TO THE TO THE RESPONDENT: [NOTE: THE INTERVIEWERS WILL HAVE HARD COPIES OF THESE PICTURES TO SHOW TO THE RESPONDENTS]						
<u>Picture 1</u> Cigarette Smoke Kills People Nearby	<u>Picture 2</u> Smoking Causes Bad Breath	<u>Picture 3</u> Smoking Causes Fatal Emphysema	<u>Picture 4</u> Smoking Causes Lung Cancer	<u>Picture 7</u> Smoking Causes Oral Cancer		
<u>Picture 8</u> Smoking Causes Laryngeal Cancer	<u>Picture 11</u> Smoking Causes Heart Failure	<u>Picture 12</u> Smoking Causes Stroke	<u>Picture 13</u> Cigarette Smoke Causes 10 Types of Cancer	<u>Picture 14</u> Smoking Causes Foot Gangrene		
I01. [IF (B01 = 1 OR 2) AND (B06a > 0 OR B10a > 0) AND (B06e > 0 OR B10e > 0) , ADMINISTER. ELSE, SKIP TO I02.]						
Of these pictorial health warnings, which one makes you want to quit smoking the most?						
PICTURE 1 CIGARETTE SMOKE KILLS PEOPLE NEARBY ..... <input type="checkbox"/> 1						
PICTURE 2 SMOKING CAUSE BAD BREATH ..... <input type="checkbox"/> 2						
PICTURE 3 SMOKING CAUSES FATAL EMPHYSEMA..... <input type="checkbox"/> 3						
PICTURE 4 SMOKING CAUSES LUNG CANCER ..... <input type="checkbox"/> 4						
PICTURE 7 SMOKING CAUSES ORAL CANCER ..... <input type="checkbox"/> 7						
PICTURE 8 SMOKING CAUSES LARYNGEAL CANCER..... <input type="checkbox"/> 8					✓	✓
PICTURE 11 SMOKING CAUSES HEART FAILURE..... <input type="checkbox"/> 11*						
PICTURE 12 SMOKING CAUSES STROKE ..... <input type="checkbox"/> 12*						
PICTURE 13 CIGARETTE SMOKE CAUSES 10 TYPES OF CANCER ..... <input type="checkbox"/> 13*						
PICTURE 14 SMOKING CAUSES FOOT GANGRENE ..... <input type="checkbox"/> 14*						
NONE OF THEM ..... <input type="checkbox"/> 10						
DON'T KNOW ..... <input type="checkbox"/> 77						
REFUSED ..... <input type="checkbox"/> 99						
Note : * answer in 11, 12, 13 and 14 add for 2011 GATS						

Questionnaire		2009	2011
<b>I02.</b>	<p>[IF B03 = 3 and C03 = 3, ADMINISTER. ELSE, SKIP TO I03.]</p> <p>Of these pictorial health warnings, which one makes you not want to smoke cigarettes the most?</p> <p>PICTURE 1 CIGARETTE SMOKE KILLS PEOPLE NEARBY ..... <input type="checkbox"/> 1</p> <p>PICTURE 2 SMOKING CAUSE BAD BREATH ..... <input type="checkbox"/> 2</p> <p>PICTURE 3 SMOKING CAUSES FATAL EMPHYSEMA ..... <input type="checkbox"/> 3</p> <p>PICTURE 4 SMOKING CAUSES LUNG CANCER ..... <input type="checkbox"/> 4</p> <p>PICTURE 7 SMOKING CAUSES ORAL CANCER..... <input type="checkbox"/> 7</p> <p>PICTURE 8 SMOKING CAUSES LARYNGEAL CANCER..... <input type="checkbox"/> 8</p> <p>PICTURE 11 SMOKING CAUSES HEART FAILURE ..... <input type="checkbox"/> 11*</p> <p>PICTURE 12 SMOKING CAUSES STROKE ..... <input type="checkbox"/> 12*</p> <p>PICTURE 13 CIGARETTE SMOKE CAUSES 10 TYPES OF CANCER..... <input type="checkbox"/> 13*</p> <p>PICTURE 14 SMOKING CAUSES FOOT GANGRENE ..... <input type="checkbox"/> 14*</p> <p>NONE OF THEM..... <input type="checkbox"/> 10</p> <p>DON'T KNOW ..... <input type="checkbox"/> 77</p> <p>REFUSED ..... <input type="checkbox"/> 99</p> <p><b>Note :</b> * answer in 11, 12, 13 and 14 add for 2011 GATS</p>	✓	✓
<b>I03.</b>	<p>[IF (B1 = 1 OR 2) AND (B6 ≠ (a)/(e) OR B10 ≠ (a)/(e)), OR (C1 = 1 OR 2), THEN ADMINISTER. ELSE, SKIP TO I7]</p> <p>In the past 30 days, did you notice any pictorial health warnings on raw tobacco packs?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2 → SKIP TO I7</p> <p>DID NOT SEE ANY RAW TOBACCO PACKS ..... <input type="checkbox"/> 3 → SKIP TO I7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<b>I04.</b>	<p>In the past 30 days, have the pictorial warning on the raw tobacco pack make you concern or think about the danger of raw tobacco on health?</p> <p>YES ..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓
<b>I05.</b>	<p>In the past 30 days, have the pictorial health warnings on raw tobacco packs led you to think about quitting?</p> <p>YES..... <input type="checkbox"/> 1</p> <p>NO ..... <input type="checkbox"/> 2</p> <p>DON'T KNOW ..... <input type="checkbox"/> 7</p> <p>REFUSED..... <input type="checkbox"/> 9</p>	✓	✓



Questionnaire		2009	2011					
106.	Do the pictorial warning on raw tobacco packages effect on your try to quit using raw tobacco?							
	<table border="1"> <tr> <td>  </td> <td>I6_a Picture 1 Smoking causes laryngeal cancer</td> <td>                     YES A LOT ..... <input type="checkbox"/> 1                      YES A LITTLE ..... <input type="checkbox"/> 2                      NOT AT ALL..... <input type="checkbox"/> 3                      REFUSED..... <input type="checkbox"/> 9                 </td> </tr> <tr> <td>  </td> <td>I6_b Picture 2 cigarette smoke causes lung cancer</td> <td>                     YES A LOT ..... <input type="checkbox"/> 1                      YES A LITTLE..... <input type="checkbox"/> 2                      NOT AT ALL..... <input type="checkbox"/> 3                      REFUSED..... <input type="checkbox"/> 9                 </td> </tr> </table>		I6_a Picture 1 Smoking causes laryngeal cancer	YES A LOT ..... <input type="checkbox"/> 1 YES A LITTLE ..... <input type="checkbox"/> 2 NOT AT ALL..... <input type="checkbox"/> 3 REFUSED..... <input type="checkbox"/> 9		I6_b Picture 2 cigarette smoke causes lung cancer	YES A LOT ..... <input type="checkbox"/> 1 YES A LITTLE..... <input type="checkbox"/> 2 NOT AT ALL..... <input type="checkbox"/> 3 REFUSED..... <input type="checkbox"/> 9	✓
	I6_a Picture 1 Smoking causes laryngeal cancer	YES A LOT ..... <input type="checkbox"/> 1 YES A LITTLE ..... <input type="checkbox"/> 2 NOT AT ALL..... <input type="checkbox"/> 3 REFUSED..... <input type="checkbox"/> 9						
	I6_b Picture 2 cigarette smoke causes lung cancer	YES A LOT ..... <input type="checkbox"/> 1 YES A LITTLE..... <input type="checkbox"/> 2 NOT AT ALL..... <input type="checkbox"/> 3 REFUSED..... <input type="checkbox"/> 9						
107.	As far as you know, which of the following do you think is true: manufactured cigarettes are more harmful than hand-rolled tobacco, hand-rolled tobacco is more harmful than manufactured cigarettes, or they are equally harmful?							
	MANUFACTURED MORE HARMFUL..... <input type="checkbox"/> 1 HAND-ROLLED MORE HARMFUL ..... <input type="checkbox"/> 2 EQUALLY HARMFUL ..... <input type="checkbox"/> 3 DON'T KNOW ..... <input type="checkbox"/> 7 REFUSED ..... <input type="checkbox"/> 9	✓	✓					

**SECTION J. Economics — Shredded Tobacco Products used for hand-rolled cigarettes and smokeless tobacco**

Questionnaire	2009	2011												
<p><u>IF [B01 = 1 OR 2 (RESPONDENT CURRENTLY SMOKES DAILY OR LESS THAN DAILY)]</u>  <u>AND</u>  <u>[(B06b OR B10b) &gt; 0 OR = 888 (RESPONDENT SMOKES HAND-ROLLED CIGARETTES)],</u>  <u>OR</u>  <u>IF [C01 = 1 OR 2 (RESPONDENT CURRENTLY USES SMOKELESS DAILY OR LESS THAN DAILY)]</u>  <u>THEN CONTINUE WITH THIS SECTION.</u>  <u>OTHERWISE, SKIP TO NEXT SECTION.</u></p>														
<p><b>J00.</b> The next few questions are about shredded tobacco products used for hand-rolled cigarettes and smokeless tobacco you purchased for yourself.</p>														
<p><b>J01.</b> The last time you purchased shredded tobacco packs for yourself, how much packages did you purchase?</p> <p>PACKS..... <input type="checkbox"/> 1 → J01a: [SPECIFY THE NUMBER OF PACKS]: _____  OTHER FORM ..... <input type="checkbox"/> 2 → J01b – J01c: [SPECIFY UNIT and NUMBER OF OTHER FORM]: _____  NEVER BOUGHT..... <input type="checkbox"/> 3 → END INTERVIEW  DON'T KNOW..... <input type="checkbox"/> 7 → J03  REFUSED ..... <input type="checkbox"/> 9 → J03</p>	-	✓												
<p><b>J02.</b> In total, how much money did you pay for the last purchase?</p> <p>[IF DON'T KNOW OR REFUSED, ENTER 999]</p> <p><input type="text"/> <input type="text"/> <input type="text"/> Baht</p>	-	✓												
<p><b>J03.</b> How many days did each packet last you?</p> <p>[IF DON'T KNOW" OR REFUSE, ENTER 999]</p> <p><input type="text"/> <input type="text"/> <input type="text"/> Days</p>	-	✓												
<p><b>J04.</b> Were these tobacco packs labeled any words implying quality of product, e.g., best quality, special selection, strong taste, etc?</p> <p>YES ..... <input type="checkbox"/> 1  NO ..... <input type="checkbox"/> 2  DON'T KNOW ..... <input type="checkbox"/> 7  REFUSED ..... <input type="checkbox"/> 9</p>	-	✓												
<p><b>J05.</b> In the last 30 days, have you noticed any of the following types of promotions for the shredded tobacco packs?</p> <p>READ EACH ITEM:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>YES</th> <th>NO</th> <th>DON'T KNOW</th> <th>REFUSED</th> </tr> <tr> <th>▼</th> <th>▼</th> <th>▼</th> <th>▼</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 9</td> </tr> </tbody> </table> <p>a. Free samples of the shredded tobacco packs? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9  b. The shredded tobacco packs at sale prices? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9  c. Free gifts or special discount offers on other products when buying the shredded tobacco packs? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9  d. Internet promotion the shredded tobacco packs? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 7 ..... <input type="checkbox"/> 9  e. Others? ..... <input type="checkbox"/> 1 ..... <input type="checkbox"/> 2 ..... <input type="checkbox"/> 9</p> <p>→ e1. Please specify any types of promotions: _____</p>	YES	NO	DON'T KNOW	REFUSED	▼	▼	▼	▼	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9	-	✓
YES	NO	DON'T KNOW	REFUSED											
▼	▼	▼	▼											
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9											

## End Individual Questionnaire

**K00.** Those are all of the questions I have. Thank you very much for participating in this important survey.

**K02.** [RECORD ANY NOTES ABOUT INTERVIEW:]

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## Appendix B: Sample design

### B.1 Sample design

The Global Adult Tobacco Survey in Thailand (2011 GATS) used a three-stage stratified cluster sampling design as in the previous GATS in 2009. The same primary sampling units (PSUs) from the previous GATS were used for the 2011 GATS but new households were selected. The design is described in this section.

The target population was stratified into four regions (Central, Northern, Northeastern and Southern) and Bangkok metropolitan area. Each of the four regions was further stratified into urban and rural areas, making nine strata in total (Bangkok had only an urban area).

Sample size in each of the nine domains before non-response was taken into consideration was equal to that in the previous survey. For each of the four regions and Bangkok 4000 eligible persons were sampled. These numbers were equally allocated in both rural and urban areas, except for Bangkok, where all areas were considered as urban (Table B1).

**Table B1.** Sample size allocation before the non-response rate was taken into consideration

Region	Urban	Rural	Total
Bangkok	4 000	-	4 000
Central	2 000	2 000	4 000
Northern	2 000	2 000	4 000
Northeastern	2 000	2 000	4 000
Southern	2 000	2 000	4 000
<b>Total</b>	<b>12 000</b>	<b>8 000</b>	<b>20 000</b>

Based on the 2009 GATS, the non-response rate was approximately 15% for Bangkok, 5% for urban areas and 2.5% for rural areas. This would result in a final sample size of 21 488 persons (Table B2) after taking the non-response prevalence into account.

**Table B2.** Sample size (number of eligible persons) by region and urban/rural area after non-response rate was taken into consideration

Region	Sample size (number)		
	Total	Urban	Rural
Bangkok	4 752	4 752	-
Central	4 184	2 112	2 072
Northern	4 184	2 112	2 072
Northeastern	4 184	2 112	2 072
Southern	4 184	2 112	2 072
<b>Total</b>	<b>21 488</b>	<b>13 200</b>	<b>8 288</b>

A three-stage stratified cluster sampling was adopted for this survey. In the first stage, enumeration areas (EAs) were taken as primary sampling units (PSUs). PSUs were selected systematically by the probability proportional to size (PPS) method. The total number of EAs and the sample size for the systematic sampling are shown in Tables B3 and B4.

The number of households in each EA was used as the measure of size (MOS). The selection probability of the  $i^{th}$  EA and the  $h^{th}$  stratum was also the same as in the 2009 GATS Thailand.

$$P_{hi} = \frac{\alpha M_{hi}}{M_h}$$

Where  $M_{hi}$  is the number of households of the  $i^{th}$  EA in the  $h^{th}$  stratum  
 $M_h$  is the number of households in the  $h^{th}$  stratum  
 $\alpha$  is the number of EAs selected  
 $i = 1, 2, \dots, m_h$  ,  $h = 1, 2, \dots, 9$

There were 47 EAs, which were split into  $k$  parts and one of the parts selected at random. Then the random selection of one of the split parts was calculated to get the value of  $P_{hi}$

**Table B3.** Total number of EAs by region and urban/rural area

Region	Number of EAs		
	Total	Urban	Rural
Bangkok	16 717	16 717	-
Central	26 477	11 636	14 841
Northern	19 541	4 912	14 629
Northeastern	35 325	5 654	29 671
Southern	11 906	3 674	8 232
<b>Whole Kingdom</b>	<b>109 966</b>	<b>42 593</b>	<b>67 373</b>

**Table B4.** Number of sampled EAs by region and urban/rural area

Region	Number of blocks/villages		
	Total	Urban	Rural
Bangkok	264	264	
Central	206	132	74
Northern	206	132	74
Northeastern	206	132	74
Southern	206	132	74
<b>Whole Kingdom</b>	<b>1 088</b>	<b>792</b>	<b>296</b>

In the second stage, a fixed number of households (18 for Bangkok, 16 for urban areas and 28 for rural areas) were selected from each sample PSU in every stratum, using systematic random sampling. The selection probability at stage 2 was given by:

$$P_{hij} = \frac{n_{hi}}{N_{hi}}$$

Where  $n_{hi}$  is the number of households selected of the  $i^{th}$  EA in the  $h^{th}$  stratum  
 $N_{hi}$  is the number of households counted from the listing of the  $i^{th}$  EA in the  $h^{th}$  stratum  
 $i = 1, 2, \dots, m_h$  ,  $h = 1, 2, \dots, 9$

In the third stage, one eligible person was randomly selected. The selection probability at stage 3 was given by:

$$P_{hijk} = \frac{1}{R_{hij}}$$

Where  $R_{hij}$  is the number of person of the  $j^{\text{th}}$  sampled household in the  $i^{\text{th}}$  EA and in the  $h^{\text{th}}$  stratum

## B.2 Sample weighting

The weighting process for the GATS included three main steps: (1) the base weight or design weight, calculated from all steps of random selection in the sample design, (2) an adjustment for non-response by sampled households and sampled individuals eligible for the survey, and (3) a post-stratification calibration adjustment of sample totals to the projection of the population 15 years of age and above by region, area, gender and age group.

### 1) Base weight

The base weight was equal to the reciprocal of the probability of selection assigned to each sample person. The probability of selection was the product of the probabilities of selection of: (1) the PSU; (2) the household within the PSU; and (3) the eligible sample person within the household.

### 2) Adjustment for unit non-response

The base weights were adjusted for non-response on two factors: household-level non-response adjustments, and person-level non-response adjustments. Household-level non-response adjustments were made within provinces or districts in Bangkok, so there were 127 adjustment cells. The corresponding household-level weighting class adjustments were computed as one divided by the weighted household response rate for each adjustment cell. The person-level response rate was computed within strategically formed sub-groups: region, urban/rural area, gender and smoking status. This produced non-response-adjusted base weights for sample persons who responded.

### 3) Post-stratification calibration adjustment

Population projections of persons 15 years of age and above by region, urban/rural area, gender and age group were used for post-stratification calibration adjustment.

The final weights assigned to each responding unit were computed as the product of the base weights, the non-response adjustment and post-stratification calibration adjustment. The final weights were used in all analyses to produce estimates of population parameters.

## Appendix C: Estimation of sampling errors

The estimates from a sample survey are affected by two types of errors: (1) non-sampling errors, and (2) sampling errors. **Non-sampling errors** are the results of mistakes made in implementing data collection and data processing, such as errors in coverage, response errors, non-response errors, faulty questionnaires, interviewer recording errors, processing errors, etc. Although numerous efforts were made during the implementation of the 2011 GATS to minimize such errors, non-sampling errors are impossible to avoid and difficult to evaluate statistically.

The sample of respondents selected for the GATS is only one of the samples that could have been selected from the same population, using the same design and sample size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. **Sampling errors** are a measure of the variability between all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey results.

The following sampling error measures are presented for each of the selected indicators:

- **Standard error (SE):** Sampling errors are usually measured in terms of standard errors for particular indicators. The standard error of an estimate is thus simply the square root of the variance of that estimate, and is computed in the same units as the estimate  $\hat{\theta}$ .
- **Design effect (deff)** is the ratio of the actual variance of an indicator, under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling. The square root of the design effect, called *deff*, is used to show the efficiency of the sample design. A *deff* value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a *deff* value above 1.0 indicates an increase in the standard error due to the use of a more complex sample design. In general, for a well-designed study, the *deff* usually ranges from 1 to 3. It is common, however, for the *deff* to be much larger, up to 7 or 8.
- **Relative standard error (RSE)** is the ratio of the standard error to the value of the indicator.
- **Confidence limits** are calculated to show the interval within which the true value for the population can be reasonably assumed to fall. For any given statistic calculated from the survey, the value of that statistic will fall within a range of plus or minus twice the standard error of the statistic in 95% of all possible samples of identical size and design.

For calculating sampling errors from the GATS data, SPSS Version 17.0 with the complexity of sample design (CSPLAN module) has been used. The results are shown in the tables that follow. In addition to the sampling error measures described above, the tables also include unweighted and weighted counts of denominators for each indicator (Table C1).

**Table C1. Sampling errors of key indicators for all adults 15 years of age and above**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Current tobacco users	26.86	0.62	20,606	14,559.4	4.02	0.02	25.65	28.08
Current tobacco smokers	23.96	0.59	20,606	12,987.1	3.92	0.02	22.81	25.12
Current cigarette smokers	23.82	0.58	20,606	12,907.6	3.85	0.02	22.68	24.96
Current users of smokeless tobacco	3.22	0.24	20,606	1,747.1	3.80	0.07	2.75	3.69
Current manufactured cigarette smokers	15.21	0.49	20,606	8,243.8	3.88	0.03	14.25	16.18
Current hand-rolled cigarette smokers	14.37	0.58	20,606	7,790.0	5.66	0.04	13.23	15.51
Current smokers of other tobacco products	0.23	0.08	20,606	124.3	5.79	0.35	0.07	0.39
Daily tobacco smokers	21.51	0.57	20,606	11,657.0	3.90	0.03	20.40	22.62
Daily cigarette smokers	21.38	0.56	20,606	11,588.2	3.80	0.03	20.29	22.47
Daily users of smokeless tobacco	2.90	0.22	20,606	1,572.9	3.63	0.08	2.47	3.34
Former daily tobacco smokers among all adults	8.37	0.29	20,606	4,537.8	2.31	0.04	7.80	8.95
Former tobacco smokers among ever daily smokers	27.25	0.93	5,922	4,537.8	2.59	0.03	25.42	29.07
Time to first tobacco smoke upon waking								
- Within 5 minutes of waking	24.19	1.29	3,851	2,819.6	3.50	0.05	21.66	26.72
- Within 6–30 minutes of waking	33.46	1.37	3,851	3,899.0	3.23	0.04	30.78	36.14
- Within 31–60 minutes of waking	14.65	1.07	3,851	1,707.8	3.50	0.07	12.56	16.74
- More than 60 minutes of waking	27.69	1.31	3,851	3,227.4	3.29	0.05	25.13	30.26
Type of current tobacco use								
- Smoked only	88.00	0.84	4,958	12,812.3	3.29	0.01	86.36	89.64
- Both smoked and smokeless	1.20	0.28	4,958	174.8	3.18	0.23	0.66	1.74
- Smokeless only	10.80	0.77	4,958	1,572.3	3.04	0.07	9.29	12.31
Smoking quit attempt in the past 12 months	36.66	1.40	4,405	4,895.6	3.73	0.04	33.91	39.40
Visited a health- care provider in the past 12 months	34.56	1.17	4,395	4,606.4	2.68	0.03	32.25	36.86
Health-care provider asked about smoking	65.31	1.90	1,609	3,011.6	2.55	0.03	61.59	69.02
Health-care provider advised quitting smoking	55.81	1.91	1,609	2,573.4	2.38	0.03	52.06	59.55
Use of pharmacotherapy for smoking cessation	7.59	1.13	1,616	370.6	2.92	0.15	5.39	9.80
Use of counseling/advice or quit lines for smoking cessation	4.77	0.68	1,617	233.4	1.65	0.14	3.43	6.10
Quit smoking tobacco without assistance	90.72	1.25	1,617	4,440.5	3.01	0.01	88.27	93.18
Use of other methods for smoking cessation	2.27	0.49	1,596	109.8	1.72	0.22	1.31	3.23
Interest in quitting smoking in 5 categories								
- Planning to quit within next month	3.59	0.42	4,288	465.3	2.23	0.12	2.75	4.42
- Thinking about quitting within next 12 months	11.02	0.87	4,288	1,429.4	3.30	0.08	9.32	12.72
- Will quit someday, but not in next 12 months	39.41	1.43	4,288	5,112.3	3.68	0.04	36.60	42.21
- Not interested in quitting	41.67	1.36	4,288	5,406.2	3.27	0.03	39.01	44.34
- Don't know	4.31	0.70	4,288	559.2	5.10	0.16	2.94	5.68
Smokeless tobacco use quit attempt in the past 12 months	16.42	1.99	752	295.7	2.17	0.12	12.51	20.32
Visited a health-care provider in the past 12 months	68.98	2.51	682	1,119.8	2.00	0.04	64.07	73.89
Health-care provider asked about smokeless tobacco use	25.08	2.66	493	307.4	1.85	0.11	19.87	30.29
Health-care provider advised to stop using smokeless tobacco products	16.34	1.98	493	200.3	1.40	0.12	12.47	20.21
Use of pharmacotherapy for smokeless tobacco use cessation	2.11	1.43	123	6.2	1.22	0.68	-0.70	4.91
Use of counseling/advice or quit lines for smokeless tobacco use cessation	3.85	2.20	123	11.3	1.60	0.57	-0.46	8.17
Quit smokeless tobacco use without assistance	79.50	4.52	124	235.1	1.54	0.06	70.65	88.36
Use of other methods for smokeless tobacco use cessation	3.21	1.48	120	9.2	0.84	0.46	0.31	6.12
Interest in quitting smokeless tobacco use in								
- Planning to quit within next month	1.63	0.54	734	28.5	1.34	0.33	0.57	2.70
- Thinking about quitting within next 12 months	5.44	1.02	734	95.0	1.49	0.19	3.44	7.45
- Will quit someday, but not in next 12 months	15.22	1.70	734	265.7	1.63	0.11	11.90	18.55
- Not interested in quitting	73.94	2.28	734	1,290.6	1.99	0.03	69.46	78.42
- Don't know	3.76	1.34	734	65.7	3.62	0.36	1.14	6.38



Table C1 (continued). Sampling errors of key indicators for all adults 15 years of age and above

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Exposure to second-hand smoke (SHS) at workplace	30.45	1.22	5,717	4,191.2	3.99	0.04	28.07	32.83
Exposure to SHS at home	36.01	0.87	20,592	19,507.3	6.81	0.02	34.30	37.72
Exposure to SHS in government buildings/offices among those who visited	14.72	0.78	7,212	2,913.5	3.52	0.05	13.19	16.26
Exposure to SHS in health-care facilities among those who visited	7.34	0.49	8,150	1,505.8	2.91	0.07	6.38	8.31
Exposure to SHS in restaurants among all adults those who visited	46.93	1.22	9,933	12,313.7	5.93	0.03	44.54	49.32
Exposure to SHS on public transportation among those who visited	25.61	1.04	6,230	3,564.9	3.51	0.04	23.58	27.64
Exposure to SHS at universities among those who visited	34.92	2.61	1,118	1,049.3	3.34	0.07	29.81	40.02
Exposure to SHS at schools among those who visited	28.79	1.45	4,981	4,691.7	5.10	0.05	25.95	31.63
Exposure to SHS at bars or nightclubs among those who visited	68.44	2.23	1,147	2,122.8	2.63	0.03	64.08	72.80
Exposure to SHS at indoor/outside markets among those who visited	68.83	0.88	15,987	28,767.8	5.77	0.01	67.10	70.55
Last brand of cigarette purchased								
- Krongthip	37.78	1.60	2,683	2,952.5	2.91	0.04	34.65	40.91
- Wander	25.28	1.49	2,683	1,975.2	3.17	0.06	22.35	28.21
- L&M	11.59	0.94	2,683	905.7	2.33	0.08	9.74	13.44
- SMS	10.02	0.88	2,683	783.3	2.33	0.09	8.29	11.76
- Sai-Fon	6.48	0.91	2,683	506.2	3.69	0.14	4.69	8.27
- Others	8.85	0.75	2,683	691.8	1.87	0.08	7.38	10.32
Location of last cigarette purchase								
- Grocery	88.27	0.93	2,688	6,910.1	2.23	0.01	86.45	90.09
- Convenience store	9.58	0.87	2,688	749.9	2.36	0.09	7.87	11.29
- All others	2.15	0.31	2,688	168.4	1.25	0.15	1.54	2.76
Last pack purchased had pictorial warning	95.23	0.73	1,627	3,925.5	1.91	0.01	93.80	96.67
Noticed anti-cigarette smoking information in newspapers or in magazines	20.15	0.62	20,598	10,920.7	4.96	0.03	18.93	21.37
Noticed anti-cigarette smoking information on local TV	68.07	1.01	20,598	36,881.4	9.76	0.01	66.08	70.05
Noticed anti-cigarette smoking information on radio	28.66	0.90	20,597	15,524.3	8.24	0.03	26.88	30.43
Noticed anti-cigarette smoking information on billboards	32.56	1.00	20,595	17,639.8	9.31	0.03	30.60	34.51
Noticed anti-cigarette smoking information on leaflet/sticker	38.15	1.16	20,596	20,670.2	11.75	0.03	35.88	40.42
Noticed anti-cigarette smoking information on the internet	8.44	0.40	20,594	4,573.6	4.21	0.05	7.66	9.22
Noticed anti-cigarette smoking information during campaign activity	12.25	0.68	20,594	6,635.2	8.79	0.06	10.92	13.58
Noticed anti-cigarette smoking information on demonstration board	24.93	0.96	20,596	13,509.6	10.16	0.04	23.05	26.82
Noticed anti-cigarette smoking information somewhere else	0.43	0.11	20,210	231.4	6.16	0.26	0.21	0.66
Noticed anti-cigarette smoking information at any location	81.23	0.77	20,544	43,941.1	7.97	0.01	79.72	82.74
Noticed health warning labels on cigarette packages	94.65	0.61	4,291	12,291.9	3.16	0.01	93.45	95.84
Thinking of quitting because of health warning labels on cigarette package	62.63	1.35	4,283	8,122.3	3.32	0.02	59.99	65.27
Noticed health warning labels on raw tobacco packages	75.20	1.45	2,867	6,947.9	3.23	0.02	72.36	78.04
Thinking of quitting because of health warning labels on raw tobacco packages	49.50	1.81	2,862	4,566.7	3.75	0.04	45.95	53.04
Noticed cigarette advertisements in stores	18.23	0.98	20,592	9,876.4	13.30	0.05	16.31	20.15
Noticed advertisements anywhere other than stores	2.40	0.20	20,163	1,280.0	3.36	0.08	2.01	2.79
Noticed advertisements at sport or sporting events or arts	3.14	0.22	20,556	1,698.9	3.35	0.07	2.70	3.58
Noticed cigarette promotions: other places	2.56	0.21	20,500	1,382.7	3.59	0.08	2.15	2.97
Believes that tobacco smoking causes serious illness	96.98	0.29	20,597	52,541.4	5.85	0.00	96.41	97.54
Believes that tobacco smoking causes stroke	81.03	0.65	20,596	43,899.3	5.69	0.01	79.75	82.31
Believes that tobacco smoking causes heart attack	77.26	0.69	20,594	41,858.2	5.62	0.01	75.90	78.61
Believes that tobacco smoking causes lung cancer	97.77	0.20	20,600	52,984.4	3.75	0.00	97.38	98.16
Believes that tobacco smoking causes high blood pressure	78.09	0.71	20,598	42,317.4	6.03	0.01	76.71	79.48

Table C1 (continued). Sampling errors of key indicators for all adults 15 years of age and above

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Believes that tobacco smoking causes cancer of the mouth	91.78	0.44	20,597	49,723.1	5.40	0.00	90.91	92.65
Believes that tobacco smoking causes laryngeal cancer	92.24	0.47	20,599	49,985.0	6.49	0.01	91.31	93.17
Believes that tobacco smoking causes impotence	65.51	0.85	20,585	35,484.5	6.53	0.01	63.85	67.16
Believes that tobacco smoking causes emphysema	92.76	0.40	20,597	50,258.7	4.97	0.00	91.97	93.55
Believes that tobacco smoking causes bladder cancer	48.05	0.92	20,587	26,029.0	6.93	0.02	46.26	49.85
Believes that tobacco smoking causes stomach cancer	51.42	0.90	20,593	27,856.7	6.66	0.02	49.66	53.18
Believes that tobacco smoking causes premature birth	64.44	0.85	20,590	34,910.4	6.52	0.01	62.77	66.11
Believes that tobacco smoking causes bone loss	49.62	0.81	20,584	26,872.8	5.44	0.02	48.03	51.22
Believes that using smokeless tobacco causes serious illness	72.41	0.79	20,592	39,226.6	6.35	0.01	70.87	73.94
Believes that SHS causes serious illness in non-smokers	94.16	0.33	20,599	51,023.4	4.06	0.00	93.52	94.81
Believes that SHS causes heart disease	65.52	0.80	20,588	35,488.6	5.77	0.01	63.96	67.08
Believes that SHS causes lung disease in children	87.30	0.47	20,598	47,302.1	4.02	0.01	86.38	88.21
Believes that SHS causes lung cancer in adults	91.24	0.39	20,599	49,440.3	3.86	0.00	90.48	92.00
Believes that SHS causes emphysema	84.27	0.57	20,599	45,665.6	5.08	0.01	83.15	85.39
Believes that SHS causes low birth weight	65.47	0.81	20,590	35,467.6	5.91	0.01	63.89	67.05
Believes that SHS causes premature birth	58.62	0.83	20,582	31,742.1	5.82	0.01	56.99	60.24
PHW No.1 that most makes smokers want to quit	5.40	0.51	2,764	442.1	1.41	0.09	4.40	6.40
PHW No.2 that most makes smokers want to quit	3.05	0.51	2,764	250.0	2.45	0.17	2.05	4.06
PHW No.3 that most makes smokers want to quit	3.59	0.52	2,764	293.9	2.17	0.15	2.57	4.61
PHW No.4 that most makes smokers want to quit	17.98	1.20	2,764	1,472.0	2.72	0.07	15.62	20.34
PHW No.7 that most makes smokers want to quit	28.76	1.59	2,764	2,354.8	3.41	0.06	25.65	31.88
PHW No.8 that most makes smokers want to quit	18.87	1.17	2,764	1,544.8	2.46	0.06	16.58	21.16
PHW No.11 that most makes smokers want to quit	9.90	1.07	2,764	810.1	3.57	0.11	7.79	12.00
PHW No.12 that most makes smokers want to quit	4.03	0.72	2,764	330.0	3.71	0.18	2.62	5.44
PHW No.13 that most makes smokers want to quit	5.69	0.67	2,764	465.8	2.29	0.12	4.38	7.00
PHW No.14 that most makes smokers want to quit	1.08	0.24	2,764	88.5	1.44	0.22	0.62	1.54
Pictorial warning that most makes smokers want to quit (none of them)	1.65	0.31	2,764	134.8	1.61	0.19	1.04	2.25
PHW No.1 that most influences non-smokers to not smoke	6.34	0.40	13,120	2,131.1	3.59	0.06	5.55	7.13
PHW No.2 that most influences non-smokers to not smoke	2.82	0.25	13,120	946.3	2.95	0.09	2.33	3.30
PHW No.3 that most influences non-smokers to not smoke	2.94	0.23	13,120	988.5	2.42	0.08	2.49	3.39
PHW No.4 that most influences non-smokers to not smoke	16.40	0.55	13,120	5,509.9	2.95	0.03	15.31	17.49
PHW No.7 that most influences non-smokers to not smoke	36.63	0.90	13,120	12,307.5	4.57	0.02	34.87	38.39
PHW No.8 that most influences non-smokers to not smoke	15.38	0.52	13,120	5,166.5	2.73	0.03	14.36	16.40
PHW No.11 that most influences non-smokers to not smoke	7.80	0.96	13,120	2,619.9	16.85	0.12	5.91	9.68
PHW No.12 that most influences non-smokers to not smoke	3.53	0.22	13,120	1,184.6	1.93	0.06	3.09	3.96
PHW No.13 that most influences non-smokers to not smoke	5.92	0.35	13,120	1,990.5	2.86	0.06	5.24	6.61
PHW No.14 that most influences non-smokers to not smoke	0.48	0.08	13,120	159.8	1.79	0.17	0.32	0.63
Pictorial warning that most influences non-smokers to not smoke (none of them)	1.77	0.23	13,120	596.3	4.01	0.13	1.32	2.23
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes	34.34	0.81	20,588	18,602.7	5.99	0.02	32.75	35.92
Believes hand-rolled cigarettes are more harmful than manufactured cigarettes	19.49	0.63	20,588	10,559.9	5.22	0.03	18.26	20.73
Believes manufactured cigarettes are as harmful as hand-rolled cigarettes	42.16	0.88	20,588	22,842.2	6.60	0.02	40.43	43.90
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes (don't know)	4.01	0.22	20,588	2,170.3	2.65	0.06	3.57	4.44

Table C2. Sampling errors of key indicators for men 15 years of age and above

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Current tobacco users	47.20	0.95	8,781	12,430.2	3.18	0.02	45.34	49.07
Current tobacco smokers	46.55	0.94	8,781	12,258.9	3.13	0.02	44.71	48.40
Current cigarette smokers	46.46	0.94	8,781	12,233.0	3.10	0.02	44.62	48.29
Current users of smokeless tobacco	1.09	0.16	8,781	286.4	2.15	0.15	0.77	1.41
Current manufactured cigarette smokers	30.10	0.89	8,781	7,927.0	3.32	0.03	28.35	31.85
Current hand-rolled cigarette smokers	28.09	1.06	8,781	7,398.0	4.93	0.04	26.01	30.18
Current smokers of other tobacco products	0.25	0.08	8,781	64.9	2.06	0.31	0.10	0.40
Daily tobacco smokers	42.04	0.95	8,781	11,069.8	3.26	0.02	40.18	43.90
Daily cigarette smokers	41.93	0.94	8,781	11,041.8	3.22	0.02	40.08	43.78
Daily users of smokeless tobacco	0.73	0.12	8,781	191.1	1.84	0.17	0.48	0.97
Former daily tobacco smokers among all adults	15.97	0.57	8,781	4,205.8	2.16	0.04	14.85	17.10
Former tobacco smokers among ever daily smokers	26.84	0.96	5,365	4,205.8	2.53	0.04	24.95	28.72
Time to first tobacco smoke upon waking								
- Within 5 minutes of waking	24.32	1.33	3,524	2,692.2	3.41	0.05	21.71	26.94
- Within 6–30 minutes of waking	33.46	1.42	3,524	3,703.8	3.17	0.04	30.69	36.23
- Within 31–60 minutes of waking	14.43	1.08	3,524	1,597.6	3.32	0.07	12.32	16.55
- More than 60 minutes of waking	27.78	1.35	3,524	3,075.3	3.22	0.05	25.13	30.44
Type of current tobacco use								
- Smoked only	97.70	0.34	3,972	12,143.9	2.03	0.00	97.03	98.36
- Both smoked and smokeless	0.92	0.24	3,972	115.0	2.43	0.26	0.46	1.39
- Smokeless only	1.38	0.23	3,972	171.4	1.55	0.17	0.93	1.83
Smoking quit attempt in the past 12 months	36.49	1.43	3,997	4,600.0	3.52	0.04	33.69	39.29
Visited a health-care provider in the past 12 months	33.51	1.20	3,987	4,215.5	2.56	0.04	31.16	35.85
Health-care provider asked about smoking	65.04	2.02	1,405	2,744.9	2.52	0.03	61.08	68.99
Health-care provider advised quitting smoking	55.93	2.02	1,405	2,360.5	2.33	0.04	51.97	59.89
Use of pharmacotherapy for smoking cessation	7.48	1.18	1,461	343.0	2.94	0.16	5.17	9.80
Use of counseling/advice or quit lines for smoking cessation	4.62	0.71	1,462	212.3	1.66	0.15	3.23	6.00
Quit smoking tobacco without assistance	91.11	1.29	1,462	4,190.1	3.01	0.01	88.58	93.64
Use of other methods for smoking cessation	2.12	0.51	1,443	96.2	1.81	0.24	1.12	3.12
Interest in quitting smoking in 5 categories								
- Planning to quit within next month	3.41	0.44	3,890	417.9	2.24	0.13	2.56	4.27
- Thinking about quitting within next 12 months	10.93	0.91	3,890	1,338.1	3.30	0.08	9.15	12.71
- Will quit someday, but not in next 12 months	39.53	1.48	3,890	4,840.4	3.58	0.04	36.62	42.44
- Not interested in quitting	42.01	1.39	3,890	5,144.0	3.07	0.03	39.29	44.73
- Don't know	4.11	0.66	3,890	503.8	4.28	0.16	2.82	5.41
Smokeless tobacco use quit attempt in the past 12 months	26.34	5.32	136	85.0	1.97	0.20	15.91	36.78
Visited a health-care provider in the past 12 months	51.56	7.11	90	105.8	1.80	0.14	37.63	65.48
Health-care provider asked about smokeless tobacco use	20.76	7.09	77	36.3	2.33	0.34	6.85	34.67
Health-care provider advised to stop using smokeless tobacco products	13.23	5.34	77	23.1	1.89	0.40	2.77	23.69
Use of pharmacotherapy for smokeless tobacco use cessation	2.47	2.48	36	2.1	0.89	1.00	-2.39	7.34
Use of counseling/advice or quit lines for smokeless tobacco use cessation	8.82	5.71	36	7.5	1.42	0.65	-2.38	20.02
Quit smokeless tobacco use without assistance	80.21	6.80	36	68.2	1.02	0.08	66.87	93.54
Use of other methods for smokeless tobacco use cessation	5.02	3.45	36	4.3	0.87	0.69	-1.74	11.79
Interest in quitting smokeless tobacco use in								
- Planning to quit within next month	4.06	1.74	124	11.6	0.96	0.43	0.65	7.47
- Thinking about quitting within next 12 months	11.92	3.72	124	34.1	1.62	0.31	4.64	19.20
- Will quit someday, but not in next 12 months	19.00	4.05	124	54.4	1.31	0.21	11.07	26.94
- Not interested in quitting	56.92	5.27	124	163.0	1.40	0.09	46.58	67.26
- Don't know	8.10	3.54	124	23.2	2.07	0.44	1.16	15.04

**Table C2 (continued). Sampling errors of key indicators for men 15 years of age and above**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Exposure to second-hand smoke (SHS) at workplace	37.05	1.65	2,765	2,737.3	3.22	0.04	33.82	40.28
Exposure to SHS at home	39.89	1.12	8,779	10,503.2	4.56	0.03	37.71	42.08
Exposure to SHS in government buildings/offices among those who visited	16.64	1.07	3,293	1,662.6	2.72	0.06	14.54	18.73
Exposure to SHS in health-care facilities among those who visited	8.31	0.79	2,891	676.9	2.38	0.10	6.75	9.86
Exposure to SHS in restaurants among all adults those who visited	51.56	1.58	4,573	6,969.0	4.55	0.03	48.47	54.65
Exposure to SHS on public transportation among those who visited	25.92	1.47	2,197	1,403.2	2.48	0.06	23.04	28.81
Exposure to SHS at universities among those who visited	39.20	3.58	576	606.7	3.10	0.09	32.17	46.22
Exposure to SHS at schools among those who visited	35.91	2.15	2,082	2,803.3	4.20	0.06	31.69	40.13
Exposure to SHS at bars or nightclubs among those who visited	70.72	2.50	744	1,573.2	2.24	0.04	65.83	75.62
Exposure to SHS at indoor/outside markets among those who visited	72.90	1.10	6,484	14,071.2	4.00	0.02	70.74	75.06
Last brand of cigarette purchased								
- Krongthip	38.41	1.64	2,481	2,888.3	2.81	0.04	35.20	41.62
- Wander	25.23	1.53	2,481	1,897.3	3.08	0.06	22.23	28.23
- L&M	11.30	0.97	2,481	849.8	2.33	0.09	9.40	13.20
- SMS	9.86	0.90	2,481	741.7	2.28	0.09	8.09	11.64
- Sai-Fon	6.28	0.94	2,481	472.3	3.75	0.15	4.43	8.13
- Others	8.92	0.77	2,481	670.6	1.81	0.09	7.41	10.43
Location of last cigarette purchase								
- Grocery	88.79	0.93	2,486	6,689.0	2.18	0.01	86.96	90.62
- Convenience store	9.08	0.88	2,486	683.8	2.32	0.10	7.36	10.80
- All others	2.13	0.32	2,486	160.8	1.19	0.15	1.52	2.75
Last pack purchased had pictorial warning	95.03	0.76	1,502	3,748.7	1.86	0.01	93.53	96.53
Noticed anti-cigarette smoking information in newspapers or in magazines	20.46	0.79	8,777	5,386.8	3.40	0.04	18.90	22.02
Noticed anti-cigarette smoking information on local TV	67.46	1.18	8,778	17,760.8	5.57	0.02	65.14	69.77
Noticed anti-cigarette smoking information on radio	29.25	1.12	8,778	7,698.8	5.32	0.04	27.05	31.44
Noticed anti-cigarette smoking information on billboards	32.40	1.18	8,775	8,528.5	5.60	0.04	30.08	34.71
Noticed anti-cigarette smoking information on leaflet/sticker	37.46	1.36	8,776	9,861.2	6.92	0.04	34.79	40.12
Noticed anti-cigarette smoking information on the internet	8.42	0.53	8,776	2,215.9	3.22	0.06	7.37	9.46
Noticed anti-cigarette smoking information during campaign activity	12.43	0.83	8,776	3,271.3	5.49	0.07	10.81	14.05
Noticed anti-cigarette smoking information on demonstration board	24.78	1.19	8,776	6,523.7	6.72	0.05	22.44	27.12
Noticed anti-cigarette smoking information somewhere else	0.56	0.21	8,623	146.9	6.65	0.37	0.16	0.97
Noticed anti-cigarette smoking information at any location	81.01	0.92	8,758	21,303.7	4.85	0.01	79.20	82.81
Noticed health warning labels on cigarette packages	95.43	0.55	3,893	11,698.7	2.66	0.01	94.36	96.50
Thinking of quitting because of health warning labels on cigarette package	62.85	1.40	3,885	7,692.9	3.25	0.02	60.11	65.59
Noticed health warning labels on raw tobacco packages	81.51	1.53	2,108	6,088.7	3.29	0.02	78.51	84.52
Thinking of quitting because of health warning labels on raw tobacco packages	53.45	2.04	2,103	3,985.4	3.52	0.04	49.45	57.44
Noticed cigarette advertisements in stores	19.42	1.22	8,773	5,110.5	8.32	0.06	17.03	21.80
Noticed advertisements anywhere other than stores	2.69	0.31	8,597	696.7	3.10	0.11	2.09	3.29
Noticed advertisements at sport or sporting events or arts	4.52	0.36	8,763	1,189.0	2.58	0.08	3.82	5.22
Noticed cigarette promotions: other places	3.11	0.31	8,741	814.9	2.85	0.10	2.49	3.72
Believes that tobacco smoking causes serious illness	96.82	0.36	8,777	25,485.7	3.73	0.00	96.11	97.53
Believes that tobacco smoking causes stroke	81.21	0.84	8,777	21,376.2	4.03	0.01	79.57	82.85
Believes that tobacco smoking causes heart attack	77.41	0.86	8,779	20,382.5	3.75	0.01	75.72	79.10
Believes that tobacco smoking causes lung cancer	97.74	0.29	8,779	25,734.8	3.45	0.00	97.16	98.31
Believes that tobacco smoking causes high blood pressure	77.63	0.89	8,778	20,439.2	3.96	0.01	75.89	79.36

Table C2 (continued). Sampling errors of key indicators for men 15 years of age and above

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Believes that tobacco smoking causes cancer of the mouth	91.80	0.56	8,777	24,159.4	3.69	0.01	90.70	92.90
Believes that tobacco smoking causes laryngeal cancer	92.52	0.62	8,778	24,359.4	4.82	0.01	91.31	93.73
Believes that tobacco smoking causes impotence	68.64	1.08	8,773	18,067.2	4.74	0.02	66.53	70.75
Believes that tobacco smoking causes emphysema	93.45	0.54	8,778	24,602.7	4.21	0.01	92.39	94.51
Believes that tobacco smoking causes bladder cancer	46.19	1.09	8,774	12,158.4	4.20	0.02	44.05	48.33
Believes that tobacco smoking causes stomach cancer	49.38	1.09	8,775	12,997.8	4.18	0.02	47.24	51.52
Believes that tobacco smoking causes premature birth	59.13	1.14	8,773	15,563.4	4.73	0.02	56.89	61.37
Believes that tobacco smoking causes bone loss	47.48	0.99	8,769	12,494.5	3.44	0.02	45.54	49.42
Believes that using smokeless tobacco causes serious illness	70.58	1.03	8,776	18,579.8	4.46	0.01	68.57	72.59
Believes that SHS causes serious illness in non-smokers	93.79	0.49	8,776	24,693.1	3.58	0.01	92.84	94.75
Believes that SHS causes heart disease	65.04	1.04	8,772	17,119.7	4.18	0.02	63.00	67.08
Believes that SHS causes lung disease in children	86.54	0.71	8,775	22,784.0	3.75	0.01	85.16	87.93
Believes that SHS causes lung cancer in adults	90.99	0.55	8,776	23,954.8	3.21	0.01	89.91	92.06
Believes that SHS causes emphysema	84.45	0.84	8,776	22,233.1	4.69	0.01	82.81	86.09
Believes that SHS causes low birth weight	61.10	1.08	8,771	16,080.9	4.29	0.02	58.99	63.22
Believes that SHS causes premature birth	53.27	1.09	8,772	14,021.1	4.22	0.02	51.13	55.42
PHW No.1 that most makes smokers want to quit	5.47	0.53	2,553	430.0	1.37	0.10	4.43	6.50
PHW No.2 that most makes smokers want to quit	3.06	0.53	2,553	240.8	2.43	0.17	2.02	4.10
PHW No.3 that most makes smokers want to quit	3.48	0.53	2,553	273.8	2.17	0.15	2.43	4.53
PHW No.4 that most makes smokers want to quit	17.74	1.24	2,553	1,395.6	2.71	0.07	15.30	20.17
PHW No.7 that most makes smokers want to quit	28.86	1.64	2,553	2,270.9	3.34	0.06	25.65	32.07
PHW No.8 that most makes smokers want to quit	19.06	1.21	2,553	1,499.7	2.42	0.06	16.69	21.43
PHW No.11 that most makes smokers want to quit	9.96	1.11	2,553	783.6	3.54	0.11	7.78	12.14
PHW No.12 that most makes smokers want to quit	4.10	0.75	2,553	322.4	3.64	0.18	2.63	5.56
PHW No.13 that most makes smokers want to quit	5.66	0.69	2,553	445.1	2.28	0.12	4.30	7.01
PHW No.14 that most makes smokers want to quit	1.09	0.25	2,553	85.4	1.43	0.23	0.61	1.57
Pictorial warning that most makes smokers want to quit (none of them)	1.53	0.30	2,553	120.7	1.52	0.20	0.95	2.12
PHW No.1 that most influences non-smokers to not smoke	7.39	0.81	2,794	651.0	2.65	0.11	5.81	8.97
PHW No.2 that most influences non-smokers to not smoke	2.57	0.42	2,794	226.3	1.92	0.16	1.76	3.38
PHW No.3 that most influences non-smokers to not smoke	3.63	0.57	2,794	319.5	2.57	0.16	2.52	4.74
PHW No.4 that most influences non-smokers to not smoke	19.05	1.22	2,794	1,677.6	2.72	0.06	16.65	21.45
PHW No.7 that most influences non-smokers to not smoke	31.86	1.43	2,794	2,805.5	2.62	0.04	29.07	34.66
PHW No.8 that most influences non-smokers to not smoke	17.10	1.18	2,794	1,506.0	2.73	0.07	14.80	19.41
PHW No.11 that most influences non-smokers to not smoke	7.35	1.05	2,794	647.4	4.52	0.14	5.29	9.41
PHW No.12 that most influences non-smokers to not smoke	3.56	0.45	2,794	313.3	1.68	0.13	2.67	4.45
PHW No.13 that most influences non-smokers to not smoke	5.33	0.63	2,794	469.5	2.19	0.12	4.10	6.56
PHW No.14 that most influences non-smokers to not smoke	0.52	0.18	2,794	45.7	1.70	0.34	0.17	0.87
Pictorial warning that most influences non-smokers to not smoke (none of them)	1.63	0.31	2,794	143.3	1.65	0.19	1.02	2.23
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes	32.00	1.03	8,771	8,421.9	4.30	0.03	29.97	34.02
Believes hand-rolled cigarettes are more harmful than manufactured cigarettes	26.45	0.94	8,771	6,962.9	4.00	0.04	24.61	28.30
Believes manufactured cigarettes are as harmful as hand-rolled cigarettes	38.83	1.06	8,771	10,220.2	4.13	0.03	36.76	40.90
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes (don't know)	2.72	0.27	8,771	716.2	2.42	0.10	2.19	3.25



**Table C3. Sampling errors of key indicators for women 15 years of age and above**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Current tobacco users	7.64	0.46	11,825	2,129.2	3.48	0.06	6.75	8.53
Current tobacco smokers	2.61	0.22	11,825	728.2	2.16	0.08	2.19	3.04
Current cigarette smokers	2.42	0.19	11,825	674.6	1.88	0.08	2.04	2.80
Current users of smokeless tobacco	5.24	0.40	11,825	1,460.8	3.80	0.08	4.46	6.03
Current manufactured cigarette smokers	1.14	0.11	11,825	316.8	1.20	0.09	0.93	1.35
Current hand-rolled cigarette smokers	1.41	0.16	11,825	391.9	2.27	0.12	1.09	1.73
Current smokers of other tobacco products	0.21	0.11	11,825	59.4	6.60	0.51	0.00	0.43
Daily tobacco smokers	2.11	0.18	11,825	587.1	1.91	0.09	1.75	2.47
Daily cigarette smokers	1.96	0.17	11,825	546.4	1.79	0.09	1.63	2.30
Daily users of smokeless tobacco	4.96	0.39	11,825	1,381.9	3.79	0.08	4.20	5.72
Former daily tobacco smokers among all adults	1.19	0.11	11,825	332.1	1.13	0.09	0.98	1.40
Former tobacco smokers among ever daily smokers	33.80	2.42	557	332.1	1.45	0.07	29.06	38.54
Time to first tobacco smoke upon waking								
- Within 5 minutes of waking	21.77	2.97	327	127.4	1.69	0.14	15.95	27.60
- Within 6–30 minutes of waking	33.38	3.69	327	195.3	2.00	0.11	26.14	40.61
- Within 31–60 minutes of waking	18.85	3.60	327	110.3	2.77	0.19	11.78	25.91
- More than 60 minutes of waking	26.00	3.30	327	152.1	1.84	0.13	19.55	32.46
Type of current tobacco use								
- Smoked only	31.39	2.28	986	668.4	2.38	0.07	26.93	35.86
- Both smoked and smokeless	2.81	1.03	986	59.8	3.83	0.37	0.79	4.83
- Smokeless only	65.80	2.44	986	1,400.9	2.60	0.04	61.02	70.57
Smoking quit attempt in the past 12 months	39.41	3.72	408	295.6	2.36	0.09	32.12	46.70
Visited a health-care provider in the past 12 months	52.12	3.63	408	390.9	2.15	0.07	45.00	59.24
Health-care provider asked about smoking	68.23	5.09	204	266.7	2.43	0.07	58.26	78.21
Health-care provider advised quitting smoking	54.47	4.99	204	212.9	2.04	0.09	44.68	64.25
Use of pharmacotherapy for smoking cessation	9.35	2.95	155	27.6	1.58	0.32	3.57	15.13
Use of counseling/advice or quit lines for smoking cessation	7.15	2.27	155	21.1	1.19	0.32	2.71	11.59
Quit smoking tobacco without assistance	84.72	3.94	155	250.4	1.85	0.05	76.99	92.45
Use of other methods for smoking cessation	4.65	1.84	153	13.6	1.16	0.40	1.04	8.26
Interest in quitting smoking in 5 categories								
- Planning to quit within next month	6.51	1.42	398	47.4	1.32	0.22	3.72	9.29
- Thinking about quitting within next 12 months	12.54	2.37	398	91.3	2.04	0.19	7.89	17.19
- Will quit someday, but not in next 12 months	37.34	3.66	398	271.9	2.27	0.10	30.17	44.50
- Not interested in quitting	36.01	3.80	398	262.2	2.49	0.11	28.56	43.46
- Don't know	7.61	2.62	398	55.4	3.87	0.34	2.48	12.74
Smokeless tobacco use quit attempt in the past 12 months	14.25	2.19	616	210.6	2.42	0.15	9.95	18.55
Visited a health-care provider in the past 12 months	71.50	2.57	592	1,014.0	1.92	0.04	66.46	76.54
Health-care provider asked about smokeless tobacco use	25.79	3.01	416	271.1	1.97	0.12	19.89	31.70
Health-care provider advised to stop using smokeless tobacco products	16.86	2.18	416	177.2	1.41	0.13	12.58	21.14
Use of pharmacotherapy for smokeless tobacco use cessation	1.96	1.76	87	4.1	1.39	0.90	-1.49	5.40
Use of counseling/advice or quit lines for smokeless tobacco use cessation	1.83	1.83	87	3.8	1.61	1.00	-1.76	5.43
Quit smokeless tobacco use without assistance	79.22	5.78	88	166.9	1.76	0.07	67.90	90.54
Use of other methods for smokeless tobacco use cessation	2.45	1.51	84	4.9	0.80	0.62	-0.52	5.41
Interest in quitting smokeless tobacco use in								
- Planning to quit within next month	1.16	0.51	610	16.9	1.37	0.44	0.16	2.15
- Thinking about quitting within next 12 months	4.17	1.00	610	60.9	1.52	0.24	2.22	6.13
- Will quit someday, but not in next 12 months	14.48	1.89	610	211.3	1.76	0.13	10.78	18.18
- Not interested in quitting	77.28	2.38	610	1,127.6	1.97	0.03	72.61	81.95
- Don't know	2.91	1.01	610	42.5	2.22	0.35	0.92	4.90

Table C3 (continued). Sampling errors of key indicators for women 15 years of age and above

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Exposure to second-hand smoke (SHS) at workplace	22.81	1.30	2,952	1,453.8	2.84	0.06	20.25	25.36
Exposure to SHS at home	32.34	0.95	11,813	9,004.1	4.88	0.03	30.48	34.20
Exposure to SHS in government buildings/offices among those who visited	12.77	0.93	3,919	1,250.9	3.07	0.07	10.94	14.60
Exposure to SHS in health-care facilities among those who visited	6.71	0.51	5,259	828.9	2.18	0.08	5.71	7.70
Exposure to SHS in restaurants among all adults those who visited	42.02	1.29	5,360	5,344.6	3.65	0.03	39.49	44.54
Exposure to SHS on public transportation among those who visited	25.42	1.21	4,033	2,161.7	3.11	0.05	23.05	27.79
Exposure to SHS at universities among those who visited	30.38	3.00	542	442.6	2.30	0.10	24.50	36.25
Exposure to SHS at schools among those who visited	22.25	1.38	2,899	1,888.4	3.21	0.06	19.53	24.96
Exposure to SHS at bars or nightclubs among those who visited	62.66	3.87	403	549.6	2.57	0.06	55.08	70.24
Exposure to SHS at indoor/outside markets among those who visited	65.33	0.98	9,503	14,696.6	4.06	0.02	63.40	67.26
Last brand of cigarette purchased								
- Krongthip	21.79	3.33	202	64.2	1.31	0.15	15.27	28.30
- Wander	26.42	4.40	202	77.9	2.00	0.17	17.80	35.04
- L&M	18.98	3.76	202	55.9	1.85	0.20	11.60	26.35
- SMS	14.12	3.41	202	41.6	1.92	0.24	7.44	20.79
- Sai-Fon	11.52	2.76	202	33.9	1.51	0.24	6.10	16.93
- Others	7.18	2.30	202	21.2	1.59	0.32	2.68	11.69
Location of last cigarette purchase								
- Grocery	75.01	4.16	202	221.1	1.86	0.06	66.86	83.16
- Convenience store	22.42	4.13	202	66.1	1.97	0.18	14.34	30.51
- All others	2.57	1.13	202	7.6	1.02	0.44	0.36	4.77
Last pack purchased had pictorial warning	99.78	0.22	125	176.9	0.27	0.00	99.35	100.21
Noticed anti-cigarette smoking information in newspapers or in magazines	19.86	0.71	11,821	5,533.9	3.77	0.04	18.47	21.26
Noticed anti-cigarette smoking information on local TV	68.64	1.11	11,820	19,120.6	6.77	0.02	66.47	70.82
Noticed anti-cigarette smoking information on radio	28.10	0.93	11,819	7,825.5	5.10	0.03	26.27	29.93
Noticed anti-cigarette smoking information on billboards	32.71	1.05	11,820	9,111.3	5.88	0.03	30.66	34.76
Noticed anti-cigarette smoking information on leaflet/sticker	38.80	1.20	11,820	10,809.1	7.17	0.03	36.45	41.15
Noticed anti-cigarette smoking information on the internet	8.46	0.46	11,818	2,357.6	3.18	0.05	7.57	9.36
Noticed anti-cigarette smoking information during campaign activity	12.08	0.68	11,818	3,363.9	5.20	0.06	10.74	13.42
Noticed anti-cigarette smoking information on demonstration board	25.08	0.97	11,820	6,985.9	5.91	0.04	23.18	26.98
Noticed anti-cigarette smoking information somewhere else	0.31	0.07	11,587	84.6	1.98	0.24	0.17	0.45
Noticed anti-cigarette smoking information at any location	81.44	0.82	11,786	22,637.4	5.26	0.01	79.83	83.05
Noticed health warning labels on cigarette packages	81.46	2.83	398	593.2	2.11	0.03	75.91	87.01
Thinking of quitting because of health warning labels on cigarette package	58.96	3.47	398	429.4	1.97	0.06	52.17	65.75
Noticed health warning labels on raw tobacco packages	48.56	3.18	759	859.1	3.07	0.07	42.33	54.79
Thinking of quitting because of health warning labels on raw tobacco packages	32.86	3.09	759	581.3	3.29	0.09	26.80	38.92
Noticed cigarette advertisements in stores	17.11	0.96	11,819	4,765.9	7.62	0.06	15.24	18.98
Noticed advertisements anywhere other than stores	2.13	0.21	11,566	583.2	2.43	0.10	1.72	2.54
Noticed advertisements at sport or sporting events or arts	1.83	0.19	11,793	509.9	2.28	0.10	1.47	2.20
Noticed cigarette promotions: other places	2.05	0.22	11,759	567.8	2.75	0.11	1.62	2.47
Believes that tobacco smoking causes serious illness	97.13	0.31	11,820	27,055.7	4.09	0.00	96.52	97.74
Believes that tobacco smoking causes stroke	80.86	0.72	11,819	22,523.1	3.93	0.01	79.45	82.26
Believes that tobacco smoking causes heart attack	77.11	0.75	11,815	21,475.6	3.80	0.01	75.63	78.58
Believes that tobacco smoking causes lung cancer	97.81	0.22	11,821	27,249.6	2.60	0.00	97.38	98.23
Believes that tobacco smoking causes high blood pressure	78.53	0.77	11,820	21,878.2	4.18	0.01	77.02	80.04
Believes that tobacco smoking causes cancer of the mouth	91.76	0.48	11,820	25,563.7	3.58	0.01	90.82	92.70
Believes that tobacco smoking causes laryngeal cancer	91.98	0.50	11,821	25,625.6	3.93	0.01	91.01	92.95

Table C3 (continued). Sampling errors of key indicators for women 15 years of age and above

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Believes that tobacco smoking causes impotence	62.54	0.94	11,812	17,417.3	4.46	0.02	60.70	64.39
Believes that tobacco smoking causes emphysema	92.11	0.45	11,819	25,656.1	3.30	0.00	91.23	92.99
Believes that tobacco smoking causes bladder cancer	49.81	1.02	11,813	13,870.6	4.92	0.02	47.81	51.81
Believes that tobacco smoking causes stomach cancer	53.35	0.99	11,818	14,858.9	4.66	0.02	51.40	55.29
Believes that tobacco smoking causes premature birth	69.46	0.87	11,817	19,347.0	4.26	0.01	67.75	71.18
Believes that tobacco smoking causes bone loss	51.64	0.98	11,815	14,378.3	4.50	0.02	49.73	53.56
Believes that using smokeless tobacco causes serious illness	74.13	0.82	11,816	20,646.7	4.10	0.01	72.53	75.73
Believes that SHS causes serious illness in non-smokers	94.51	0.34	11,823	26,330.3	2.71	0.00	93.84	95.19
Believes that SHS causes heart disease	65.97	0.89	11,816	18,368.9	4.13	0.01	64.23	67.70
Believes that SHS causes lung disease in children	88.01	0.50	11,823	24,518.1	2.78	0.01	87.03	88.98
Believes that SHS causes lung cancer in adults	91.48	0.41	11,823	25,485.5	2.51	0.00	90.68	92.28
Believes that SHS causes emphysema	84.11	0.58	11,823	23,432.5	2.95	0.01	82.98	85.24
Believes that SHS causes low birth weight	69.60	0.85	11,819	19,386.7	4.04	0.01	67.93	71.27
Believes that SHS causes premature birth	63.67	0.90	11,810	17,721.1	4.16	0.01	61.90	65.44
PHW No.1 that most makes smokers want to quit	3.79	1.55	211	12.1	1.38	0.41	0.76	6.82
PHW No.2 that most makes smokers want to quit	2.87	1.15	211	9.2	0.99	0.40	0.62	5.12
PHW No.3 that most makes smokers want to quit	6.30	2.46	211	20.1	2.15	0.39	1.49	11.12
PHW No.4 that most makes smokers want to quit	24.00	3.99	211	76.5	1.83	0.17	16.18	31.82
PHW No.7 that most makes smokers want to quit	26.34	4.01	211	83.9	1.74	0.15	18.48	34.20
PHW No.8 that most makes smokers want to quit	14.14	2.86	211	45.1	1.41	0.20	8.54	19.74
PHW No.11 that most makes smokers want to quit	8.32	2.25	211	26.5	1.39	0.27	3.91	12.72
PHW No.12 that most makes smokers want to quit	2.37	1.19	211	7.6	1.28	0.50	0.04	4.70
PHW No.13 that most makes smokers want to quit	6.48	2.08	211	20.7	1.50	0.32	2.41	10.56
PHW No.14 that most makes smokers want to quit	0.97	0.59	211	3.1	0.77	0.61	-0.19	2.13
Pictorial warning that most makes smokers want to quit (none of them)	4.41	1.82	211	14.1	1.66	0.41	0.84	7.98
PHW No.1 that most influences non-smokers to not smoke	5.97	0.40	10,326	1,480.1	2.91	0.07	5.19	6.75
PHW No.2 that most influences non-smokers to not smoke	2.90	0.29	10,326	719.9	3.08	0.10	2.34	3.47
PHW No.3 that most influences non-smokers to not smoke	2.70	0.23	10,326	669.0	2.04	0.08	2.25	3.14
PHW No.4 that most influences non-smokers to not smoke	15.46	0.58	10,326	3,832.3	2.66	0.04	14.32	16.59
PHW No.7 that most influences non-smokers to not smoke	38.32	1.00	10,326	9,502.0	4.36	0.03	36.36	40.28
PHW No.8 that most influences non-smokers to not smoke	14.76	0.54	10,326	3,660.4	2.43	0.04	13.70	15.83
PHW No.11 that most influences non-smokers to not smoke	7.95	1.08	10,326	1,972.5	16.51	0.14	5.83	10.08
PHW No.12 that most influences non-smokers to not smoke	3.51	0.26	10,326	871.3	2.00	0.07	3.01	4.02
PHW No.13 that most influences non-smokers to not smoke	6.13	0.39	10,326	1,521.0	2.72	0.06	5.37	6.90
PHW No.14 that most influences non-smokers to not smoke	0.46	0.09	10,326	114.1	1.69	0.19	0.29	0.63
Pictorial warning that most influences non-smokers to not smoke (none of them)	1.83	0.25	10,326	453.1	3.66	0.14	1.33	2.32
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes	36.55	0.91	11,817	10,180.8	4.21	0.02	34.77	38.33
Believes hand-rolled cigarettes are more harmful than manufactured cigarettes	12.91	0.55	11,817	3,597.0	3.13	0.04	11.85	13.98
Believes manufactured cigarettes are as harmful as hand-rolled cigarettes	45.31	1.03	11,817	12,622.0	5.05	0.02	43.30	47.33
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes (don't know)	5.22	0.32	11,817	1,454.1	2.40	0.06	4.60	5.84



Table C4. Sampling errors of key indicators for adults 15 years of age and above living in urban areas

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Current tobacco users	21.51	0.52	12,484	4,039.2	2.02	0.02	20.48	22.53
Current tobacco smokers	20.31	0.52	12,484	3,814.5	2.05	0.03	19.30	21.32
Current cigarette smokers	20.28	0.51	12,484	3,808.0	2.04	0.03	19.27	21.28
Current users of smokeless tobacco	1.41	0.14	12,484	264.6	1.71	0.10	1.14	1.68
Current manufactured cigarette smokers	17.01	0.49	12,484	3,195.0	2.12	0.03	16.05	17.97
Current hand-rolled cigarette smokers	5.88	0.31	12,484	1,104.9	2.20	0.05	5.27	6.49
Current smokers of other tobacco products	0.20	0.05	12,484	38.3	1.33	0.23	0.11	0.30
Daily tobacco smokers	17.85	0.49	12,484	3,351.5	2.03	0.03	16.89	18.80
Daily cigarette smokers	17.83	0.49	12,484	3,348.0	2.03	0.03	16.87	18.78
Daily users of smokeless tobacco	1.22	0.12	12,484	228.8	1.57	0.10	0.98	1.46
Former daily tobacco smokers among all adults	8.31	0.33	12,484	1,560.9	1.79	0.04	7.66	8.96
Former tobacco smokers among ever daily smokers	30.71	1.05	3,226	1,560.9	1.69	0.03	28.64	32.77
Time to first tobacco smoke upon waking								
- Within 5 minutes of waking	25.57	1.43	2,017	856.2	2.17	0.06	22.77	28.38
- Within 6–30 minutes of waking	31.64	1.46	2,017	1,059.5	1.99	0.05	28.78	34.51
- Within 31–60 minutes of waking	14.05	1.02	2,017	470.4	1.75	0.07	12.04	16.05
- More than 60 minutes of waking	28.74	1.40	2,017	962.3	1.93	0.05	26.00	31.48
Type of current tobacco use								
- Smoked only	93.45	0.63	2,503	3,774.6	1.62	0.01	92.22	94.68
- Both smoked and smokeless	0.99	0.27	2,503	39.9	1.81	0.27	0.47	1.51
- Smokeless only	5.56	0.55	2,503	224.7	1.46	0.10	4.48	6.65
Smoking quit attempt in the past 12 months	41.27	1.44	2,346	1,621.5	2.01	0.03	38.45	44.09
Visited a health- care provider in the past 12 months	33.62	1.40	2,340	1,318.7	2.05	0.04	30.88	36.36
Health-care provider asked about smoking	68.43	2.27	817	902.6	1.94	0.03	63.98	72.87
Health-care provider advised quitting smoking	56.58	2.39	817	746.4	1.90	0.04	51.90	61.27
Use of pharmacotherapy for smoking cessation	10.11	1.37	942	163.9	1.94	0.14	7.43	12.79
Use of counseling/advice or quit lines for smoking cessation	6.53	1.08	942	105.7	1.79	0.16	4.42	8.63
Quit smoking tobacco without assistance	88.73	1.40	942	1,437.8	1.84	0.02	85.99	91.47
Use of other methods for smoking cessation	2.82	0.81	926	45.0	2.21	0.29	1.24	4.40
Interest in quitting smoking in 5 categories								
- Planning to quit within next month	5.43	0.70	2,286	207.0	2.16	0.13	4.06	6.80
- Thinking about quitting within next 12 months	13.14	1.05	2,286	500.8	2.19	0.08	11.08	15.19
- Will quit someday, but not in next 12 months	40.27	1.46	2,286	1,535.3	2.01	0.04	37.42	43.12
- Not interested in quitting	37.88	1.39	2,286	1,444.2	1.88	0.04	35.16	40.60
- Don't know	3.28	0.47	2,286	125.2	1.57	0.14	2.37	4.20
Smokeless tobacco use quit attempt in the past 12 months	19.87	3.85	247	54.8	2.29	0.19	12.32	27.42
Visited a health-care provider in the past 12 months	59.66	4.28	221	140.8	1.67	0.07	51.28	68.05
Health-care provider asked about smokeless tobacco use	20.04	3.74	154	31.9	1.34	0.19	12.71	27.37
Health-care provider advised to stop using smokeless tobacco products	13.49	2.71	154	21.5	0.96	0.20	8.18	18.81
Use of pharmacotherapy for smokeless tobacco use cessation	3.84	3.80	40	2.1	1.53	0.99	-3.61	11.28
Use of counseling/advice or quit lines for smokeless tobacco use cessation	-	-	-	-	-	-	-	-
Quit smokeless tobacco use without assistance	80.06	7.50	40	43.9	1.38	0.09	65.36	94.77
Use of other methods for smokeless tobacco use cessation	4.09	4.01	39	2.2	1.56	0.98	-3.77	11.96
Interest in quitting smokeless tobacco use in								
- Planning to quit within next month	4.66	2.17	240	12.3	2.54	0.47	0.41	8.92
- Thinking about quitting within next 12 months	4.77	1.48	240	12.6	1.15	0.31	1.88	7.67
- Will quit someday, but not in next 12 months	17.75	3.38	240	46.9	1.88	0.19	11.12	24.38
- Not interested in quitting	71.47	4.06	240	188.8	1.93	0.06	63.51	79.43
- Don't know	1.34	0.68	240	3.6	0.84	0.51	0.01	2.68

**Table C4 (continued). Sampling errors of key indicators for adults 15 years of age and above living in urban areas**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Exposure to second-hand smoke (SHS) at workplace	25.42	1.06	4,237	1,701.6	2.51	0.04	23.34	27.49
Exposure to SHS at home	25.87	0.71	12,473	4,853.8	3.29	0.03	24.47	27.26
Exposure to SHS in government buildings/offices among those who visited	17.28	0.90	4,344	1,167.5	2.48	0.05	15.51	19.04
Exposure to SHS in health-care facilities among those who visited	8.35	0.61	4,796	580.8	2.30	0.07	7.16	9.53
Exposure to SHS in restaurants among all adults those who visited	42.86	0.98	6,662	4,545.5	2.63	0.02	40.93	44.78
Exposure to SHS on public transportation among those who visited	28.92	1.16	4,809	2,056.2	3.15	0.04	26.64	31.19
Exposure to SHS at universities among those who visited	41.52	2.39	884	644.9	2.07	0.06	36.85	46.20
Exposure to SHS at schools among those who visited	22.90	1.08	2,773	1,095.0	1.83	0.05	20.78	25.01
Exposure to SHS at bars or nightclubs among those who visited	63.10	2.16	916	1,024.7	1.83	0.03	58.87	67.33
Exposure to SHS at indoor/outside markets among those who visited	68.49	0.84	9,979	10,368.9	3.25	0.01	66.85	70.13
Last brand of cigarette purchased								
- Krongthip	35.91	1.48	1,794	1,109.7	1.70	0.04	33.01	38.81
- Wander	18.75	1.24	1,794	579.5	1.80	0.07	16.33	21.18
- L&M	17.43	1.22	1,794	538.8	1.84	0.07	15.05	19.82
- SMS	9.87	0.96	1,794	304.9	1.85	0.10	7.99	11.74
- Sai-Fon	7.47	0.77	1,794	230.8	1.54	0.10	5.96	8.98
- Others	10.57	0.92	1,794	326.6	1.62	0.09	8.76	12.38
Location of last cigarette purchase								
- Grocery	79.48	1.32	1,798	2,461.9	1.92	0.02	76.90	82.07
- Convenience store	17.03	1.26	1,798	527.6	2.02	0.07	14.56	19.50
- All others	3.48	0.57	1,798	107.9	1.74	0.16	2.37	4.60
Last pack purchased had pictorial warning	95.88	0.67	1,136	1,820.6	1.30	0.01	94.56	97.19
Noticed anti-cigarette smoking information in newspapers or in magazines	28.06	0.82	12,477	5,267.9	4.14	0.03	26.46	29.67
Noticed anti-cigarette smoking information on local TV	71.32	0.88	12,477	13,387.7	4.76	0.01	69.59	73.05
Noticed anti-cigarette smoking information on radio	25.69	0.82	12,477	4,821.3	4.38	0.03	24.08	27.29
Noticed anti-cigarette smoking information on billboards	39.00	1.10	12,474	7,319.9	6.38	0.03	36.84	41.16
Noticed anti-cigarette smoking information on leaflet/sticker	42.29	1.11	12,476	7,938.3	6.30	0.03	40.12	44.47
Noticed anti-cigarette smoking information on the internet	12.96	0.54	12,476	2,433.6	3.27	0.04	11.90	14.03
Noticed anti-cigarette smoking information during campaign activity	15.10	0.75	12,476	2,835.4	5.42	0.05	13.64	16.57
Noticed anti-cigarette smoking information on demonstration board	26.70	0.91	12,477	5,013.0	5.31	0.03	24.92	28.49
Noticed anti-cigarette smoking information somewhere else	0.50	0.11	12,151	92.4	2.81	0.21	0.29	0.71
Noticed anti-cigarette smoking information at any location	84.24	0.78	12,442	15,777.3	5.70	0.01	82.71	85.77
Noticed health warning labels on cigarette packages	97.35	0.39	2,288	3,713.4	1.32	0.00	96.59	98.10
Thinking of quitting because of health warning labels on cigarette package	60.83	1.50	2,282	2,314.2	2.16	0.02	57.89	63.77
Noticed health warning labels on raw tobacco packages	77.47	1.66	938	1,008.0	1.48	0.02	74.21	80.72
Thinking of quitting because of health warning labels on raw tobacco packages	48.37	2.17	934	624.6	1.75	0.04	44.12	52.62
Noticed cigarette advertisements in stores	19.74	0.75	12,471	3,703.3	4.47	0.04	18.26	21.21
Noticed advertisements anywhere other than stores	3.41	0.28	12,125	624.2	2.82	0.08	2.87	3.95
Noticed advertisements at sport or sporting events or arts	4.04	0.27	12,460	756.7	2.42	0.07	3.50	4.57
Noticed cigarette promotions: other places	3.92	0.29	12,431	732.7	2.71	0.07	3.36	4.48
Believes that tobacco smoking causes serious illness	97.25	0.30	12,478	18,254.5	4.21	0.00	96.66	97.84
Believes that tobacco smoking causes stroke	82.92	0.63	12,475	15,556.9	3.48	0.01	81.69	84.15

Table C4 (continued). Sampling errors of key indicators for adults 15 years of age and above living in urban areas

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Believes that tobacco smoking causes heart attack	80.28	0.62	12,475	15,070.8	3.06	0.01	79.06	81.50
Believes that tobacco smoking causes lung cancer	98.28	0.17	12,478	18,452.1	2.23	0.00	97.94	98.62
Believes that tobacco smoking causes high blood pressure	81.04	0.65	12,477	15,215.6	3.42	0.01	79.77	82.31
Believes that tobacco smoking causes cancer of the mouth	93.79	0.33	12,478	17,609.7	2.33	0.00	93.15	94.44
Believes that tobacco smoking causes laryngeal cancer	94.85	0.29	12,479	17,809.9	2.17	0.00	94.28	95.42
Believes that tobacco smoking causes impotence	69.80	0.73	12,469	13,096.2	3.18	0.01	68.37	71.24
Believes that tobacco smoking causes emphysema	95.45	0.28	12,476	17,916.6	2.25	0.00	94.91	96.00
Believes that tobacco smoking causes bladder cancer	48.04	0.94	12,471	9,015.9	4.41	0.02	46.20	49.88
Believes that tobacco smoking causes stomach cancer	52.41	0.92	12,475	9,836.6	4.20	0.02	50.62	54.21
Believes that tobacco smoking causes premature birth	68.66	0.74	12,474	12,884.1	3.19	0.01	67.21	70.12
Believes that tobacco smoking causes bone loss	52.61	0.93	12,468	9,866.2	4.32	0.02	50.79	54.43
Believes that using smokeless tobacco causes serious illness	71.89	0.83	12,473	13,490.9	4.22	0.01	70.27	73.51
Believes that SHS causes serious illness in non-smokers	95.67	0.26	12,478	17,961.9	2.09	0.00	95.16	96.19
Believes that SHS causes heart disease	69.26	0.74	12,470	12,991.2	3.21	0.01	67.80	70.71
Believes that SHS causes lung disease in children	89.34	0.43	12,478	16,772.5	2.42	0.00	88.49	90.18
Believes that SHS causes lung cancer in adults	92.83	0.34	12,478	17,428.2	2.13	0.00	92.17	93.49
Believes that SHS causes emphysema	87.21	0.46	12,478	16,372.5	2.36	0.01	86.31	88.11
Believes that SHS causes low birth weight	70.47	0.72	12,475	13,228.8	3.14	0.01	69.05	71.89
Believes that SHS causes premature birth	63.71	0.76	12,470	11,951.1	3.14	0.01	62.22	65.21
PHW No.1 that most makes smokers want to quit	6.74	0.67	1,813	212.0	1.28	0.10	5.43	8.04
PHW No.2 that most makes smokers want to quit	2.97	0.47	1,813	93.4	1.41	0.16	2.04	3.89
PHW No.3 that most makes smokers want to quit	4.04	0.63	1,813	127.0	1.86	0.16	2.80	5.27
PHW No.4 that most makes smokers want to quit	19.23	1.15	1,813	604.8	1.54	0.06	16.98	21.47
PHW No.7 that most makes smokers want to quit	23.07	1.33	1,813	725.7	1.80	0.06	20.47	25.67
PHW No.8 that most makes smokers want to quit	20.13	1.17	1,813	633.3	1.54	0.06	17.84	22.42
PHW No.11 that most makes smokers want to quit	9.55	1.00	1,813	300.3	2.12	0.11	7.58	11.52
PHW No.12 that most makes smokers want to quit	4.05	0.54	1,813	127.4	1.35	0.13	3.00	5.10
PHW No.13 that most makes smokers want to quit	6.08	0.72	1,813	191.2	1.63	0.12	4.67	7.48
PHW No.14 that most makes smokers want to quit	0.95	0.26	1,813	30.0	1.26	0.27	0.45	1.46
Pictorial warning that most makes smokers want to quit (none of them)	3.20	0.65	1,813	100.7	2.49	0.20	1.92	4.48
PHW No.1 that most influences non-smokers to not smoke	6.19	0.37	8,464	777.5	1.98	0.06	5.47	6.91
PHW No.2 that most influences non-smokers to not smoke	2.88	0.27	8,464	361.6	2.13	0.09	2.36	3.40
PHW No.3 that most influences non-smokers to not smoke	3.05	0.23	8,464	383.2	1.55	0.08	2.59	3.51
PHW No.4 that most influences non-smokers to not smoke	16.87	0.59	8,464	2,118.5	2.12	0.04	15.71	18.03
PHW No.7 that most influences non-smokers to not smoke	33.52	0.78	8,464	4,209.5	2.34	0.02	31.98	35.06
PHW No.8 that most influences non-smokers to not smoke	16.45	0.55	8,464	2,065.9	1.89	0.03	15.37	17.54
PHW No.11 that most influences non-smokers to not smoke	5.88	0.57	8,464	738.8	5.00	0.10	4.76	7.00
PHW No.12 that most influences non-smokers to not smoke	3.97	0.32	8,464	498.5	2.27	0.08	3.34	4.60
PHW No.13 that most influences non-smokers to not smoke	6.65	0.38	8,464	835.0	2.01	0.06	5.90	7.40
PHW No.14 that most influences non-smokers to not smoke	0.47	0.08	8,464	59.5	1.07	0.16	0.32	0.63
Pictorial warning that most influences non-smokers to not smoke (none of them)	4.06	0.55	8,464	509.7	6.52	0.13	2.99	5.13
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes	27.68	0.69	12,469	5,193.9	2.99	0.03	26.33	29.04
Believes hand-rolled cigarettes are more harmful than manufactured cigarettes	23.71	0.69	12,469	4,448.9	3.26	0.03	22.36	25.06
Believes manufactured cigarettes are as harmful as hand-rolled cigarettes	44.36	0.83	12,469	8,323.0	3.50	0.02	42.73	45.99
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes (don't know)	4.24	0.28	12,469	796.1	2.40	0.07	3.70	4.79

**Table C5. Sampling errors of key indicators for adults 15 years of age and above living in rural areas**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Current tobacco users	29.70	0.90	8,122	10,520.2	3.18	0.03	27.93	31.48
Current tobacco smokers	25.90	0.86	8,122	9,172.6	3.12	0.03	24.22	27.58
Current cigarette smokers	25.69	0.85	8,122	9,099.6	3.06	0.03	24.03	27.36
Current users of smokeless tobacco	4.19	0.36	8,122	1,482.5	2.60	0.09	3.48	4.89
Current manufactured cigarette smokers	14.26	0.71	8,122	5,048.8	3.34	0.05	12.87	15.64
Current hand-rolled cigarette smokers	18.88	0.88	8,122	6,685.1	4.08	0.05	17.16	20.59
Current smokers of other tobacco products	0.24	0.12	8,122	86.0	4.84	0.49	0.01	0.48
Daily tobacco smokers	23.45	0.83	8,122	8,305.4	3.09	0.04	21.83	25.07
Daily cigarette smokers	23.27	0.81	8,122	8,240.2	3.01	0.03	21.67	24.86
Daily users of smokeless tobacco	3.80	0.33	8,122	1,344.1	2.48	0.09	3.14	4.45
Former daily tobacco smokers among all adults	8.41	0.41	8,122	2,976.9	1.80	0.05	7.60	9.22
Former tobacco smokers among ever daily smokers	25.73	1.25	2,696	2,976.9	2.19	0.05	23.29	28.17
Time to first tobacco smoke upon waking								
- Within 5 minutes of waking	23.64	1.72	1,834	1,963.4	3.00	0.07	20.27	27.01
- Within 6–30 minutes of waking	34.19	1.83	1,834	2,839.5	2.72	0.05	30.61	37.77
- Within 31–60 minutes of waking	14.90	1.44	1,834	1,237.4	2.99	0.10	12.08	17.72
- More than 60 minutes of waking	27.27	1.74	1,834	2,265.1	2.81	0.06	23.85	30.69
Type of current tobacco use								
- Smoked only	85.91	1.13	2,455	9,037.7	2.58	0.01	83.70	88.12
- Both smoked and smokeless	1.28	0.37	2,455	134.9	2.62	0.29	0.56	2.00
- Smokeless only	12.81	1.04	2,455	1,347.6	2.38	0.08	10.77	14.85
Smoking quit attempt in the past 12 months	34.73	1.88	2,059	3,274.1	3.22	0.05	31.04	38.42
Visited a health- care provider in the past 12 months	34.94	1.56	2,055	3,287.7	2.19	0.04	31.89	38.00
Health-care provider asked about smoking	64.06	2.48	792	2,109.0	2.12	0.04	59.19	68.93
Health-care provider advised quitting smoking	55.50	2.50	792	1,827.0	2.00	0.05	50.60	60.39
Use of pharmacotherapy for smoking cessation	6.34	1.54	674	206.8	2.68	0.24	3.33	9.36
Use of counseling/advice or quit lines for smoking cessation	3.90	0.86	675	127.6	1.33	0.22	2.21	5.58
Quit smoking tobacco without assistance	91.71	1.73	675	3,002.8	2.66	0.02	88.32	95.11
Use of other methods for smoking cessation	2.00	0.61	670	64.8	1.27	0.31	0.80	3.20
Interest in quitting smoking in 5 categories								
- Planning to quit within next month	2.82	0.52	2,002	258.3	2.01	0.19	1.79	3.85
- Thinking about quitting within next 12 months	10.14	1.14	2,002	928.6	2.88	0.11	7.89	12.38
- Will quit someday, but not in next 12 months	39.05	1.93	2,002	3,577.0	3.15	0.05	35.26	42.84
- Not interested in quitting	43.25	1.84	2,002	3,961.9	2.75	0.04	39.66	46.85
- Don't know	4.74	0.97	2,002	434.0	4.19	0.21	2.83	6.64
Smokeless tobacco use quit attempt in the past 12 months	15.79	2.25	505	240.8	1.91	0.14	11.39	20.20
Visited a health-care provider in the past 12 months	70.56	2.79	461	979.0	1.73	0.04	65.09	76.04
Health-care provider asked about smokeless tobacco use	25.83	3.01	339	275.4	1.60	0.12	19.92	31.74
Health-care provider advised to stop using smokeless tobacco products	16.77	2.24	339	178.8	1.21	0.13	12.38	21.16
Use of pharmacotherapy for smokeless tobacco use cessation	1.71	1.56	83	4.1	1.19	0.91	-1.35	4.77
Use of counseling/advice or quit lines for smokeless tobacco use cessation	4.74	2.71	83	11.3	1.34	0.57	-0.58	10.06
Quit smokeless tobacco use without assistance	79.38	5.28	84	191.2	1.41	0.07	69.03	89.72
Use of other methods for smokeless tobacco use cessation	3.01	1.57	81	7.0	0.67	0.52	-0.06	6.08
Interest in quitting smokeless tobacco use in								
- Planning to quit within next month	1.09	0.49	494	16.2	1.10	0.45	0.13	2.06
- Thinking about quitting within next 12 months	5.56	1.18	494	82.4	1.30	0.21	3.26	7.87
- Will quit someday, but not in next 12 months	14.77	1.91	494	218.8	1.42	0.13	11.04	18.51
- Not interested in quitting	74.38	2.59	494	1,101.8	1.74	0.03	69.30	79.46
- Don't know	4.19	1.57	494	62.1	3.02	0.37	1.12	7.27

Table C5 (continued). Sampling errors of key indicators for adults 15 years of age and above living in rural areas

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Exposure to second-hand smoke (SHS) at workplace	35.22	2.15	1,480	2,489.6	3.00	0.06	31.00	39.43
Exposure to SHS at home	41.39	1.28	8,119	14,653.5	5.46	0.03	38.88	43.89
Exposure to SHS in government buildings/offices among those who visited	13.40	1.08	2,868	1,746.0	2.88	0.08	11.28	15.52
Exposure to SHS in health-care facilities among those who visited	6.83	0.68	3,354	925.0	2.42	0.10	5.50	8.15
Exposure to SHS in restaurants among all adults those who visited	49.70	1.91	3,271	7,768.2	4.76	0.04	45.96	53.43
Exposure to SHS on public transportation among those who visited	22.16	1.71	1,421	1,508.7	2.40	0.08	18.82	25.51
Exposure to SHS at universities among those who visited	27.85	4.59	234	404.4	2.45	0.16	18.85	36.85
Exposure to SHS at schools among those who visited	31.24	1.99	2,208	3,596.6	4.05	0.06	27.35	35.13
Exposure to SHS at bars or nightclubs among those who visited	74.31	4.08	231	1,098.1	2.01	0.05	66.31	82.32
Exposure to SHS at indoor/outside markets among those who visited	69.02	1.29	6,008	18,398.9	4.70	0.02	66.48	71.55
Last brand of cigarette purchased								
- Krongthip	39.01	2.46	889	1,842.8	2.25	0.06	34.19	43.82
- Wander	29.54	2.31	889	1,395.7	2.28	0.08	25.01	34.07
- L&M	7.77	1.33	889	366.9	2.18	0.17	5.17	10.37
- SMS	10.13	1.32	889	478.4	1.71	0.13	7.53	12.72
- Sai-Fon	5.83	1.43	889	275.4	3.30	0.25	3.03	8.63
- Others	7.73	1.07	889	365.2	1.42	0.14	5.64	9.82
Location of last cigarette purchase								
- Grocery	94.02	1.16	890	4,448.1	2.11	0.01	91.76	96.29
- Convenience store	4.70	1.10	890	222.3	2.39	0.23	2.55	6.85
- All others	1.28	0.35	890	60.5	0.86	0.27	0.59	1.96
Last pack purchased had pictorial warning	94.69	1.23	491	2,105.0	1.48	0.01	92.27	97.10
Noticed anti-cigarette smoking information in newspapers or in magazines	15.96	0.84	8,121	5,652.8	4.25	0.05	14.32	17.61
Noticed anti-cigarette smoking information on local TV	66.34	1.48	8,121	23,493.8	7.96	0.02	63.44	69.24
Noticed anti-cigarette smoking information on radio	30.23	1.32	8,120	10,703.0	6.69	0.04	27.65	32.81
Noticed anti-cigarette smoking information on billboards	29.14	1.40	8,121	10,319.9	7.70	0.05	26.40	31.88
Noticed anti-cigarette smoking information on leaflet/sticker	35.95	1.68	8,120	12,732.0	9.89	0.05	32.67	39.24
Noticed anti-cigarette smoking information on the internet	6.04	0.53	8,118	2,139.9	4.07	0.09	5.00	7.09
Noticed anti-cigarette smoking information during campaign activity	10.73	0.96	8,118	3,799.8	7.74	0.09	8.86	12.61
Noticed anti-cigarette smoking information on demonstration board	24.00	1.39	8,119	8,496.6	8.58	0.06	21.27	26.72
Noticed anti-cigarette smoking information somewhere else	0.40	0.17	8,059	139.0	5.57	0.42	0.07	0.72
Noticed anti-cigarette smoking information at any location	79.64	1.10	8,102	28,163.8	6.06	0.01	77.48	81.79
Noticed health warning labels on cigarette packages	93.52	0.85	2,003	8,578.6	2.36	0.01	91.87	95.18
Thinking of quitting because of health warning labels on cigarette package	63.38	1.80	2,001	5,808.1	2.78	0.03	59.86	66.90
Noticed health warning labels on raw tobacco packages	74.83	1.67	1,929	5,939.9	2.84	0.02	71.57	78.10
Thinking of quitting because of health warning labels on raw tobacco packages	49.68	2.07	1,928	3,942.1	3.31	0.04	45.62	53.74
Noticed cigarette advertisements in stores	17.43	1.45	8,121	6,173.1	11.83	0.08	14.59	20.27
Noticed advertisements anywhere other than stores	1.87	0.26	8,038	655.7	3.03	0.14	1.36	2.39
Noticed advertisements at sport or sporting events or arts	2.67	0.31	8,096	942.2	2.96	0.12	2.06	3.27
Noticed cigarette promotions: other places	1.84	0.28	8,069	650.0	3.52	0.15	1.29	2.39
Believes that tobacco smoking causes serious illness	96.84	0.41	8,119	34,286.8	4.48	0.00	96.03	97.64
Believes that tobacco smoking causes stroke	80.03	0.94	8,121	28,342.4	4.49	0.01	78.19	81.87
Believes that tobacco smoking causes heart attack	75.65	1.01	8,119	26,787.3	4.45	0.01	73.68	77.62
Believes that tobacco smoking causes lung cancer	97.51	0.29	8,122	34,532.3	2.81	0.00	96.94	98.07



Table C5 (continued). Sampling errors of key indicators for adults 15 years of age and above living in rural areas

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Believes that tobacco smoking causes high blood pressure	76.53	1.03	8,121	27,101.8	4.75	0.01	74.52	78.54
Believes that tobacco smoking causes cancer of the mouth	90.71	0.66	8,119	32,113.4	4.18	0.01	89.42	92.00
Believes that tobacco smoking causes laryngeal cancer	90.85	0.71	8,120	32,175.1	4.92	0.01	89.46	92.25
Believes that tobacco smoking causes impotence	63.23	1.23	8,116	22,388.4	5.30	0.02	60.81	65.64
Believes that tobacco smoking causes emphysema	91.33	0.60	8,121	32,342.1	3.66	0.01	90.16	92.51
Believes that tobacco smoking causes bladder cancer	48.06	1.31	8,116	17,013.2	5.59	0.03	45.49	50.63
Believes that tobacco smoking causes stomach cancer	50.89	1.29	8,118	18,020.1	5.37	0.03	48.37	53.41
Believes that tobacco smoking causes premature birth	62.21	1.25	8,116	22,026.3	5.37	0.02	59.76	64.65
Believes that tobacco smoking causes bone loss	48.04	1.14	8,116	17,006.6	4.23	0.02	45.81	50.27
Believes that using smokeless tobacco causes serious illness	72.68	1.12	8,119	25,735.7	5.12	0.02	70.49	74.87
Believes that SHS causes serious illness in non-smokers	93.36	0.48	8,121	33,061.5	3.08	0.01	92.41	94.31
Believes that SHS causes heart disease	63.54	1.15	8,118	22,497.4	4.63	0.02	61.28	65.79
Believes that SHS causes lung disease in children	86.21	0.67	8,120	30,529.6	3.10	0.01	84.89	87.53
Believes that SHS causes lung cancer in adults	90.40	0.57	8,121	32,012.0	2.99	0.01	89.29	91.51
Believes that SHS causes emphysema	82.72	0.84	8,121	29,293.1	4.01	0.01	81.07	84.37
Believes that SHS causes low birth weight	62.82	1.17	8,115	22,238.8	4.77	0.02	60.53	65.12
Believes that SHS causes premature birth	55.91	1.20	8,112	19,791.0	4.76	0.02	53.56	58.27
PHW No.1 that most makes smokers want to quit	4.56	0.71	951	230.1	1.09	0.15	3.18	5.95
PHW No.2 that most makes smokers want to quit	3.11	0.78	951	156.7	1.91	0.25	1.58	4.63
PHW No.3 that most makes smokers want to quit	3.31	0.75	951	166.9	1.66	0.23	1.84	4.78
PHW No.4 that most makes smokers want to quit	17.20	1.81	951	867.2	2.20	0.11	13.65	20.76
PHW No.7 that most makes smokers want to quit	32.32	2.43	951	1,629.1	2.56	0.08	27.56	37.07
PHW No.8 that most makes smokers want to quit	18.08	1.75	951	911.5	1.96	0.10	14.65	21.51
PHW No.11 that most makes smokers want to quit	10.11	1.63	951	509.8	2.77	0.16	6.92	13.30
PHW No.12 that most makes smokers want to quit	4.02	1.12	951	202.6	3.10	0.28	1.82	6.22
PHW No.13 that most makes smokers want to quit	5.45	0.99	951	274.6	1.80	0.18	3.51	7.38
PHW No.14 that most makes smokers want to quit	1.16	0.35	951	58.5	1.01	0.30	0.48	1.84
Pictorial warning that most makes smokers want to quit (none of them)	0.68	0.29	951	34.1	1.19	0.43	0.11	1.25
PHW No.1 that most influences non-smokers to not smoke	6.43	0.61	4,656	1,353.6	2.83	0.09	5.25	7.62
PHW No.2 that most influences non-smokers to not smoke	2.78	0.36	4,656	584.7	2.27	0.13	2.07	3.49
PHW No.3 that most influences non-smokers to not smoke	2.88	0.34	4,656	605.3	1.91	0.12	2.21	3.54
PHW No.4 that most influences non-smokers to not smoke	16.12	0.81	4,656	3,391.4	2.27	0.05	14.52	17.71
PHW No.7 that most influences non-smokers to not smoke	38.48	1.36	4,656	8,098.0	3.64	0.04	35.82	41.15
PHW No.8 that most influences non-smokers to not smoke	14.73	0.76	4,656	3,100.6	2.16	0.05	13.24	16.23
PHW No.11 that most influences non-smokers to not smoke	8.94	1.49	4,656	1,881.0	12.75	0.17	6.01	11.86
PHW No.12 that most influences non-smokers to not smoke	3.26	0.30	4,656	686.2	1.34	0.09	2.67	3.85
PHW No.13 that most influences non-smokers to not smoke	5.49	0.51	4,656	1,155.5	2.31	0.09	4.50	6.48
PHW No.14 that most influences non-smokers to not smoke	0.48	0.12	4,656	100.3	1.40	0.25	0.24	0.71
Pictorial warning that most influences non-smokers to not smoke (none of them)	0.41	0.16	4,656	86.7	2.98	0.39	0.09	0.73
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes	37.86	1.18	8,119	13,408.8	4.82	0.03	35.55	40.18
Believes hand-rolled cigarettes are more harmful than manufactured cigarettes	17.26	0.90	8,119	6,111.0	4.59	0.05	15.50	19.02
Believes manufactured cigarettes are as harmful as hand-rolled cigarettes	41.00	1.28	8,119	14,519.1	5.47	0.03	38.50	43.50
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes (don't know)	3.88	0.31	8,119	1,374.2	2.04	0.08	3.28	4.48



**Table C6 (continued). Sampling errors of key indicators for adults 15 years of age and above living in Bangkok**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Exposure to second-hand smoke (SHS) at workplace	21.24	1.73	1,523	430.1	2.74	0.08	17.84	24.64
Exposure to SHS at home	19.02	1.02	4,349	1,067.3	2.97	0.05	17.01	21.03
Exposure to SHS in government buildings/offices among those who visited	17.00	1.37	1,416	316.8	1.88	0.08	14.32	19.68
Exposure to SHS in health-care facilities among those who visited	7.48	0.84	1,519	145.4	1.56	0.11	5.82	9.13
Exposure to SHS in restaurants among all adults those who visited	40.52	1.45	2,320	1,266.4	2.01	0.04	37.69	43.36
Exposure to SHS on public transportation among those who visited	29.04	1.50	2,842	1,040.9	3.09	0.05	26.11	31.97
Exposure to SHS at universities among those who visited	45.92	4.31	315	208.7	2.35	0.09	37.47	54.37
Exposure to SHS at schools among those who visited	17.92	1.86	665	168.2	1.56	0.10	14.27	21.57
Exposure to SHS at bars or nightclubs among those who visited	60.18	4.05	259	226.2	1.76	0.07	52.25	68.11
Exposure to SHS at indoor/outside markets among those who visited	70.43	1.15	3,374	3,078.3	2.15	0.02	68.18	72.69
Last brand of cigarette purchased								
- Krongthip	37.96	2.48	651	341.2	1.70	0.07	33.10	42.82
- Wander	13.39	1.68	651	120.4	1.58	0.13	10.10	16.68
- L&M	17.39	1.80	651	156.3	1.46	0.10	13.87	20.91
- SMS	10.08	1.41	651	90.6	1.42	0.14	7.32	12.83
- Sai-Fon	8.79	1.35	651	79.0	1.48	0.15	6.14	11.44
- Others	12.39	1.67	651	111.4	1.67	0.13	9.12	15.67
Location of last cigarette purchase								
- Grocery	68.72	2.72	652	619.4	2.24	0.04	63.40	74.05
- Convenience store	28.10	2.63	652	253.2	2.23	0.09	22.94	33.25
- All others	3.18	1.05	652	28.7	2.34	0.33	1.12	5.24
Last pack purchased had pictorial warning	96.54	1.29	435	592.3	2.17	0.01	94.01	99.07
Noticed anti-cigarette smoking information in newspapers or in magazines	32.32	1.43	4,345	1,811.7	4.08	0.04	29.51	35.13
Noticed anti-cigarette smoking information on local TV	76.15	1.23	4,347	4,271.3	3.62	0.02	73.74	78.56
Noticed anti-cigarette smoking information on radio	31.33	1.43	4,347	1,757.0	4.16	0.05	28.51	34.14
Noticed anti-cigarette smoking information on billboards	46.39	1.72	4,346	2,601.3	5.15	0.04	43.03	49.75
Noticed anti-cigarette smoking information on leaflet/sticker	40.17	1.83	4,347	2,253.0	6.08	0.05	36.58	43.76
Noticed anti-cigarette smoking information on the internet	14.71	0.88	4,347	825.2	2.68	0.06	12.99	16.43
Noticed anti-cigarette smoking information during campaign activity	17.64	1.48	4,347	989.2	6.52	0.08	14.75	20.53
Noticed anti-cigarette smoking information on demonstration board	28.05	1.64	4,346	1,572.8	5.79	0.06	24.83	31.26
Noticed anti-cigarette smoking information somewhere else	0.63	0.21	4,058	33.1	3.00	0.34	0.21	1.05
Noticed anti-cigarette smoking information at any location	86.50	1.04	4,315	4,819.4	4.00	0.01	84.46	88.54
Noticed health warning labels on cigarette packages	98.19	0.56	735	998.7	1.31	0.01	97.09	99.29
Thinking of quitting because of health warning labels on cigarette package	59.94	2.55	732	608.2	1.98	0.04	54.95	64.93
Noticed health warning labels on raw tobacco packages	86.82	3.53	162	181.4	1.75	0.04	79.90	93.73
Thinking of quitting because of health warning labels on raw tobacco packages	50.76	4.62	162	106.1	1.37	0.09	41.72	59.81
Noticed cigarette advertisements in stores	24.92	1.23	4,345	1,396.7	3.50	0.05	22.52	27.32
Noticed advertisements anywhere other than stores	3.67	0.43	4,046	191.8	2.09	0.12	2.83	4.50
Noticed advertisements at sport or sporting events or arts	5.42	0.46	4,341	303.7	1.79	0.08	4.52	6.32
Noticed cigarette promotions: other places	4.95	0.51	4,337	276.7	2.43	0.10	3.94	5.95
Believes that tobacco smoking causes serious illness	98.87	0.21	4,349	5,548.1	1.65	0.00	98.47	99.28
Believes that tobacco smoking causes stroke	81.26	1.04	4,348	4,559.2	3.11	0.01	79.22	83.31
Believes that tobacco smoking causes heart attack	78.75	1.07	4,347	4,417.2	2.96	0.01	76.66	80.84
Believes that tobacco smoking causes lung cancer	98.58	0.25	4,348	5,531.0	1.92	0.00	98.10	99.07
Believes that tobacco smoking causes high blood pressure	79.73	1.00	4,348	4,473.4	2.69	0.01	77.78	81.69



Table C6 (continued). Sampling errors of key indicators for adults 15 years of age and above living in Bangkok

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Believes that tobacco smoking causes cancer of the mouth	93.97	0.52	4,348	5,271.9	2.07	0.01	92.95	94.98
Believes that tobacco smoking causes laryngeal cancer	95.55	0.43	4,348	5,361.0	1.92	0.00	94.71	96.40
Believes that tobacco smoking causes impotence	66.89	1.30	4,346	3,750.9	3.31	0.02	64.34	69.43
Believes that tobacco smoking causes emphysema	96.75	0.36	4,348	5,427.6	1.79	0.00	96.04	97.45
Believes that tobacco smoking causes bladder cancer	41.57	1.35	4,346	2,331.7	3.27	0.03	38.92	44.22
Believes that tobacco smoking causes stomach cancer	48.29	1.34	4,349	2,709.8	3.12	0.03	45.67	50.92
Believes that tobacco smoking causes premature birth	70.15	1.15	4,348	3,935.3	2.72	0.02	67.90	72.39
Believes that tobacco smoking causes bone loss	51.46	1.45	4,344	2,884.3	3.68	0.03	48.61	54.31
Believes that using smokeless tobacco causes serious illness	70.59	1.26	4,345	3,958.6	3.30	0.02	68.13	73.05
Believes that SHS causes serious illness in non-smokers	96.38	0.42	4,349	5,408.6	2.19	0.00	95.56	97.21
Believes that SHS causes heart disease	64.79	1.17	4,346	3,634.2	2.60	0.02	62.50	67.08
Believes that SHS causes lung disease in children	89.62	0.65	4,349	5,029.1	1.98	0.01	88.35	90.90
Believes that SHS causes lung cancer in adults	93.13	0.52	4,349	5,226.1	1.86	0.01	92.11	94.16
Believes that SHS causes emphysema	87.35	0.76	4,349	4,901.4	2.29	0.01	85.85	88.84
Believes that SHS causes low birth weight	71.49	1.22	4,348	4,011.2	3.20	0.02	69.09	73.88
Believes that SHS causes premature birth	66.14	1.29	4,346	3,708.0	3.23	0.02	63.62	68.67
PHW No.1 that most makes smokers want to quit	6.21	1.02	648	56.5	1.15	0.16	4.22	8.20
PHW No.2 that most makes smokers want to quit	2.25	0.65	648	20.5	1.25	0.29	0.98	3.53
PHW No.3 that most makes smokers want to quit	3.46	0.80	648	31.5	1.23	0.23	1.90	5.03
PHW No.4 that most makes smokers want to quit	18.72	1.83	648	170.2	1.43	0.10	15.12	22.31
PHW No.7 that most makes smokers want to quit	24.40	2.19	648	221.9	1.68	0.09	20.11	28.69
PHW No.8 that most makes smokers want to quit	21.24	1.80	648	193.2	1.25	0.08	17.72	24.77
PHW No.11 that most makes smokers want to quit	9.01	1.53	648	81.9	1.85	0.17	6.01	12.01
PHW No.12 that most makes smokers want to quit	2.46	0.69	648	22.3	1.28	0.28	1.11	3.80
PHW No.13 that most makes smokers want to quit	5.22	1.06	648	47.5	1.47	0.20	3.15	7.30
PHW No.14 that most makes smokers want to quit	0.90	0.36	648	8.2	0.93	0.40	0.20	1.60
Pictorial warning that most makes smokers want to quit (none of them)	6.13	1.40	648	55.7	2.20	0.23	3.39	8.86
PHW No.1 that most influences non-smokers to not smoke	5.50	0.53	3,023	210.9	1.62	0.10	4.46	6.53
PHW No.2 that most influences non-smokers to not smoke	2.16	0.34	3,023	82.9	1.63	0.16	1.50	2.82
PHW No.3 that most influences non-smokers to not smoke	2.63	0.36	3,023	100.8	1.56	0.14	1.92	3.34
PHW No.4 that most influences non-smokers to not smoke	13.48	0.81	3,023	517.0	1.68	0.06	11.90	15.06
PHW No.7 that most influences non-smokers to not smoke	33.27	1.21	3,023	1,275.9	2.00	0.04	30.89	35.64
PHW No.8 that most influences non-smokers to not smoke	17.50	0.94	3,023	671.4	1.86	0.05	15.66	19.35
PHW No.11 that most influences non-smokers to not smoke	5.18	0.85	3,023	198.7	4.48	0.16	3.51	6.85
PHW No.12 that most influences non-smokers to not smoke	2.79	0.35	3,023	107.1	1.34	0.12	2.11	3.47
PHW No.13 that most influences non-smokers to not smoke	6.51	0.54	3,023	249.7	1.45	0.08	5.45	7.57
PHW No.14 that most influences non-smokers to not smoke	0.38	0.12	3,023	14.4	1.15	0.32	0.14	0.61
Pictorial warning that most influences non-smokers to not smoke (none of them)	10.61	1.52	3,023	406.8	7.40	0.14	7.62	13.59
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes	24.02	0.99	4,342	1,346.3	2.34	0.04	22.08	25.96
Believes hand-rolled cigarettes are more harmful than manufactured cigarettes	24.29	1.01	4,342	1,361.3	2.40	0.04	22.31	26.27
Believes manufactured cigarettes are as harmful as hand-rolled cigarettes	47.72	1.42	4,342	2,674.3	3.51	0.03	44.93	50.50
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes (don't know)	3.98	0.43	4,342	222.8	2.10	0.11	3.13	4.82

**Table C7. Sampling errors of key indicators for adults 15 years of age and above living in the Central Region**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Current tobacco users	24.99	1.00	3,980	3,263.3	2.10	0.04	23.04	26.94
Current tobacco smokers	23.38	0.95	3,980	3,052.8	2.01	0.04	21.51	25.24
Current cigarette smokers	23.38	0.95	3,980	3,052.8	2.01	0.04	21.51	25.24
Current users of smokeless tobacco	1.76	0.23	3,980	229.6	1.24	0.13	1.30	2.21
Current manufactured cigarette smokers	16.67	0.91	3,980	2,176.9	2.37	0.05	14.89	18.45
Current hand-rolled cigarette smokers	10.81	0.94	3,980	1,411.1	3.66	0.09	8.96	12.65
Current smokers of other tobacco products	0.04	0.03	3,980	5.8	0.68	0.62	-0.01	0.10
Daily tobacco smokers	20.39	0.89	3,980	2,662.2	1.94	0.04	18.65	22.13
Daily cigarette smokers	20.39	0.89	3,980	2,662.2	1.94	0.04	18.65	22.13
Daily users of smokeless tobacco	1.58	0.23	3,980	205.9	1.30	0.14	1.14	2.02
Former daily tobacco smokers among all adults	6.93	0.52	3,980	905.3	1.68	0.08	5.91	7.96
Former tobacco smokers among ever daily smokers	24.51	1.67	1,127	905.3	1.70	0.07	21.24	27.79
Time to first tobacco smoke upon waking								
- Within 5 minutes of waking	29.18	2.54	778	776.1	2.43	0.09	24.20	34.16
- Within 6–30 minutes of waking	33.67	2.68	778	895.6	2.51	0.08	28.41	38.93
- Within 31–60 minutes of waking	13.89	2.05	778	369.4	2.73	0.15	9.87	17.91
- More than 60 minutes of waking	23.27	2.50	778	619.0	2.73	0.11	18.36	28.18
Type of current tobacco use								
- Smoked only	92.96	0.88	964	3,033.6	1.13	0.01	91.25	94.68
- Both smoked and smokeless	0.59	0.25	964	19.2	1.03	0.43	0.10	1.08
- Smokeless only	6.45	0.85	964	210.5	1.16	0.13	4.78	8.12
Smoking quit attempt in the past 12 months	42.15	2.40	906	1,325.3	2.14	0.06	37.45	46.85
Visited a health- care provider in the past 12 months	36.60	2.10	905	1,147.0	1.72	0.06	32.48	40.72
Health-care provider asked about smoking	59.92	3.87	353	687.2	2.20	0.06	52.33	67.50
Health-care provider advised quitting smoking	49.63	3.62	353	569.3	1.85	0.07	42.53	56.73
Use of pharmacotherapy for smoking cessation	5.73	1.17	391	75.9	0.99	0.20	3.43	8.02
Use of counseling/advice or quit lines for smoking cessation	5.88	1.41	391	78.0	1.40	0.24	3.12	8.64
Quit smoking tobacco without assistance	88.86	2.02	391	1,177.7	1.60	0.02	84.91	92.82
Use of other methods for smoking cessation	3.58	1.27	390	47.4	1.81	0.35	1.10	6.07
Interest in quitting smoking in 5 categories								
- Planning to quit within next month	5.57	1.17	880	170.1	2.29	0.21	3.28	7.87
- Thinking about quitting within next 12 months	8.77	1.20	880	267.7	1.58	0.14	6.42	11.12
- Will quit someday, but not in next 12 months	39.91	2.59	880	1,218.2	2.45	0.06	34.84	44.98
- Not interested in quitting	42.58	2.62	880	1,299.7	2.46	0.06	37.45	47.71
- Don't know	3.16	0.71	880	96.6	1.44	0.22	1.77	4.55
Smokeless tobacco use quit attempt in the past 12 months	22.40	5.72	93	54.7	1.73	0.26	11.19	33.60
Visited a health-care provider in the past 12 months	58.37	6.58	85	131.3	1.50	0.11	45.48	71.26
Health-care provider asked about smokeless tobacco use	31.35	6.99	58	45.0	1.30	0.22	17.64	45.05
Health-care provider advised to stop using smokeless tobacco products	15.72	5.15	58	22.6	1.14	0.33	5.64	25.81
Use of pharmacotherapy for smokeless tobacco use cessation	-	-	-	-	-	-	-	-
Use of counseling/advice or quit lines for smokeless tobacco use cessation	7.00	6.85	22	3.8	1.51	0.98	-6.42	20.43
Quit smokeless tobacco use without assistance	86.51	6.97	22	47.3	0.87	0.08	72.85	100.17
Use of other methods for smokeless tobacco use cessation	1.62	1.67	22	0.9	0.37	1.03	-1.66	4.89
Interest in quitting smokeless tobacco use in								
- Planning to quit within next month	4.36	2.55	90	10.0	1.39	0.58	-0.64	9.37
- Thinking about quitting within next 12 months	5.56	2.85	90	12.7	1.37	0.51	-0.02	11.14
- Will quit someday, but not in next 12 months	13.70	4.30	90	31.3	1.39	0.31	5.28	22.12
- Not interested in quitting	74.18	5.57	90	169.5	1.44	0.08	63.26	85.10
- Don't know	2.20	1.53	90	5.0	0.97	0.70	-0.80	5.19

Table C7 (continued). Sampling errors of key indicators for adults 15 years of age and above living in the Central Region

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Exposure to second-hand smoke (SHS) at workplace	27.84	2.08	1,307	1,236.0	2.83	0.07	23.75	31.92
Exposure to SHS at home	36.35	1.55	3,975	4,742.9	4.14	0.04	33.31	39.40
Exposure to SHS in government buildings/offices among those who visited	20.63	1.92	1,289	879.0	2.91	0.09	16.86	24.40
Exposure to SHS in health-care facilities among those who visited	9.13	1.00	1,466	404.9	1.75	0.11	7.18	11.09
Exposure to SHS in restaurants among all adults those who visited	55.56	2.11	2,003	3,909.4	3.60	0.04	51.43	59.69
Exposure to SHS on public transportation among those who visited	30.58	2.27	1,283	1,238.1	3.11	0.07	26.14	35.03
Exposure to SHS at universities among those who visited	45.26	5.05	146	240.9	1.49	0.11	35.37	55.15
Exposure to SHS at schools among those who visited	24.36	2.44	871	788.8	2.81	0.10	19.58	29.14
Exposure to SHS at bars or nightclubs among those who visited	84.02	3.16	206	605.8	1.53	0.04	77.82	90.21
Exposure to SHS at indoor/outside markets among those who visited	72.83	1.53	3,100	7,521.8	3.68	0.02	69.83	75.83
Last brand of cigarette purchased								
- Krongthip	37.31	2.85	580	782.9	2.01	0.08	31.72	42.90
- Wander	18.16	2.11	580	381.1	1.73	0.12	14.03	22.29
- L&M	14.89	2.42	580	312.3	2.68	0.16	10.14	19.63
- SMS	13.57	1.78	580	284.8	1.57	0.13	10.08	17.07
- Sai-Fon	8.26	1.54	580	173.4	1.82	0.19	5.24	11.29
- Others	7.80	1.42	580	163.7	1.63	0.18	5.01	10.59
Location of last cigarette purchase								
- Grocery	85.74	2.18	582	1,806.9	2.27	0.03	81.45	90.02
- Convenience store	11.79	2.11	582	248.4	2.49	0.18	7.65	15.92
- All others	2.48	0.76	582	52.2	1.37	0.30	1.00	3.96
Last pack purchased had pictorial warning	97.88	1.01	371	1,254.9	1.84	0.01	95.89	99.87
Noticed anti-cigarette smoking information in newspapers or in magazines	24.44	1.47	3,980	3,191.5	4.63	0.06	21.57	27.31
Noticed anti-cigarette smoking information on local TV	69.20	1.88	3,979	9,034.2	6.62	0.03	65.51	72.89
Noticed anti-cigarette smoking information on radio	21.01	1.46	3,977	2,742.0	5.11	0.07	18.15	23.87
Noticed anti-cigarette smoking information on billboards	34.71	2.06	3,979	4,532.0	7.44	0.06	30.68	38.74
Noticed anti-cigarette smoking information on leaflet/sticker	35.42	1.91	3,978	4,623.5	6.35	0.05	31.67	39.16
Noticed anti-cigarette smoking information on the internet	9.62	0.90	3,980	1,256.4	3.69	0.09	7.86	11.38
Noticed anti-cigarette smoking information during campaign activity	12.32	1.41	3,979	1,609.0	7.30	0.11	9.56	15.08
Noticed anti-cigarette smoking information on demonstration board	19.41	1.53	3,980	2,534.7	5.96	0.08	16.41	22.41
Noticed anti-cigarette smoking information somewhere else	0.13	0.07	3,974	17.5	1.53	0.53	-0.01	0.28
Noticed anti-cigarette smoking information at any location	81.35	1.53	3,976	10,613.0	6.14	0.02	78.35	84.35
Noticed health warning labels on cigarette packages	98.03	0.56	881	2,992.7	1.44	0.01	96.93	99.13
Thinking of quitting because of health warning labels on cigarette package	54.66	2.71	878	1,661.8	2.61	0.05	49.34	59.97
Noticed health warning labels on raw tobacco packages	78.72	2.97	486	1,256.3	2.55	0.04	72.91	84.53
Thinking of quitting because of health warning labels on raw tobacco packages	43.64	3.76	482	692.1	2.76	0.09	36.28	51.00
Noticed cigarette advertisements in stores	14.83	1.23	3,979	1,936.1	4.76	0.08	12.42	17.24
Noticed advertisements anywhere other than stores	3.60	0.57	3,966	467.8	3.70	0.16	2.48	4.71
Noticed advertisements at sport or sporting events or arts	3.48	0.49	3,972	453.6	2.86	0.14	2.52	4.45
Noticed cigarette promotions: other places	3.36	0.60	3,955	436.2	4.45	0.18	2.17	4.54
Believes that tobacco smoking causes serious illness	95.35	0.80	3,977	12,440.4	5.67	0.01	93.79	96.91
Believes that tobacco smoking causes stroke	80.36	1.17	3,978	10,486.5	3.46	0.01	78.06	82.66
Believes that tobacco smoking causes heart attack	75.15	1.32	3,979	9,811.1	3.69	0.02	72.57	77.73
Believes that tobacco smoking causes lung cancer	97.41	0.34	3,979	12,719.1	1.79	0.00	96.75	98.07
Believes that tobacco smoking causes high blood pressure	74.81	1.42	3,980	9,768.8	4.27	0.02	72.02	77.59

**Table C7 (continued). Sampling errors of key indicators for adults 15 years of age and above living in the Central Region**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Believes that tobacco smoking causes cancer of the mouth	90.70	0.76	3,979	11,842.8	2.74	0.01	89.20	92.19
Believes that tobacco smoking causes laryngeal cancer	92.48	0.70	3,980	12,076.6	2.81	0.01	91.10	93.85
Believes that tobacco smoking causes impotence	62.74	1.53	3,976	8,188.8	3.96	0.02	59.75	65.73
Believes that tobacco smoking causes emphysema	93.92	0.65	3,979	12,263.6	2.98	0.01	92.64	95.20
Believes that tobacco smoking causes bladder cancer	41.88	1.77	3,977	5,468.3	5.14	0.04	38.41	45.36
Believes that tobacco smoking causes stomach cancer	47.44	1.79	3,977	6,192.2	5.12	0.04	43.93	50.96
Believes that tobacco smoking causes premature birth	62.32	1.73	3,977	8,132.5	5.04	0.03	58.94	65.70
Believes that tobacco smoking causes bone loss	46.93	1.77	3,975	6,120.4	4.98	0.04	43.46	50.39
Believes that using smokeless tobacco causes serious illness	63.59	1.74	3,979	8,301.2	5.19	0.03	60.18	66.99
Believes that SHS causes serious illness in non-smokers	92.74	0.66	3,978	12,106.2	2.58	0.01	91.45	94.04
Believes that SHS causes heart disease	60.85	1.59	3,974	7,937.6	4.21	0.03	57.74	63.97
Believes that SHS causes lung disease in children	82.59	1.01	3,978	10,781.0	2.85	0.01	80.60	84.58
Believes that SHS causes lung cancer in adults	88.10	0.86	3,978	11,500.3	2.79	0.01	86.42	89.78
Believes that SHS causes emphysema	83.49	1.08	3,978	10,899.2	3.36	0.01	81.38	85.61
Believes that SHS causes low birth weight	63.86	1.46	3,977	8,334.4	3.66	0.02	61.00	66.72
Believes that SHS causes premature birth	54.69	1.54	3,976	7,134.5	3.80	0.03	51.68	57.71
PHW No.1 that most makes smokers want to quit	7.77	1.25	598	168.5	1.29	0.16	5.32	10.21
PHW No.2 that most makes smokers want to quit	3.22	0.91	598	69.8	1.61	0.28	1.42	5.01
PHW No.3 that most makes smokers want to quit	5.62	1.33	598	121.9	2.00	0.24	3.01	8.23
PHW No.4 that most makes smokers want to quit	16.81	2.33	598	364.6	2.31	0.14	12.25	21.37
PHW No.7 that most makes smokers want to quit	26.69	3.58	598	578.8	3.91	0.13	19.67	33.70
PHW No.8 that most makes smokers want to quit	16.53	2.01	598	358.6	1.75	0.12	12.59	20.47
PHW No.11 that most makes smokers want to quit	9.64	2.20	598	209.2	3.31	0.23	5.33	13.95
PHW No.12 that most makes smokers want to quit	4.28	0.83	598	92.8	1.01	0.19	2.64	5.91
PHW No.13 that most makes smokers want to quit	6.18	1.31	598	134.1	1.76	0.21	3.62	8.75
PHW No.14 that most makes smokers want to quit	1.15	0.51	598	24.9	1.39	0.45	0.14	2.16
Pictorial warning that most makes smokers want to quit (none of them)	2.12	0.74	598	45.9	1.59	0.35	0.66	3.57
PHW No.1 that most influences non-smokers to not smoke	6.74	0.78	2,562	566.6	2.51	0.12	5.21	8.28
PHW No.2 that most influences non-smokers to not smoke	2.52	0.38	2,562	212.0	1.51	0.15	1.78	3.27
PHW No.3 that most influences non-smokers to not smoke	2.77	0.38	2,562	232.6	1.34	0.14	2.03	3.51
PHW No.4 that most influences non-smokers to not smoke	15.19	0.93	2,562	1,275.9	1.71	0.06	13.37	17.00
PHW No.7 that most influences non-smokers to not smoke	37.83	1.68	2,562	3,178.2	3.08	0.04	34.53	41.12
PHW No.8 that most influences non-smokers to not smoke	15.88	1.12	2,562	1,334.5	2.39	0.07	13.69	18.07
PHW No.11 that most influences non-smokers to not smoke	7.49	1.57	2,562	629.3	9.16	0.21	4.41	10.57
PHW No.12 that most influences non-smokers to not smoke	4.39	0.49	2,562	369.1	1.47	0.11	3.43	5.36
PHW No.13 that most influences non-smokers to not smoke	5.85	0.64	2,562	491.8	1.90	0.11	4.60	7.11
PHW No.14 that most influences non-smokers to not smoke	0.36	0.14	2,562	30.3	1.47	0.40	0.08	0.64
Pictorial warning that most influences non-smokers to not smoke (none of them)	0.97	0.33	2,562	81.6	2.86	0.34	0.33	1.61
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes	36.12	1.58	3,979	4,715.1	4.30	0.04	33.02	39.21
Believes hand-rolled cigarettes are more harmful than manufactured cigarettes	19.83	1.45	3,979	2,588.7	5.27	0.07	16.99	22.68
Believes manufactured cigarettes are as harmful as hand-rolled cigarettes	39.31	1.53	3,979	5,132.3	3.91	0.04	36.31	42.32
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes (don't know)	4.74	0.47	3,979	618.2	1.93	0.10	3.82	5.65

Table C8. Sampling errors of key indicators for adults 15 years of age and above living in the Northern Region

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Current tobacco users	24.88	1.38	4,086	2,503.8	4.19	0.06	22.17	27.60
Current tobacco smokers	21.67	1.21	4,086	2,180.8	3.55	0.06	19.29	24.06
Current cigarette smokers	20.93	1.10	4,086	2,105.9	3.00	0.05	18.77	23.09
Current users of smokeless tobacco	4.07	0.72	4,086	410.0	5.36	0.18	2.67	5.48
Current manufactured cigarette smokers	11.33	0.95	4,086	1,140.3	3.66	0.08	9.47	13.19
Current hand-rolled cigarette smokers	13.49	1.10	4,086	1,357.3	4.23	0.08	11.34	15.64
Current smokers of other tobacco products	0.75	0.41	4,086	75.4	9.24	0.55	-0.05	1.55
Daily tobacco smokers	19.55	1.25	4,086	1,966.8	4.09	0.06	17.09	22.01
Daily cigarette smokers	18.92	1.13	4,086	1,903.5	3.39	0.06	16.71	21.13
Daily users of smokeless tobacco	3.48	0.58	4,086	349.7	4.13	0.17	2.33	4.62
Former daily tobacco smokers among all adults	10.73	0.66	4,086	1,079.7	1.87	0.06	9.43	12.03
Former tobacco smokers among ever daily smokers	34.75	1.99	1,241	1,079.7	2.18	0.06	30.84	38.66
Time to first tobacco smoke upon waking								
- Within 5 minutes of waking	25.81	2.76	718	507.6	2.84	0.11	20.41	31.21
- Within 6–30 minutes of waking	34.78	3.00	718	684.0	2.84	0.09	28.91	40.65
- Within 31–60 minutes of waking	12.07	2.10	718	237.3	2.97	0.17	7.96	16.18
- More than 60 minutes of waking	27.35	2.82	718	537.9	2.86	0.10	21.83	32.87
Type of current tobacco use								
- Smoked only	83.63	2.43	942	2,093.8	4.07	0.03	78.86	88.40
- Both smoked and smokeless	3.47	1.37	942	87.0	5.24	0.39	0.80	6.15
- Smokeless only	12.90	1.89	942	323.0	3.00	0.15	9.19	16.61
Smoking quit attempt in the past 12 months	28.23	3.09	821	635.4	3.86	0.11	22.18	34.28
Visited a health-care provider in the past 12 months	37.44	2.78	819	840.4	2.71	0.07	31.99	42.90
Health-care provider asked about smoking	62.55	4.44	322	527.2	2.71	0.07	53.84	71.26
Health-care provider advised quitting smoking	52.98	4.31	322	446.5	2.39	0.08	44.53	61.43
Use of pharmacotherapy for smoking cessation	4.89	1.49	237	31.1	1.12	0.30	1.97	7.80
Use of counseling/advice or quit lines for smoking cessation	4.99	1.46	237	31.7	1.05	0.29	2.14	7.85
Quit smoking tobacco without assistance	89.74	2.72	237	570.2	1.90	0.03	84.41	95.07
Use of other methods for smoking cessation	1.04	0.76	234	6.6	1.29	0.73	-0.44	2.53
Interest in quitting smoking in 5 categories								
- Planning to quit within next month	1.76	0.64	797	38.3	1.91	0.37	0.50	3.02
- Thinking about quitting within next 12 months	6.67	1.30	797	145.4	2.15	0.19	4.13	9.21
- Will quit someday, but not in next 12 months	36.90	2.73	797	804.8	2.54	0.07	31.56	42.25
- Not interested in quitting	46.89	3.36	797	1,022.5	3.61	0.07	40.30	53.48
- Don't know	7.79	3.11	797	169.9	10.74	0.40	1.69	13.89
Smokeless tobacco use quit attempt in the past 12 months	14.10	4.60	176	59.7	3.06	0.33	5.09	23.12
Visited a health-care provider in the past 12 months	65.87	4.16	150	221.3	1.15	0.06	57.71	74.02
Health-care provider asked about smokeless tobacco use	24.69	5.28	110	67.6	1.63	0.21	14.34	35.03
Health-care provider advised to stop using smokeless tobacco products	8.25	2.93	110	22.6	1.24	0.36	2.51	13.99
Use of pharmacotherapy for smokeless tobacco use cessation	-	-	-	-	-	-	-	-
Use of counseling/advice or quit lines for smokeless tobacco use cessation	7.01	6.60	25	4.2	1.60	0.94	-5.92	19.94
Quit smokeless tobacco use without assistance	70.64	7.32	25	42.1	0.62	0.10	56.28	84.99
Use of other methods for smokeless tobacco use cessation	-	-	-	-	-	-	-	-
Interest in quitting smokeless tobacco use in								
- Planning to quit within next month	-	-	-	-	-	-	-	-
- Thinking about quitting within next 12 months	4.06	1.51	171	16.7	1.00	0.37	1.10	7.02
- Will quit someday, but not in next 12 months	16.40	3.10	171	67.3	1.19	0.19	10.34	22.47
- Not interested in quitting	70.41	5.84	171	288.6	2.78	0.08	58.96	81.85
- Don't know	9.13	5.34	171	37.4	5.84	0.58	-1.33	19.59

**Table C8 (continued). Sampling errors of key indicators for adults 15 years of age and above living in the Northern Region**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Exposure to second-hand smoke (SHS) at workplace	27.38	2.75	972	658.5	3.69	0.10	21.99	32.76
Exposure to SHS at home	34.65	2.35	4,084	3,485.3	9.96	0.07	30.04	39.26
Exposure to SHS in government buildings/offices among those who visited	8.70	1.33	1,385	325.0	3.06	0.15	6.10	11.30
Exposure to SHS in health-care facilities among those who visited	3.39	0.77	1,775	145.2	3.20	0.23	1.88	4.89
Exposure to SHS in restaurants among all adults those who visited	35.85	2.43	1,715	1,629.0	4.42	0.07	31.08	40.62
Exposure to SHS on public transportation among those who visited	17.85	3.55	513	235.7	4.39	0.20	10.90	24.80
Exposure to SHS at universities among those who visited	30.37	7.46	218	163.8	5.72	0.25	15.74	45.00
Exposure to SHS at schools among those who visited	30.95	4.07	1,060	1,042.7	8.22	0.13	22.97	38.92
Exposure to SHS at bars or nightclubs among those who visited	68.18	4.54	196	321.0	1.85	0.07	59.29	77.08
Exposure to SHS at indoor/outside markets among those who visited	58.86	2.23	3,238	4,744.1	6.63	0.04	54.50	63.23
Last brand of cigarette purchased								
- Krongthip	26.24	3.97	365	273.0	2.97	0.15	18.45	34.03
- Wander	39.94	3.83	365	415.5	2.23	0.10	32.44	47.44
- L&M	12.09	2.56	365	125.7	2.25	0.21	7.06	17.11
- SMS	14.12	2.19	365	146.9	1.44	0.16	9.82	18.42
- Sai-Fon	2.84	1.03	365	29.5	1.39	0.36	0.82	4.85
- Others	4.78	1.26	365	49.7	1.28	0.26	2.30	7.25
Location of last cigarette purchase								
- Grocery	88.88	1.99	366	926.1	1.47	0.02	84.97	92.79
- Convenience store	9.02	1.86	366	94.0	1.54	0.21	5.38	12.67
- All others	2.10	0.73	366	21.8	0.96	0.35	0.66	3.53
Last pack purchased had pictorial warning	98.30	0.88	229	630.1	1.04	0.01	96.58	100.01
Noticed anti-cigarette smoking information in newspapers or in magazines	19.05	1.55	4,086	1,917.0	6.37	0.08	16.01	22.09
Noticed anti-cigarette smoking information on local TV	67.36	2.45	4,086	6,778.1	11.18	0.04	62.56	72.17
Noticed anti-cigarette smoking information on radio	33.70	2.27	4,085	3,388.6	9.40	0.07	29.26	38.14
Noticed anti-cigarette smoking information on billboards	23.68	1.95	4,086	2,382.5	8.63	0.08	19.85	27.51
Noticed anti-cigarette smoking information on leaflet/sticker	42.70	2.50	4,085	4,296.0	10.42	0.06	37.80	47.60
Noticed anti-cigarette smoking information on the internet	6.87	0.87	4,084	691.0	4.82	0.13	5.17	8.57
Noticed anti-cigarette smoking information during campaign activity	6.36	0.84	4,084	640.1	4.79	0.13	4.73	8.00
Noticed anti-cigarette smoking information on demonstration board	22.25	1.59	4,082	2,236.5	5.97	0.07	19.13	25.36
Noticed anti-cigarette smoking information somewhere else	0.15	0.07	4,043	15.1	1.31	0.46	0.01	0.29
Noticed anti-cigarette smoking information at any location	79.44	2.10	4,078	7,985.2	10.99	0.03	75.33	83.55
Noticed health warning labels on cigarette packages	85.03	2.73	797	1,854.3	4.65	0.03	79.68	90.37
Thinking of quitting because of health warning labels on cigarette package	55.74	2.70	796	1,214.8	2.34	0.05	50.45	61.02
Noticed health warning labels on raw tobacco packages	60.66	4.47	617	1,014.8	5.15	0.07	51.90	69.41
Thinking of quitting because of health warning labels on raw tobacco packages	35.48	3.58	616	592.7	3.45	0.10	28.46	42.50
Noticed cigarette advertisements in stores	12.44	1.43	4,085	1,251.1	7.62	0.11	9.64	15.23
Noticed advertisements anywhere other than stores	1.76	0.34	4,038	175.1	2.63	0.19	1.10	2.42
Noticed advertisements at sport or sporting events or arts	1.60	0.28	4,063	160.6	2.00	0.17	1.06	2.15
Noticed cigarette promotions: other places	1.38	0.38	4,045	138.2	4.36	0.28	0.63	2.14
Believes that tobacco smoking causes serious illness	96.39	0.58	4,084	9,695.8	3.96	0.01	95.25	97.53
Believes that tobacco smoking causes stroke	75.12	2.15	4,083	7,557.2	10.08	0.03	70.91	79.33



Table C8 (continued). Sampling errors of key indicators for adults 15 years of age and above living in the Northern Region

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Believes that tobacco smoking causes heart attack	71.64	2.12	4,082	7,205.0	9.01	0.03	67.49	75.79
Believes that tobacco smoking causes lung cancer	97.72	0.55	4,085	9,832.0	5.53	0.01	96.64	98.80
Believes that tobacco smoking causes high blood pressure	75.54	2.16	4,083	7,599.1	10.32	0.03	71.31	79.78
Believes that tobacco smoking causes cancer of the mouth	87.98	1.69	4,082	8,839.5	11.06	0.02	84.67	91.30
Believes that tobacco smoking causes laryngeal cancer	87.14	1.88	4,083	8,766.4	12.93	0.02	83.45	90.83
Believes that tobacco smoking causes impotence	60.59	2.44	4,079	6,092.7	10.20	0.04	55.80	65.38
Believes that tobacco smoking causes emphysema	92.74	1.10	4,085	9,330.9	7.37	0.01	90.58	94.90
Believes that tobacco smoking causes bladder cancer	42.17	2.22	4,078	4,236.6	8.24	0.05	37.82	46.52
Believes that tobacco smoking causes stomach cancer	44.90	2.27	4,080	4,514.7	8.53	0.05	40.45	49.36
Believes that tobacco smoking causes premature birth	59.36	2.34	4,080	5,968.7	9.22	0.04	54.78	63.93
Believes that tobacco smoking causes bone loss	41.38	2.03	4,082	4,160.5	6.97	0.05	37.39	45.37
Believes that using smokeless tobacco causes serious illness	72.38	2.02	4,082	7,279.9	8.30	0.03	68.42	76.33
Believes that SHS causes serious illness in non-smokers	93.03	0.98	4,085	9,360.3	6.04	0.01	91.12	94.95
Believes that SHS causes heart disease	62.06	2.13	4,083	6,243.0	7.89	0.03	57.88	66.24
Believes that SHS causes lung disease in children	86.72	1.27	4,084	8,723.7	5.68	0.01	84.23	89.20
Believes that SHS causes lung cancer in adults	91.40	1.13	4,085	9,195.6	6.66	0.01	89.18	93.62
Believes that SHS causes emphysema	85.71	1.36	4,085	8,623.3	6.18	0.02	83.04	88.38
Believes that SHS causes low birth weight	57.97	2.43	4,080	5,826.2	9.92	0.04	53.20	62.74
Believes that SHS causes premature birth	53.69	2.43	4,076	5,392.4	9.69	0.05	48.92	58.45
PHW No.1 that most makes smokers want to quit	4.63	1.20	389	52.6	1.27	0.26	2.27	6.98
PHW No.2 that most makes smokers want to quit	3.15	1.06	389	35.8	1.43	0.34	1.07	5.23
PHW No.3 that most makes smokers want to quit	2.59	0.86	389	29.4	1.15	0.33	0.90	4.28
PHW No.4 that most makes smokers want to quit	18.63	2.34	389	211.8	1.40	0.13	14.04	23.22
PHW No.7 that most makes smokers want to quit	32.89	3.58	389	374.0	2.25	0.11	25.87	39.91
PHW No.8 that most makes smokers want to quit	15.28	2.21	389	173.8	1.46	0.14	10.95	19.61
PHW No.11 that most makes smokers want to quit	9.80	2.60	389	111.5	2.97	0.27	4.70	14.90
PHW No.12 that most makes smokers want to quit	3.33	0.89	389	37.8	0.96	0.27	1.58	5.08
PHW No.13 that most makes smokers want to quit	7.48	2.05	389	85.1	2.35	0.27	3.47	11.50
PHW No.14 that most makes smokers want to quit	1.96	1.00	389	22.3	2.02	0.51	0.00	3.92
Pictorial warning that most makes smokers want to quit (none of them)	0.27	0.20	389	3.0	0.58	0.75	-0.13	0.66
PHW No.1 that most influences non-smokers to not smoke	4.47	0.63	2,523	277.3	2.33	0.14	3.24	5.70
PHW No.2 that most influences non-smokers to not smoke	3.78	0.62	2,523	234.8	2.66	0.16	2.57	5.00
PHW No.3 that most influences non-smokers to not smoke	2.62	0.41	2,523	162.8	1.69	0.16	1.81	3.44
PHW No.4 that most influences non-smokers to not smoke	21.02	1.51	2,523	1,303.7	3.45	0.07	18.06	23.97
PHW No.7 that most influences non-smokers to not smoke	38.64	2.09	2,523	2,396.7	4.63	0.05	34.55	42.73
PHW No.8 that most influences non-smokers to not smoke	17.59	1.26	2,523	1,090.8	2.75	0.07	15.12	20.05
PHW No.11 that most influences non-smokers to not smoke	2.04	0.46	2,523	126.6	2.61	0.22	1.15	2.93
PHW No.12 that most influences non-smokers to not smoke	3.49	0.49	2,523	216.3	1.77	0.14	2.53	4.44
PHW No.13 that most influences non-smokers to not smoke	5.30	0.75	2,523	328.8	2.80	0.14	3.84	6.76
PHW No.14 that most influences non-smokers to not smoke	1.01	0.33	2,523	62.7	2.67	0.32	0.37	1.65
Pictorial warning that most influences non-smokers to not smoke (none of them)	0.04	0.04	2,523	2.7	1.08	1.00	-0.04	0.13
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes	37.98	2.21	4,085	3,821.2	8.46	0.06	33.65	42.31
Believes hand-rolled cigarettes are more harmful than manufactured cigarettes	17.09	1.15	4,085	1,719.3	3.79	0.07	14.84	19.34
Believes manufactured cigarettes are as harmful as hand-rolled cigarettes	41.19	1.90	4,085	4,144.2	6.10	0.05	37.46	44.92
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes (don't know)	3.74	0.47	4,085	376.2	2.55	0.13	2.81	4.67

**Table C9. Sampling errors of key indicators for adults 15 years of age and above living in the Northeastern Region**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Current tobacco users	29.61	1.38	4,149	5,377.1	3.79	0.05	26.91	32.32
Current tobacco smokers	25.07	1.36	4,149	4,552.6	4.08	0.05	22.41	27.73
Current cigarette smokers	25.06	1.36	4,149	4,550.9	4.08	0.05	22.40	27.72
Current users of smokeless tobacco	4.72	0.54	4,149	857.6	2.69	0.11	3.66	5.78
Current manufactured cigarette smokers	13.96	1.09	4,149	2,534.7	4.07	0.08	11.83	16.08
Current hand-rolled cigarette smokers	17.66	1.37	4,149	3,207.2	5.38	0.08	14.97	20.35
Current smokers of other tobacco products	0.06	0.04	4,149	10.2	1.01	0.66	-0.02	0.13
Daily tobacco smokers	22.80	1.30	4,149	4,141.0	3.96	0.06	20.26	25.34
Daily cigarette smokers	22.77	1.30	4,149	4,135.4	3.96	0.06	20.23	25.31
Daily users of smokeless tobacco	4.45	0.53	4,149	807.2	2.77	0.12	3.40	5.49
Former daily tobacco smokers among all adults	8.82	0.65	4,149	1,602.1	2.17	0.07	7.55	10.09
Former tobacco smokers among ever daily smokers	27.16	2.03	1,162	1,602.1	2.41	0.07	23.19	31.14
Time to first tobacco smoke upon waking								
- Within 5 minutes of waking	20.98	2.74	726	868.7	3.29	0.13	15.60	26.35
- Within 6–30 minutes of waking	30.07	2.75	726	1,245.3	2.60	0.09	24.69	35.46
- Within 31–60 minutes of waking	14.66	2.25	726	607.0	2.94	0.15	10.25	19.07
- More than 60 minutes of waking	34.29	2.80	726	1,420.0	2.52	0.08	28.81	39.77
Type of current tobacco use								
- Smoked only	84.05	1.80	1,076	4,519.5	2.60	0.02	80.52	87.58
- Both smoked and smokeless	0.61	0.21	1,076	33.1	0.76	0.34	0.21	1.02
- Smokeless only	15.33	1.77	1,076	824.5	2.58	0.12	11.87	18.80
Smoking quit attempt in the past 12 months	39.71	3.10	821	1,866.9	3.29	0.08	33.63	45.78
Visited a health- care provider in the past 12 months	33.91	2.33	820	1,593.8	1.98	0.07	29.35	38.47
Health-care provider asked about smoking	70.97	3.74	333	1,131.2	2.26	0.05	63.64	78.31
Health-care provider advised quitting smoking	64.62	3.87	333	1,030.0	2.17	0.06	57.04	72.20
Use of pharmacotherapy for smoking cessation	9.61	2.59	336	179.4	2.60	0.27	4.52	14.69
Use of counseling/advice or quit lines for smoking cessation	3.30	1.21	336	61.5	1.54	0.37	0.92	5.67
Quit smoking tobacco without assistance	91.54	2.71	336	1,709.0	3.17	0.03	86.24	96.85
Use of other methods for smoking cessation	1.71	0.76	333	31.4	1.15	0.45	0.22	3.21
Interest in quitting smoking in 5 categories								
- Planning to quit within next month	2.52	0.71	791	114.5	1.62	0.28	1.13	3.91
- Thinking about quitting within next 12 months	14.95	2.18	791	678.7	2.96	0.15	10.67	19.24
- Will quit someday, but not in next 12 months	45.00	3.16	791	2,042.4	3.19	0.07	38.80	51.20
- Not interested in quitting	34.81	2.71	791	1,579.9	2.55	0.08	29.51	40.12
- Don't know	2.71	1.00	791	123.0	2.99	0.37	0.75	4.67
Smokeless tobacco use quit attempt in the past 12 months	14.41	2.82	301	126.6	1.93	0.20	8.89	19.93
Visited a health-care provider in the past 12 months	75.18	3.51	288	635.4	1.90	0.05	68.30	82.06
Health-care provider asked about smokeless tobacco use	27.09	4.10	214	178.6	1.82	0.15	19.04	35.13
Health-care provider advised to stop using smokeless tobacco products	21.70	3.24	214	143.1	1.32	0.15	15.34	28.06
Use of pharmacotherapy for smokeless tobacco use cessation	4.96	2.95	38	6.2	0.68	0.59	-0.82	10.73
Use of counseling/advice or quit lines for smokeless tobacco use cessation	2.66	2.70	38	3.3	1.04	1.01	-2.63	7.95
Quit smokeless tobacco use without assistance	76.21	8.91	39	96.5	1.67	0.12	58.74	93.68
Use of other methods for smokeless tobacco use cessation	1.88	1.90	35	2.2	0.67	1.01	-1.85	5.62
Interest in quitting smokeless tobacco use in								
- Planning to quit within next month	0.93	0.67	296	8.0	1.44	0.72	-0.38	2.24
- Thinking about quitting within next 12 months	6.08	1.72	296	52.1	1.54	0.28	2.70	9.45
- Will quit someday, but not in next 12 months	15.75	2.73	296	135.1	1.65	0.17	10.40	21.09
- Not interested in quitting	76.47	3.14	296	655.8	1.62	0.04	70.31	82.63
- Don't know	0.78	0.50	296	6.7	0.95	0.64	-0.20	1.76



Table C9 (continued). Sampling errors of key indicators for adults 15 years of age and above living in the Northeastern Region

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Exposure to second-hand smoke (SHS) at workplace	34.43	3.02	869	1,054.9	3.52	0.09	28.50	40.36
Exposure to SHS at home	34.51	1.81	4,146	6,263.4	6.00	0.05	30.96	38.05
Exposure to SHS in government buildings/offices among those who visited	10.81	1.38	1,638	782.7	3.25	0.13	8.10	13.52
Exposure to SHS in health-care facilities among those who visited	4.27	0.80	1,786	305.0	2.80	0.19	2.70	5.84
Exposure to SHS in restaurants among all adults those who visited	38.99	3.12	1,712	2,935.9	7.02	0.08	32.87	45.12
Exposure to SHS on public transportation among those who visited	16.37	1.78	876	615.2	2.03	0.11	12.88	19.86
Exposure to SHS at universities among those who visited	26.59	4.81	238	282.4	2.81	0.18	17.16	36.02
Exposure to SHS at schools among those who visited	30.19	2.65	1,157	1,899.8	3.84	0.09	25.00	35.38
Exposure to SHS at bars or nightclubs among those who visited	57.04	4.87	260	623.3	2.51	0.09	47.49	66.60
Exposure to SHS at indoor/outside markets among those who visited	65.14	2.05	3,007	8,478.9	5.58	0.03	61.12	69.16
Last brand of cigarette purchased								
- Krongthip	34.16	3.60	419	821.9	2.41	0.11	27.11	41.21
- Wander	42.13	3.68	419	1,013.7	2.33	0.09	34.91	49.35
- L&M	4.35	1.00	419	104.7	1.01	0.23	2.38	6.32
- SMS	8.08	2.03	419	194.5	2.32	0.25	4.10	12.06
- Sai-Fon	8.41	2.48	419	202.4	3.35	0.30	3.54	13.28
- Others	2.87	0.84	419	69.0	1.07	0.29	1.22	4.52
Location of last cigarette purchase								
- Grocery	96.70	1.03	419	2,326.9	1.40	0.01	94.68	98.73
- Convenience store	2.06	0.92	419	49.6	1.75	0.45	0.26	3.86
- All others	1.24	0.42	419	29.8	0.59	0.34	0.42	2.05
Last pack purchased had pictorial warning	98.35	0.74	221	913.0	0.75	0.01	96.90	99.80
Noticed anti-cigarette smoking information in newspapers or in magazines	15.03	1.07	4,149	2,729.6	3.70	0.07	12.94	17.12
Noticed anti-cigarette smoking information on local TV	66.31	2.09	4,149	12,042.3	8.12	0.03	62.22	70.41
Noticed anti-cigarette smoking information on radio	32.64	1.95	4,149	5,926.4	7.17	0.06	28.81	36.46
Noticed anti-cigarette smoking information on billboards	33.01	2.10	4,149	5,994.2	8.30	0.06	28.89	37.13
Noticed anti-cigarette smoking information on leaflet/sticker	34.05	2.63	4,148	6,182.1	12.77	0.08	28.89	39.20
Noticed anti-cigarette smoking information on the internet	6.60	0.75	4,147	1,197.9	3.76	0.11	5.13	8.06
Noticed anti-cigarette smoking information during campaign activity	14.58	1.53	4,147	2,647.1	7.77	0.10	11.59	17.57
Noticed anti-cigarette smoking information on demonstration board	27.61	2.27	4,149	5,013.3	10.74	0.08	23.15	32.07
Noticed anti-cigarette smoking information somewhere else	0.74	0.32	4,113	133.1	5.90	0.44	0.10	1.38
Noticed anti-cigarette smoking information at any location	80.61	1.44	4,139	14,612.0	5.50	0.02	77.78	83.43
Noticed health warning labels on cigarette packages	95.85	0.73	793	4,363.8	1.08	0.01	94.41	97.29
Thinking of quitting because of health warning labels on cigarette package	72.52	2.67	792	3,299.7	2.84	0.04	67.28	77.77
Noticed health warning labels on raw tobacco packages	81.01	1.83	756	3,238.3	1.64	0.02	77.43	84.59
Thinking of quitting because of health warning labels on raw tobacco packages	58.56	3.00	756	2,340.7	2.81	0.05	52.67	64.44
Noticed cigarette advertisements in stores	18.80	2.48	4,147	3,412.6	16.76	0.13	13.93	23.66
Noticed advertisements anywhere other than stores	1.76	0.31	4,103	315.3	2.31	0.18	1.15	2.37
Noticed advertisements at sport or sporting events or arts	3.15	0.49	4,143	571.2	3.29	0.16	2.18	4.11
Noticed cigarette promotions: other places	1.94	0.32	4,131	350.3	2.21	0.16	1.31	2.56
Believes that tobacco smoking causes serious illness	97.84	0.46	4,149	17,767.9	4.20	0.00	96.94	98.75
Believes that tobacco smoking causes stroke	84.41	1.02	4,148	15,323.5	3.26	0.01	82.41	86.40
Believes that tobacco smoking causes heart attack	81.70	1.11	4,148	14,835.4	3.44	0.01	79.52	83.88
Believes that tobacco smoking causes lung cancer	98.05	0.33	4,149	17,805.9	2.31	0.00	97.41	98.69
Believes that tobacco smoking causes high blood pressure	82.51	1.19	4,149	14,983.6	4.05	0.01	80.18	84.84

**Table C9 (continued). Sampling errors of key indicators for adults 15 years of age and above living in the Northeastern Region**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Believes that tobacco smoking causes cancer of the mouth	94.43	0.60	4,149	17,147.9	2.88	0.01	93.24	95.61
Believes that tobacco smoking causes laryngeal cancer	93.64	0.69	4,149	17,004.2	3.36	0.01	92.28	95.00
Believes that tobacco smoking causes impotence	69.44	1.54	4,147	12,606.9	4.64	0.02	66.42	72.46
Believes that tobacco smoking causes emphysema	91.36	0.77	4,147	16,582.9	3.13	0.01	89.85	92.87
Believes that tobacco smoking causes bladder cancer	56.93	1.81	4,147	10,336.8	5.54	0.03	53.39	60.48
Believes that tobacco smoking causes stomach cancer	58.46	1.69	4,148	10,615.0	4.87	0.03	55.15	61.77
Believes that tobacco smoking causes premature birth	67.52	1.57	4,148	12,260.1	4.68	0.02	64.44	70.61
Believes that tobacco smoking causes bone loss	54.78	1.38	4,147	9,943.7	3.19	0.03	52.07	57.48
Believes that using smokeless tobacco causes serious illness	80.18	1.40	4,147	14,554.8	5.12	0.02	77.43	82.92
Believes that SHS causes serious illness in non-smokers	95.26	0.58	4,149	17,299.6	3.08	0.01	94.13	96.40
Believes that SHS causes heart disease	70.12	1.52	4,147	12,729.8	4.56	0.02	67.15	73.10
Believes that SHS causes lung disease in children	89.11	0.84	4,149	16,181.6	3.01	0.01	87.46	90.75
Believes that SHS causes lung cancer in adults	93.25	0.64	4,149	16,933.9	2.71	0.01	91.99	94.51
Believes that SHS causes emphysema	83.69	1.22	4,149	15,197.2	4.51	0.01	81.30	86.07
Believes that SHS causes low birth weight	67.84	1.45	4,148	12,319.1	3.99	0.02	65.00	70.68
Believes that SHS causes premature birth	62.04	1.49	4,148	11,266.4	3.90	0.02	59.13	64.96
PHW No.1 that most makes smokers want to quit	3.69	0.91	433	93.3	1.01	0.25	1.91	5.48
PHW No.2 that most makes smokers want to quit	2.36	1.12	433	59.7	2.35	0.47	0.17	4.56
PHW No.3 that most makes smokers want to quit	2.89	1.09	433	73.0	1.84	0.38	0.75	5.03
PHW No.4 that most makes smokers want to quit	18.19	2.84	433	459.7	2.35	0.16	12.62	23.77
PHW No.7 that most makes smokers want to quit	33.11	3.49	433	836.6	2.37	0.11	26.28	39.94
PHW No.8 that most makes smokers want to quit	20.11	2.84	433	508.0	2.17	0.14	14.54	25.67
PHW No.11 that most makes smokers want to quit	10.55	2.44	433	266.6	2.73	0.23	5.77	15.33
PHW No.12 that most makes smokers want to quit	3.94	2.03	433	99.5	4.73	0.52	-0.05	7.93
PHW No.13 that most makes smokers want to quit	4.14	1.41	433	104.6	2.17	0.34	1.37	6.91
PHW No.14 that most makes smokers want to quit	0.28	0.18	433	7.2	0.48	0.62	-0.06	0.63
Pictorial warning that most makes smokers want to quit (none of them)	0.74	0.47	433	18.7	1.32	0.64	-0.19	1.67
PHW No.1 that most influences non-smokers to not smoke	7.21	0.96	2,540	774.3	3.53	0.13	5.32	9.10
PHW No.2 that most influences non-smokers to not smoke	2.67	0.58	2,540	286.5	3.27	0.22	1.53	3.80
PHW No.3 that most influences non-smokers to not smoke	3.12	0.51	2,540	334.7	2.20	0.16	2.12	4.12
PHW No.4 that most influences non-smokers to not smoke	14.96	1.14	2,540	1,606.8	2.61	0.08	12.72	17.20
PHW No.7 that most influences non-smokers to not smoke	39.19	1.94	2,540	4,209.2	4.03	0.05	35.38	43.00
PHW No.8 that most influences non-smokers to not smoke	11.62	0.99	2,540	1,247.8	2.45	0.09	9.67	13.57
PHW No.11 that most influences non-smokers to not smoke	12.46	2.62	2,540	1,337.9	16.00	0.21	7.32	17.60
PHW No.12 that most influences non-smokers to not smoke	2.63	0.42	2,540	282.5	1.71	0.16	1.82	3.45
PHW No.13 that most influences non-smokers to not smoke	5.33	0.73	2,540	572.2	2.71	0.14	3.89	6.77
PHW No.14 that most influences non-smokers to not smoke	0.15	0.05	2,540	15.6	0.52	0.38	0.04	0.25
Pictorial warning that most influences non-smokers to not smoke (none of them)	0.67	0.35	2,540	72.1	4.64	0.52	-0.01	1.36
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes	25.80	1.55	4,148	4,684.8	5.19	0.06	22.77	28.84
Believes hand-rolled cigarettes are more harmful than manufactured cigarettes	20.52	1.32	4,148	3,725.3	4.45	0.06	17.92	23.11
Believes manufactured cigarettes are as harmful as hand-rolled cigarettes	49.97	1.98	4,148	9,072.4	6.50	0.04	46.09	53.85
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes (don't know)	3.71	0.46	4,148	674.2	2.41	0.12	2.82	4.61

**Table C10. Sampling errors of key indicators for adults 15 years of age and above living in the Southern Region**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Current tobacco users	32.37	1.42	4,039	2,363.9	3.70	0.04	29.60	35.15
Current tobacco smokers	29.91	1.27	4,039	2,183.8	3.10	0.04	27.42	32.39
Current cigarette smokers	29.91	1.27	4,039	2,183.8	3.10	0.04	27.42	32.39
Current users of smokeless tobacco	2.84	0.39	4,039	207.7	2.20	0.14	2.08	3.61
Current manufactured cigarette smokers	19.98	1.13	4,039	1,458.6	3.22	0.06	17.76	22.19
Current hand-rolled cigarette smokers	22.34	1.31	4,039	1,631.5	3.97	0.06	19.78	24.90
Current smokers of other tobacco products	0.15	0.06	4,039	11.3	1.01	0.40	0.03	0.28
Daily tobacco smokers	27.59	1.18	4,039	2,014.4	2.83	0.04	25.27	29.90
Daily cigarette smokers	27.59	1.18	4,039	2,014.4	2.83	0.04	25.27	29.90
Daily users of smokeless tobacco	2.40	0.36	4,039	175.5	2.26	0.15	1.69	3.11
Former daily tobacco smokers among all adults	6.03	0.47	4,039	440.4	1.59	0.08	5.11	6.96
Former tobacco smokers among ever daily smokers	17.50	1.43	1,325	440.4	1.87	0.08	14.70	20.31
Time to first tobacco smoke upon waking								
- Within 5 minutes of waking	20.13	2.06	1,000	405.6	2.63	0.10	16.10	24.16
- Within 6–30 minutes of waking	39.50	2.66	1,000	795.6	2.96	0.07	34.28	44.71
- Within 31–60 minutes of waking	19.46	2.08	1,000	392.0	2.76	0.11	15.38	23.53
- More than 60 minutes of waking	20.91	2.05	1,000	421.3	2.54	0.10	16.90	24.93
Type of current tobacco use								
- Smoked only	91.21	1.04	1,212	2,156.2	1.64	0.01	89.17	93.26
- Both smoked and smokeless	1.16	0.36	1,212	27.5	1.33	0.31	0.47	1.86
- Smokeless only	7.62	0.98	1,212	180.2	1.64	0.13	5.71	9.54
Smoking quit attempt in the past 12 months	28.87	2.13	1,109	642.5	2.44	0.07	24.70	33.04
Visited a health-care provider in the past 12 months	31.85	2.71	1,105	707.2	3.73	0.08	26.54	37.15
Health-care provider asked about smoking	61.70	3.31	372	437.9	1.72	0.05	55.21	68.19
Health-care provider advised quitting smoking	47.25	3.18	372	335.4	1.50	0.07	41.03	53.48
Use of pharmacotherapy for smoking cessation	8.77	2.59	322	55.1	2.70	0.30	3.68	13.85
Use of counselling/advice or quit lines for smoking cessation	5.50	1.54	323	35.4	1.47	0.28	2.49	8.52
Quit smoking tobacco without assistance	93.02	1.55	323	597.7	1.19	0.02	89.99	96.06
Use of other methods for smoking cessation	2.77	0.97	321	17.7	1.11	0.35	0.87	4.66
Interest in quitting smoking in 5 categories								
- Planning to quit within next month	3.71	0.80	1,085	81.1	1.96	0.22	2.14	5.29
- Thinking about quitting within next 12 months	9.64	1.22	1,085	210.6	1.84	0.13	7.26	12.03
- Will quit some day, but not in next 12 months	29.76	2.30	1,085	650.0	2.75	0.08	25.25	34.28
- Not interested in quitting	50.25	2.71	1,085	1,097.3	3.17	0.05	44.95	55.55
- Don't know	6.63	1.36	1,085	144.7	3.24	0.21	3.96	9.29
Smokeless tobacco use quit attempt in the past 12 months	18.21	3.70	147	38.7	1.34	0.20	10.95	25.46
Visited a health-care provider in the past 12 months	62.76	6.12	130	114.6	2.07	0.10	50.76	74.76
Health-care provider asked about smokeless tobacco use	10.86	3.63	95	14.1	1.28	0.33	3.73	17.98
Health-care provider advised to stop using smokeless tobacco products	7.66	2.98	95	9.9	1.18	0.39	1.82	13.51
Use of pharmacotherapy for smokeless tobacco use cessation	-	-	-	-	-	-	-	-
Use of counseling/advice or quit lines for smokeless tobacco use cessation	-	-	-	-	-	-	-	-
Quit smokeless tobacco use without assistance	92.91	5.04	25	36.0	0.92	0.05	83.04	102.77
Use of other methods for smokeless tobacco use cessation	15.76	6.98	25	6.1	0.88	0.44	2.08	29.45
Interest in quitting smokeless tobacco use in								
- Planning to quit within next month	2.38	1.33	143	4.9	1.09	0.56	-0.24	4.99
- Thinking about quitting within next 12 months	6.53	2.15	143	13.6	1.08	0.33	2.31	10.74
- Will quit someday, but not in next 12 months	11.19	3.20	143	23.2	1.47	0.29	4.91	17.47
- Not interested in quitting	71.95	4.71	143	149.4	1.56	0.07	62.71	81.18
- Don't know	7.96	2.53	143	16.5	1.24	0.32	3.00	12.92

**Table C10 (continued). Sampling errors of key indicators for adults 15 years of age and above living in the Southern Region**

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Exposure to second-hand smoke (SHS) at workplace	44.38	4.42	1,046	811.7	8.29	0.10	35.70	53.05
Exposure to SHS at home	54.08	1.78	4,038	3,948.3	5.13	0.03	50.60	57.56
Exposure to SHS in government buildings/offices among those who visited	22.68	1.99	1,484	610.0	3.34	0.09	18.79	26.58
Exposure to SHS in health-care facilities among those who visited	18.69	2.06	1,604	505.3	4.48	0.11	14.65	22.73
Exposure to SHS in restaurants among all adults those who visited	64.29	2.40	2,183	2,572.9	5.47	0.04	59.59	68.99
Exposure to SHS on public transportation among those who visited	36.03	3.26	716	435.0	3.29	0.09	29.64	42.41
Exposure to SHS at universities among those who visited	36.82	4.28	201	153.5	1.57	0.12	28.44	45.20
Exposure to SHS at schools among those who visited	32.26	1.92	1,228	792.3	2.07	0.06	28.50	36.02
Exposure to SHS at bars or nightclubs among those who visited	78.52	3.97	226	346.5	2.10	0.05	70.75	86.30
Exposure to SHS at indoor/outside markets among those who visited	82.08	1.29	3,268	4,944.6	3.72	0.02	79.55	84.62
Last brand of cigarette purchased								
- Krongthip	53.50	3.04	668	733.4	2.47	0.06	47.55	59.45
- Wander	3.24	0.90	668	44.5	1.71	0.28	1.49	5.00
- L&M	15.08	2.13	668	206.7	2.36	0.14	10.91	19.24
- SMS	4.85	1.23	668	66.4	2.17	0.25	2.44	7.25
- Sai-Fon	1.59	0.42	668	21.8	0.77	0.27	0.76	2.43
- Others	21.74	2.80	668	298.0	3.07	0.13	16.25	27.22
Location of last cigarette purchase								
- Grocery	89.75	2.14	669	1,230.8	3.33	0.02	85.56	93.95
- Convenience store	7.63	2.06	669	104.7	4.00	0.27	3.60	11.66
- All others	2.62	0.68	669	35.9	1.21	0.26	1.28	3.95
Last pack purchased had pictorial warning	81.47	3.52	371	535.4	3.03	0.04	74.58	88.36
Noticed anti-cigarette smoking information in newspapers or in magazines	17.41	1.19	4,038	1,270.9	3.94	0.07	15.09	19.73
Noticed anti-cigarette smoking information on local TV	65.15	2.41	4,037	4,755.7	10.36	0.04	60.42	69.88
Noticed anti-cigarette smoking information on radio	23.42	1.97	4,039	1,710.2	8.72	0.08	19.57	27.28
Noticed anti-cigarette smoking information on billboards	29.19	2.13	4,035	2,129.8	8.85	0.07	25.01	33.36
Noticed anti-cigarette smoking information on leaflet/sticker	45.42	2.35	4,038	3,315.6	9.03	0.05	40.80	50.03
Noticed anti-cigarette smoking information on the internet	8.26	0.86	4,036	603.1	3.91	0.10	6.58	9.94
Noticed anti-cigarette smoking information during campaign activity	10.28	1.29	4,037	749.7	7.29	0.13	7.75	12.81
Noticed anti-cigarette smoking information on demonstration board	29.48	2.21	4,039	2,152.3	9.49	0.07	25.15	33.81
Noticed anti-cigarette smoking information somewhere else	0.45	0.15	4,022	32.6	1.92	0.33	0.16	0.73
Noticed anti-cigarette smoking information at any location	81.00	1.78	4,036	5,911.5	8.35	0.02	77.51	84.50
Noticed health warning labels on cigarette packages	95.36	0.77	1,085	2,082.4	1.44	0.01	93.86	96.86
Thinking of quitting because of health warning labels on cigarette package	61.26	2.45	1,085	1,337.7	2.74	0.04	56.46	66.05
Noticed health warning labels on raw tobacco packages	71.29	2.99	846	1,257.1	3.69	0.04	65.43	77.14
Thinking of quitting because of health warning labels on raw tobacco packages	47.36	3.64	846	835.1	4.50	0.08	40.22	54.50
Noticed cigarette advertisements in stores	25.75	2.22	4,036	1,879.9	10.43	0.09	21.40	30.11
Noticed advertisements anywhere other than stores	1.79	0.37	4,010	129.8	3.15	0.21	1.06	2.52
Noticed advertisements at sport or sporting events or arts	2.87	0.42	4,037	209.8	2.54	0.15	2.05	3.69
Noticed cigarette promotions: other places	2.48	0.39	4,032	181.3	2.59	0.16	1.71	3.26
Believes that tobacco smoking causes serious illness	97.10	0.73	4,038	7,089.2	7.56	0.01	95.68	98.53
Believes that tobacco smoking causes stroke	81.80	1.70	4,039	5,972.8	7.81	0.02	78.47	85.12
Believes that tobacco smoking causes heart attack	76.55	1.95	4,038	5,589.5	8.55	0.03	72.73	80.37
Believes that tobacco smoking causes lung cancer	97.18	0.74	4,039	7,096.5	8.18	0.01	95.73	98.64
Believes that tobacco smoking causes high blood pressure	75.23	1.77	4,038	5,492.5	6.83	0.02	71.75	78.71

Table C10 (continued). Sampling errors of key indicators for adults 15 years of age and above living in the Southern Region

Indicators	Estimate	Standard Error	Sample Size	Estimate Weighted Count (in 000's)	Design Effect	Relative Error	Lower Limit	Upper Limit
Believes that tobacco smoking causes cancer of the mouth	90.67	1.07	4,039	6,621.1	5.46	0.01	88.58	92.77
Believes that tobacco smoking causes laryngeal cancer	92.81	0.95	4,039	6,776.8	5.48	0.01	90.94	94.67
Believes that tobacco smoking causes impotence	66.39	2.19	4,037	4,845.3	8.68	0.03	62.09	70.68
Believes that tobacco smoking causes emphysema	91.15	1.22	4,038	6,653.7	7.51	0.01	88.75	93.55
Believes that tobacco smoking causes bladder cancer	50.06	2.46	4,039	3,655.7	9.76	0.05	45.25	54.88
Believes that tobacco smoking causes stomach cancer	52.38	2.43	4,039	3,824.9	9.60	0.05	47.61	57.15
Believes that tobacco smoking causes premature birth	63.20	1.93	4,037	4,613.7	6.50	0.03	59.41	66.99
Believes that tobacco smoking causes bone loss	51.57	2.30	4,036	3,763.9	8.53	0.04	47.07	56.07
Believes that using smokeless tobacco causes serious illness	70.28	1.74	4,039	5,132.1	5.84	0.02	66.88	73.69
Believes that SHS causes serious illness in non-smokers	93.80	0.73	4,038	6,848.7	3.69	0.01	92.38	95.23
Believes that SHS causes heart disease	67.72	1.74	4,038	4,944.0	5.56	0.03	64.31	71.12
Believes that SHS causes lung disease in children	90.21	0.86	4,038	6,586.6	3.37	0.01	88.53	91.90
Believes that SHS causes lung cancer in adults	90.18	0.84	4,038	6,584.4	3.24	0.01	88.53	91.84
Believes that SHS causes emphysema	82.79	1.17	4,038	6,044.6	3.87	0.01	80.50	85.08
Believes that SHS causes low birth weight	68.17	1.75	4,037	4,976.7	5.73	0.03	64.73	71.61
Believes that SHS causes premature birth	58.10	2.00	4,036	4,240.8	6.62	0.03	54.18	62.02
PHW No.1 that most makes smokers want to quit	4.93	0.97	696	71.2	1.39	0.20	3.03	6.83
PHW No.2 that most makes smokers want to quit	4.45	1.37	696	64.2	3.09	0.31	1.75	7.14
PHW No.3 that most makes smokers want to quit	2.64	0.57	696	38.1	0.88	0.22	1.52	3.76
PHW No.4 that most makes smokers want to quit	18.39	2.23	696	265.6	2.30	0.12	14.03	22.76
PHW No.7 that most makes smokers want to quit	23.79	2.11	696	343.6	1.71	0.09	19.66	27.92
PHW No.8 that most makes smokers want to quit	21.55	2.33	696	311.2	2.22	0.11	16.99	26.10
PHW No.11 that most makes smokers want to quit	9.76	1.70	696	141.0	2.29	0.17	6.42	13.10
PHW No.12 that most makes smokers want to quit	5.37	1.33	696	77.5	2.42	0.25	2.76	7.97
PHW No.13 that most makes smokers want to quit	6.54	1.16	696	94.5	1.54	0.18	4.26	8.82
PHW No.14 that most makes smokers want to quit	1.80	0.63	696	25.9	1.55	0.35	0.57	3.03
Pictorial warning that most makes smokers want to quit (none of them)	0.79	0.52	696	11.5	2.36	0.65	-0.22	1.81
PHW No.1 that most influences non-smokers to not smoke	6.83	0.82	2,472	302.1	2.58	0.12	5.23	8.43
PHW No.2 that most influences non-smokers to not smoke	2.95	0.45	2,472	130.2	1.72	0.15	2.07	3.82
PHW No.3 that most influences non-smokers to not smoke	3.56	0.73	2,472	157.6	3.81	0.20	2.14	4.99
PHW No.4 that most influences non-smokers to not smoke	18.24	1.30	2,472	806.6	2.80	0.07	15.70	20.79
PHW No.7 that most influences non-smokers to not smoke	28.22	1.94	2,472	1,247.5	4.61	0.07	24.41	32.03
PHW No.8 that most influences non-smokers to not smoke	18.59	1.14	2,472	822.0	2.13	0.06	16.35	20.83
PHW No.11 that most influences non-smokers to not smoke	7.41	1.47	2,472	327.5	7.81	0.20	4.52	10.29
PHW No.12 that most influences non-smokers to not smoke	4.74	0.66	2,472	209.6	2.38	0.14	3.45	6.03
PHW No.13 that most influences non-smokers to not smoke	7.87	0.97	2,472	348.2	3.19	0.12	5.98	9.77
PHW No.14 that most influences non-smokers to not smoke	0.83	0.24	2,472	36.7	1.79	0.29	0.35	1.31
Pictorial warning that most influences non-smokers to not smoke (none of them)	0.75	0.29	2,472	33.2	2.82	0.39	0.18	1.32
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes	55.29	1.90	4,034	4,035.3	5.91	0.03	51.56	59.02
Believes hand-rolled cigarettes are more harmful than manufactured cigarettes	15.96	1.09	4,034	1,165.2	3.55	0.07	13.84	18.09
Believes manufactured cigarettes are as harmful as hand-rolled cigarettes	24.92	1.95	4,034	1,819.0	8.19	0.08	21.10	28.74
Believes manufactured cigarettes are more harmful than hand-rolled cigarettes (don't know)	3.82	0.46	4,034	278.9	2.31	0.12	2.92	4.72

## Appendix D: Tables number in thousands

**Table 4.3a:** Number (in thousands) of adults 15 years and above who are current smokers of various smoked tobacco products, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Any smoked tobacco product	Any cigarette <sup>1</sup>	Type of cigarette		Other smoked tobacco <sup>2</sup>
			Manufactured	Hand-rolled	
<i>Number in thousands</i>					
<b>Overall</b>	12 987.1	12 907.5	8 243.8	7 790.0	124.3
<b>Gender</b>					
Men	12 258.8	12 233.0	7 927.0	7 398.0	64.9
Women	728.2	674.6	316.8	391.9	59.4
<b>Age (years)</b>					
15–24	2 245.8	2 245.8	2 086.3	1 112.8	8.6
25–44	5 665.2	5 650.5	3 931.7	3 113.6	30.4
45–59	3 388.5	3 346.2	1 743.7	2 222.1	55.9
60+	1 687.6	1 665.1	482.2	1 341.5	29.5
<b>Residence</b>					
Urban	3 814.5	3 808.0	3 195.0	1 104.9	38.3
Rural	9 172.6	9 099.6	5 048.8	6 685.1	86.0
<b>Education level</b>					
Less than primary	4 044.9	3 976.6	1 352.6	3 301.5	83.8
Primary	3 584.5	3 575.9	2 252.2	2 530.0	15.2
Secondary	4 393.8	4 391.2	3 719.4	1 830.8	13.0
University	961.8	961.8	917.5	127.7	12.3
<b>Region</b>					
Bangkok	1 017.1	1 014.2	933.4	183.0	21.7
Central	3 052.8	3 052.8	2 176.9	1 411.1	5.8
Northern	2 180.8	2 105.9	1 140.3	1 357.3	75.4
Northeastern	4 552.6	4 550.9	2 534.7	3 207.2	10.2
Southern	2 183.8	2 183.8	1 458.6	1 631.5	11.3
<b>Socioeconomic status</b>					
Lowest	2 747.8	2 708.9	1 457.0	2 026.7	48.7
Low	2 794.7	2 761.9	1 498.6	2 036.5	39.7
Middle	3 000.3	2 995.1	1 845.7	1 821.1	13.5
High	2 677.8	2 677.8	1 987.5	1 285.7	5.2
Highest	1 766.4	1 763.8	1 455.0	620.0	17.3

Note: Current use includes both daily and occasional (less than daily) use.

: Table 4.3a based on Table 4.3 of Chapter 4

<sup>1</sup>Includes manufactured cigarettes and hand-rolled cigarettes

<sup>2</sup>Includes pipes, cigars, water pipes and other



**Table 4.4:** Number (in thousands) of adults 15 years and above who are current users of various smokeless tobacco products, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Any smokeless tobacco product	Type of smokeless tobacco products			
		Snuff, by mouth	Snuff, by nose	Chewing tobacco	Betel quid with tobacco
<i>Number (in thousands)</i>					
<b>Overall</b>	1 747.1	700.3	132.1	82.1	992.4
<b>Gender</b>					
Men	286.3	99.4	93.8	17.0	86.1
Women	1 460.7	600.9	38.3	65.1	906.3
<b>Age (years)</b>					
15–24	12.8	0.0	0.0	0.0	12.8
25–44	147.4	49.4	4.8	8.1	86.0
45–59	378.2	171.8	44.0	6.9	165.4
60+	1 208.7	479.1	83.3	67.1	728.1
<b>Residence</b>					
Urban	264.6	104.0	50.1	23.1	125.2
Rural	1 482.5	596.3	82.0	59.0	867.2
<b>Education level</b>					
Less than primary	1 605.0	645.7	110.5	81.0	925.0
Primary	95.7	35.3	14.4	0.0	47.7
Secondary	41.6	14.5	7.2	1.1	19.7
University	4.8	4.8	0.0	0.0	0.0
<b>Region</b>					
Bangkok	42.2	20.9	13.9	0.0	12.5
Central	229.6	58.4	48.1	24.7	132.7
Northern	410.0	57.7	13.6	23.1	348.2
Northeastern	857.6	430.0	26.2	18.5	458.9
Southern	207.7	133.3	30.4	15.8	40.0
<b>Socioeconomic status</b>					
Lowest	970.2	396.7	44.6	43.8	594.6
Low	431.4	140.4	25.2	22.9	266.7
Middle	200.5	92.9	42.4	5.8	71.6
High	97.0	34.7	15.1	5.9	51.8
Highest	47.9	35.6	4.9	3.8	7.7

Note: Current use includes both daily and occasional (less than daily) use.

: Table 4.3a based on Table 4.10 of Chapter 4

**Table 4.10a:** Number (in thousands) of adults who are current tobacco users and distribution of tobacco use patterns among current tobacco users 15 years and above by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Current tobacco users <sup>1</sup>	Type of current tobacco use		
		Smoked only	Both smoked and smokeless	Smokeless only
<i>Number (in thousands)</i>				
<b>Overall</b>	14 559.4	12 812.3	174.8	1 572.3
<b>Gender</b>				
Men	12 430.2	12 143.9	115.0	171.4
Women	2 129.2	668.4	59.8	1 400.9
<b>Age (years)</b>				
15–24	2 256.9	2 244.1	1.7	11.1
25–44	5 773.9	5 626.5	38.7	108.7
45–59	3 700.7	3 322.5	66.0	312.2
60+	2 827.9	1 619.3	68.3	1 140.4
<b>Residence</b>				
Urban	4 039.2	3 774.6	39.9	224.7
Rural	10 520.2	9 037.7	134.9	1 347.6
<b>Education level</b>				
Less than primary	5 508.9	3 903.9	141.0	1 464.0
Primary	3 658.5	3 562.8	21.7	74.1
Secondary	4 425.2	4 383.6	10.2	31.4
University	964.7	959.9	1.9	2.9
<b>Region</b>				
Bangkok	1 051.3	1 009.1	8.0	34.2
Central	3 263.3	3 033.6	19.2	210.5
Northern	2 503.8	2 093.8	87.0	323.0
Northeastern	5 377.1	4 519.5	33.1	824.5
Southern	2 363.9	2 156.2	27.5	180.2
<b>Socioeconomic status</b>				
Lowest	3 663.5	2 693.3	54.6	915.6
Low	3 164.6	2 733.1	61.5	369.9
Middle	3 160.7	2 960.2	40.1	160.4
High	2 764.9	2 667.9	9.9	87.1
Highest	1 805.7	1 757.8	8.7	39.3

Note: Table 4.10a based on Table 4.15 of Chapter 4

<sup>1</sup> Includes daily and occasional (less than daily) smokers or smokeless tobacco users



**Table 5.2b:** Number (in thousands) of smokers<sup>1</sup> 15 years and above who made a quit attempt and received health-care provider assistance in the past 12 months, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Smoking cessation and health-care seeking behaviour			
	Made quit attempt <sup>2</sup>	Visited an HCP <sup>2</sup>	Asked by HCP if a smoker <sup>3</sup>	Advised to quit by HCP <sup>3</sup>
	<i>Number (in thousands)</i>			
<b>Overall</b>	4 895.6	4 606.4	3 011.6	2 573.4
<b>Gender</b>				
Men	4 600.0	4 215.5	2 744.9	2 360.5
Women	295.6	390.9	266.7	212.9
<b>Age (years)</b>				
15–24	981.4	682.6	292.7	223.7
25–44	2 132.9	1 593.5	1 035.9	829.1
45–59	1 194.5	1 321.6	915.5	803.4
60+	586.9	1 008.7	767.6	717.3
<b>Residence</b>				
Urban	1 621.5	1 318.7	902.6	746.4
Rural	3 274.1	3 287.7	2 109.0	1 827.0
<b>Education level</b>				
Less than primary	1 315.6	1 811.3	1 328.5	1 208.3
Primary	1 358.2	1 110.6	629.2	527.4
Secondary	1 821.1	1 339.0	807.7	619.9
University	400.7	345.4	246.2	217.9
<b>Region</b>				
Bangkok	425.5	318.0	228.1	192.3
Central	1 325.3	1 146.9	687.2	569.2
Northern	635.4	840.4	527.2	446.5
Northeastern	1 866.9	1 593.8	1 131.2	1 030.0
Southern	642.5	707.2	437.9	335.4
<b>Socioeconomic status</b>				
Lowest	1 018.0	1 099.6	698.1	616.8
Low	863.1	1 033.4	714.6	620.8
Middle	1 153.6	873.3	572.6	471.5
High	1 100.6	990.3	634.6	521.2
Highest	760.4	609.8	391.8	343.2

Note: Table 5.2b based on Table 5.2 of Chapter 5

: HCP = health care provider

<sup>1</sup> Includes current smokers and former smokers who have been abstinent for less than 12 months

<sup>2</sup> Among current smokers and former smokers who have been abstinent for less than 12 months

<sup>3</sup> Among current smokers and former smokers who have been abstinent for less than 12 months, and who visited an HCP during the past 12 months

**Table 5.2c:** Number (in thousands) of smokeless tobacco users<sup>1</sup> 15 years and above who made a quit attempt and received health-care provider assistance in the past 12 months, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Smokeless tobacco use cessation and health-care seeking behaviour			
	Made quit attempt <sup>1</sup>	Visited an HCP <sup>1</sup>	Asked by HCP if a user <sup>2</sup>	Advised to quit by HCP <sup>2</sup>
	<i>Number (in thousands)</i>			
<b>Overall</b>	295.7	1 119.8	307.4	200.3
<b>Gender</b>				
Men	85.0	105.8	36.3	23.1
Women	210.6	1 014.0	271.1	177.2
<b>Residence</b>				
Urban	54.8	140.8	31.9	21.5
Rural	240.8	979.0	275.4	178.8
<b>Region</b>				
Bangkok	16.1	17.2	*	*
Central	54.7	131.3	45.0	22.6
Northern	59.6	221.3	67.6	22.6
Northeastern	126.6	635.4	178.6	143.1
Southern	38.7	114.6	14.1	9.9
<b>Socioeconomic status</b>				
Lowest	133.9	693.6	181.7	116.0
Low	60.5	245.0	81.1	49.8
Middle	59.1	107.7	21.3	18.1
High	36.9	57.6	21.0	15.1
Highest	5.3	*	*	*

Note: Table 5.2c based on Table 5.2a of Chapter 5

: HCP = health-care provider

<sup>1</sup> Among current smokeless tobacco users and former users who have been abstinent for less than 12 months

<sup>2</sup> Among current smokeless tobacco users and former users who have been abstinent for less than 12 months, and who visited an HCP during the past 12 months

\*Less than 25 sample size

**Table 6.3a:** Number (in thousands) of adults 15 years and above who were exposed to tobacco smoke in public places in the past 30 days among those who visited those places, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Adults exposed to tobacco smoke <sup>1</sup> in...							
	Government buildings	Health-care facilities	Restaurants	Public transportation	Schools	Universities	Bars or night clubs	Markets
	<i>Number (in thousands)</i>							
<b>Overall</b>	2 913.5	1 505.8	12 313.7	3 564.8	4 691.7	1 049.3	2 122.8	28 767.8
<b>Gender</b>								
Men	1 662.6	676.9	6 969.0	1 403.2	2 803.3	606.7	1 573.2	14 071.2
Women	1 250.8	828.9	5 344.6	2 161.7	1 888.4	442.6	549.6	14 696.6
<b>Age (years)</b>								
15–24	868.4	215.0	3 113.6	961.2	2 352.9	662.5	772.7	5 947.8
25–44	1 067.9	688.5	6 057.8	1 479.6	1 542.2	272.9	1 089.9	13 255.4
45–59	689.1	304.1	2 320.4	781.2	622.5	94.9	241.7	6 760.6
60+	288.1	298.2	821.8	342.8	174.0	18.9	*	2 804.0
<b>Residence</b>								
Urban	1 167.5	580.8	4 545.5	2 056.2	1 095.0	644.9	1 024.7	10 368.9
Rural	1 746.0	925.0	7 768.2	1 508.7	3 596.6	404.3	1 098.1	18 398.9
<b>Education level</b>								
Less than primary	515.8	455.9	1 928.1	700.1	649.9	20.8	88.2	6 878.5
Primary	353.2	305.4	2 568.3	648.3	1 019.1	16.9	361.9	6 853.0
Secondary	1 310.0	517.4	5 458.5	1 559.8	2 465.7	628.5	1 107.4	11 021.4
University	734.6	227.1	2 356.9	654.7	557.0	383.1	565.3	4 004.3
<b>Region</b>								
Bangkok	316.8	145.4	1 266.4	1 040.9	168.1	208.7	226.2	3 078.3
Central	879.0	404.9	3 909.3	1 238.0	788.7	240.9	605.7	7 521.8
Northern	325.0	145.2	1 629.0	235.7	1 042.7	163.8	321.0	4 744.1
Northeastern	782.7	305.0	2 935.9	615.2	1 899.8	282.4	623.3	8 478.9
Southern	610.0	505.3	2 572.9	435.0	792.3	153.5	346.5	4 944.6
<b>Socioeconomic status</b>								
Lowest	703.6	291.3	2 249.3	875.6	1 929.6	234.8	331.2	5 708.5
Low	439.2	299.6	2 125.7	649.5	979.9	310.9	304.7	5 973.9
Middle	490.6	310.0	2 530.5	687.5	579.8	161.8	485.3	6 016.2
High	490.6	270.3	2 697.7	671.7	550.9	159.2	433.6	6 005.1
Highest	789.5	334.6	2 710.4	680.6	651.5	182.6	567.9	5 064.2

Note: Table 6.3a based on Table 6.3 of Chapter 6

<sup>1</sup>In the past 30 days

\*Less than 25 sample size

**Table 6.4a:** Number (in thousands) of non-smokers 15 years and above who were exposed to tobacco smoke in public places in the past 30 days among those who visited those places, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Non-smokers exposed to tobacco smoke <sup>1</sup> in...							
	Government buildings	Health-care facilities	Restaurants	Public transportation	Schools	Universities	Bars or night clubs	Markets
	<i>Number (in thousands)</i>							
<b>Non-smokers</b>	2 188.2	1 220.4	8 810.3	2 973.4	3 485.0	866.0	1 180.6	21 787.4
<b>Gender</b>								
Men	972.5	409.0	3 597.2	857.6	1 625.3	429.9	679.6	7 451.5
Women	1 215.8	811.5	5 213.1	2 115.8	1 859.7	436.1	500.9	14 335.9
<b>Age (years)</b>								
15–24	710.7	175.9	2 221.7	881.0	1 858.2	583.7	464.9	4 665.1
25–44	757.4	528.0	4 345.0	1 185.6	1 103.1	204.1	590.4	9 858.0
45–59	503.7	257.9	1 622.4	620.6	421.9	63.0	112.1	5 053.1
60+	216.4	258.6	621.2	286.2	101.7	15.3	*	2 211.2
<b>Residence</b>								
Urban	899.7	501.0	3 440.4	1 728.8	916.3	516.4	660.5	8 217.8
Rural	1 288.5	719.4	5 369.9	1 244.6	2 568.7	349.6	520.0	13 569.6
<b>Education level</b>								
Less than primary	373.8	364.0	1 319.9	562.2	402.5	11.9	37.0	5 074.2
Primary	246.4	252.0	1 526.3	504.0	642.5	11.3	150.8	4 704.6
Secondary	972.3	398.5	3 980.8	1 307.9	1 974.9	541.9	607.7	8 563.7
University	595.7	206.0	1 981.5	597.4	465.1	300.9	385.1	3 434.2
<b>Region</b>								
Bangkok	253.7	131.9	996.5	890.9	143.3	169.3	147.2	2 509.7
Central	632.9	354.1	2 843.1	995.6	599.2	190.5	310.4	5 659.1
Northern	283.1	119.0	1 246.6	209.3	801.5	152.3	217.7	3 795.8
Northeastern	599.7	261.7	2 027.4	514.0	1 384.8	230.6	340.8	6 392.6
Southern	418.8	353.7	1 696.6	363.6	556.2	123.3	164.5	3 430.3
<b>Socioeconomic status</b>								
Lowest	583.5	240.4	1 641.5	788.4	1 572.5	217.1	204.4	4 518.1
Low	313.2	260.3	1 483.8	537.7	609.4	245.3	163.3	4 455.5
Middle	350.7	222.6	1 718.0	505.5	392.1	130.4	236.7	4 387.6
High	352.9	206.7	1 909.5	541.3	412.6	140.8	219.8	4 414.7
Highest	587.9	290.3	2 057.5	600.5	498.3	132.4	356.3	4 011.6

Note: Table 6.4a based on Table 6.4 of Chapter 6

<sup>1</sup>In the past 30 days

\*Less than 25 sample size

**Table 7.1a:** Number (in thousands) of manufactured cigarette smokers 15 years and above who were classified by the type of last purchase of cigarettes, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Type of last purchase		
	Cigarettes	Packs	Other <sup>1</sup>
	<i>Number (in thousands)</i>		
<b>Overall</b>	3 705.2	3 977.8	145.3
<b>Gender</b>			
Men	3 587.8	3 802.3	143.6
Women	117.4	175.6	1.7
<b>Age (years)</b>			
15–17	376.4	49.6	0.0
18–24	1 015.9	554.2	1.7
25+	2 312.9	3 373.9	143.6
<b>Residence</b>			
Urban	1 197.4	1 812.1	88.0
Rural	2 507.8	2 165.7	57.3
<b>Region</b>			
Bangkok	287.3	584.1	30.0
Central	825.5	1 231.9	50.2
Northern	400.9	628.8	12.2
Northeastern	1 477.9	905.7	22.6
Southern	713.6	627.4	30.3
<b>Socioeconomic status</b>			
Lowest	913.7	438.2	21.4
Low	745.5	617.0	12.0
Middle	833.2	905.5	21.6
High	830.9	1 084.4	25.7
Highest	381.9	932.8	64.6

Note: Table 7.1a based on Table 7.1 of Chapter 7

<sup>1</sup> Includes: cartons and others (e.g. box)

**Table 7.1b:** Number (in thousands) of shredded tobacco users<sup>1</sup> 15 years and above who were classified by the type of last purchase of shredded tobacco products, by selected demographic characteristics – GATS Thailand, 2011

Characteristic	Type of last purchase			
	Pack	Purchased by weight	Other form <sup>2</sup>	Never bought
	<i>Number (in thousands)</i>			
<b>Overall</b>	6 853.2	962.0	645.4	860.2
<b>Gender</b>				
Men	6 023.0	515.0	441.2	556.1
Women	830.2	447.0	204.2	304.0
<b>Age (years)</b>				
15–17	180.6	17.1	0.0	88.0
18–24	663.8	14.6	46.7	112.7
25+	6 008.7	930.2	598.7	659.5
<b>Residence</b>				
Urban	992.3	134.5	61.6	111.1
Rural	5 860.8	827.6	583.7	749.1
<b>Region</b>				
Bangkok	173.4	17.1	0.7	11.3
Central	1 354.9	84.4	53.9	86.6
Northern	797.5	274.6	418.6	221.4
Northeastern	3 179.8	437.1	105.8	308.3
Southern	1 347.6	148.8	66.2	232.6
<b>Socioeconomic status</b>				
Lowest	1 859.1	463.6	180.0	423.0
Low	1 777.9	224.7	263.6	142.2
Middle	1 538.7	151.1	131.4	152.0
High	1 127.8	94.3	47.6	88.0
Highest	549.7	28.3	22.7	55.0

Note: Table 7.1b based on Table 7.1a of Chapter 7

<sup>1</sup> Includes: tobacco users who used shredded tobacco products for hand-rolled cigarettes and smokeless tobacco

<sup>2</sup> Includes: purchased by cube, roll, can, bundle, bottle, box, chump, manual pack

## Appendix E: Glossary and Abbreviations

<b>Questionnaire and Indicator terminology</b>	
Adults	Population aged 15 years and above
Awareness of cigarette advertising, promotion and sponsorship	Respondents who noticed advertisements of cigarettes at stores where cigarettes are sold (e.g. displays of cigarette packages, displays of brands of cigarettes, etc.), free gifts or discount offers on other products when buying cigarettes, or any advertisement or sign promoting cigarettes in stores where cigarettes are sold in the past 30 days, or who noticed any advertisement or sign promoting cigarettes of a cigarette company, sponsorship of a sporting event or other in stores where cigarettes are sold in the past 30 days
Beliefs about the dangers of tobacco smoking	Respondents who believe that tobacco smoking causes serious illness and specific diseases, i.e. stroke, heart attack, lung cancer, mouth cancer, laryngeal cancer, impotence, emphysema, bladder cancer, stomach cancer, premature birth and bone loss
Beliefs about the dangers of second-hand smoke	Respondents who believe that breathing other people's smoke causes serious illness and specific disease in non-smokers, i.e. heart disease in adults, lung illness in children, lung cancer in adults, emphysema, low birth weight (<2500 g), premature birth (at 28–34 weeks)
Cessation methods	Methods to stop tobacco use such as pharmacotherapy (e.g. nicotine replacement therapy and prescription drug), counselling/ advice including counselling at a cessation clinic and a telephone quit line, quitting on one's own, and other methods including traditional medicines and other products.
Current smokeless tobacco user	Person who currently uses any smokeless tobacco product, either daily or occasionally
Current tobacco smoker	Person who currently smokes any tobacco product, either daily or occasionally
Daily smoker	Person who currently smokes any tobacco product every day
Daily smokeless tobacco user	Person who currently uses any smokeless tobacco product every day
Ever daily smoker	Includes persons who are current daily smokers, current occasional smokers but formerly daily smokers, or current non-smokers but formerly daily smokers.
Exposure to anti-smoking information	Respondents who have noticed information in various media in the past 30 days about the dangers of cigarette smoking and information that encourages quitting

<b>Questionnaire and Indicator terminology</b>	
Exposure to second-hand smoke at public places	<p>Includes smoking by respondents [not SHS] and those who saw somebody smoke, smelled the smoke, or saw cigarette butts at various public places during their visit to the following places in the past 30 days:</p> <ul style="list-style-type: none"> <li>• <i>Government building: covers indoor areas which are designated as non-smoking areas by national smoke-free laws</i></li> <li>• <i>Health-care facilities: covers the entire areas of both public and private health-care facilities, which are designated as non-smoking areas by the national smoke-free laws</i></li> <li>• <i>Restaurants: covers areas where food or beverages are sold, or food and beverages are sold, with or without air-conditioning system</i></li> <li>• <i>Public transportation: all public transport both with and without air-conditioning systems</i></li> <li>• <i>School: covers the entire area, which is designated as a non-smoking area by national smoke-free laws</i></li> <li>• <i>University: covers indoor areas, which are designated as non-smoking areas by national smoke-free laws, and excludes the built-up or structured areas</i></li> <li>• <i>Bar or night club: covers indoor areas which are designated as non-smoking areas by national smoke-free laws</i></li> <li>• <i>Market: a place provided for sellers to display, sell, or trade in goods or services, on a regular, temporary or specific-day basis</i></li> </ul>
Exposure to second-hand smoke at the workplace	Respondents who reported someone smoking at work inside the workplace, smelled the smoke or saw cigarette butts in indoor areas in the past 30 days
Exposure to second-hand smoke at home	Exposure inside the respondent's home, not including outside areas such as patios, balconies, gardens, etc., which are not fully enclosed
Former daily smoker	Person who is currently a non-smoker but who previously smoked daily over a period of one month or more
Former daily smokeless tobacco user	Person who is currently a non-smokeless tobacco user but had previously used smokeless tobacco daily over a period of one month or more
Interest in quitting smoking	Current tobacco smokers who are planning or thinking about quitting smoking within the next month, 12 months or some day
Non-smoker	Person who currently does not smoke at all
Non-user of smokeless tobacco	Person who currently does not use smokeless tobacco at all
Occasional smoker	Person who currently smokes less often than daily
Occasional smokeless tobacco	Person who currently uses a smokeless tobacco product less often than daily



<b>Questionnaire and Indicator terminology</b>	
Quit attempt	Current tobacco smokers and smokeless tobacco users who tried to quit the use of tobacco during the past 12 months and former tobacco smokers and smokeless tobacco users who have been abstinent for more than 12 months
Smoking status / smoking frequency	This is classified into three categories: <ol style="list-style-type: none"> <li>1) Current/daily smoker is a person who currently smokes at least one tobacco product every day, over a period of one month or more</li> <li>2) Current/occasional smoker is a person who currently smokes less than daily (either formerly daily or never daily)</li> <li>3) Non-smoker is a person who currently does not smoke at all. This includes a former daily smoker (currently a non-smoker but previously a daily smoker) and never daily smoker (currently a non-smoker who has never smoked daily, but has smoked occasionally or never smoked or tried smoking once/ twice in a lifetime)</li> </ol>
Smokeless tobacco use status	This is classified into three categories: <ol style="list-style-type: none"> <li>1) Daily smokeless tobacco user is a person who uses at least one smokeless tobacco product every day or nearly every day over a period of a month or more</li> <li>2) Current/occasional smokeless tobacco user is a person who uses smokeless tobacco products less than daily</li> <li>3) Non-smokeless tobacco user is a person who currently does not use smokeless tobacco at all. This includes “former daily user”, “never daily user”, and those who tried smokeless tobacco use once or twice in a lifetime</li> </ol>
Thinking of quitting because of pictorial health warning on cigarette packages	Current tobacco smokers who thought about quitting smoking in the past 30 days because of health warnings on cigarette packages
Tobacco products	These are of two types: <ol style="list-style-type: none"> <li>1) Smoked tobacco: manufactured cigarettes, hand-rolled cigarettes including Khi-yo, a local cigarette from the Northern region, other smoked tobacco such as pipe, cigar, water pipe/ hookah and others</li> <li>2) Smokeless tobacco: snuff by keeping in the mouth/nose, chewing tobacco, betel quid with tobacco and others</li> </ol>

<b>Abbreviations</b>	
BTC	Bureau of Tobacco Control
CDC	Centers for Disease Control and Prevention
CHD	coronary heart disease
cigs/day	cigarettes/day
COA	certificate of approval
COPD	chronic obstructive pulmonary disease
DALY	disability-adjusted life year
DDC	Department of Disease Control
EA	enumeration area
FCTC	Framework Convention on Tobacco Control
FI	field interviewer
FS	field supervisor
GATS	Global Adult Tobacco Survey
GHPSS	Global Health Professional Students' Survey
GTSS	Global Tobacco Surveillance System
GYTS	Global Youth Tobacco Survey
HCP	health-care provider
HWS	Health and Welfare Survey
ICT	information and communications technology
IRB	Institutional Review Board
MoPH	Ministry of Public Health
MPOWER	2008 WHO publication with six key strategies on tobacco control: M: Monitor tobacco use and prevention policies P: Protect people from tobacco smoke O: Offer help to quit tobacco use W: Warn about the dangers of tobacco E: Enforce bans on tobacco advertising, promotion and sponsorship R: Raise taxes on tobacco
NESDB	National Economic and Social Development Board
NGO	nongovernmental organization
NSO	National Statistics Office
PHC	Population and Housing Census
PHW	pictorial health warning *
PSO	Provincial Statistical Office
PSU	primary sampling unit
PTO	provincial technical officer
QRC	Questionnaire Review Committee
QxQ	question by question
SD	secure digital
SES	socioeconomic status
SHS	second-hand smoke

Abbreviations	
TAAT	Teachers Alliance Against Tobacco
TAPS	tobacco advertising, promotion and sponsorship
THB	Thai Baht
THPAAT	Thai Health Professional Alliance Against Tobacco
THPF	Thai Health Promotion Foundation
TQS	tobacco questions for survey
TRC	Tobacco Control Research and Knowledge Management Centre
WEO	World Economic Outlook
WHO	World Health Organization
WHO-FCTC	WHO Framework Convention on Tobacco Control

\* **Pictorial health warnings**

Ten colour-based pictorial health warnings on cigarette/cigar packages	
 <p><b>Picture 1:</b> Cigarette smoke kills people nearby</p>	 <p><b>Picture 2:</b> Smoking causes bad breath</p>
 <p><b>Picture 3:</b> Smoking causes fatal emphysema</p>	 <p><b>Picture 4:</b> Smoking causes lung cancer</p>
 <p><b>Picture 5:</b> Smoking causes oral cancer</p>	 <p><b>Picture 6:</b> Smoking causes laryngeal cancer</p>
 <p><b>Picture 7:</b> Smoking causes heart failure</p>	 <p><b>Picture 8:</b> Smoking causes stroke</p>
 <p><b>Picture 9:</b> Cigarette smoke causes 10 types of cancer (new PHW used only in 2011)</p>	 <p><b>Picture 10:</b> Smoking causes foot gangrene (new PHW used only in 2011)</p>
<p>Two black and white pictorial health warnings on shredded tobacco packs used for hand-rolled cigarettes and smokeless tobacco use as below:</p>	
 <p><b>Picture 1:</b> Smoking causes laryngeal cancer</p>	 <p><b>Picture 2:</b> Cigarette smoke causes lung cancer</p>

## Appendix F: MPOWER Summary Indicators - GATS Thailand, 2011

Indicator	Overall (%)	Gender (%)		Residence (%)		Region (%)				
		Men	Women	Urban	Rural	Bangkok	Central	Northern	Northeastern	Southern
<b>M: Monitor tobacco use and prevention policies</b>										
<b>TOBACCO SMOKERS</b>										
Current tobacco smokers <sup>(1)</sup>	24.0	46.6	2.6	20.3	25.9	18.1	23.4	21.7	25.1	29.9
Current daily tobacco smokers	21.5	42.0	2.1	17.8	23.5	15.5	20.4	19.5	22.8	27.6
Former daily tobacco smokers ( <i>among all adults</i> )	8.4	16.0	1.2	8.3	8.4	9.1	6.9	10.7	8.8	6.0
Former daily tobacco smokers ( <i>among ever daily smokers</i> )	27.2	26.8	33.8	30.7	25.7	35.5	24.5	34.7	27.2	17.5
Percentage of adults who currently smoke manufactured cigarettes	15.2	30.1	1.1	17.0	14.3	16.6	16.7	11.3	14.0	20.0
Percentage of adults who currently smoke hand-rolled cigarettes	14.4	28.1	1.4	5.9	18.9	3.3	10.8	13.5	17.7	22.3
Percentage of adults who currently smoke other tobacco	0.2	0.2	0.2	0.2	0.2	0.4	0.0	0.7	0.1	0.2
Average number of manufactured cigarettes smoked per day	10.0	10.0	9.3	10.6	9.5	11.2	11.1	9.4	9.0	9.5
Average number of hand-rolled cigarettes smoked per day	10.8	10.9	8.7	10.0	10.9	10.1	12.6	9.3	10.0	11.9
<b>SMOKELESS TOBACCO USERS</b>										
Current smokeless tobacco use <sup>(1)</sup>	3.2	1.1	5.2	1.4	4.2	0.8	1.8	4.1	4.7	2.8
Former daily smokeless tobacco users ( <i>among all adults</i> )	0.6	0.5	0.7	0.3	0.7	0.1	0.6	0.7	0.8	0.3
Former daily smokeless tobacco users ( <i>among ever daily users</i> )	16.3	37.3	11.9	18.9	15.8	19.4	25.6	16.1	14.7	11.1
<b>P: Protect people from tobacco smoke</b>										
Percentage of adults exposed to second-hand smoke at home	36.0	39.9	32.3	25.9	41.4	19.0	36.4	34.6	34.5	54.1
Percentage of adults exposed to second-hand smoke at work	30.5	37.1	22.8	25.4	35.2	21.2	27.8	27.4	34.4	44.4
<b>O: Offer help to quit tobacco use</b>										
Percentage of current smokers who made a quit attempt in the past 12 months	36.7	36.5	39.4	41.3	34.7	41.2	42.1	28.2	39.7	28.9
Percentage of current smokers who were advised to quit smoked tobacco use by a health-care provider	55.8	55.9	54.5	56.6	55.5	60.5	49.6	53.0	64.6	47.3

Indicator	Overall (%)	Gender (%)		Residence (%)		Region (%)				
		Men	Women	Urban	Rural	Bangkok	Central	Northern	Northeastern	Southern
<b>W: Warn about the dangers of tobacco</b>										
Percentage of adults who noticed information about the dangers of smoking cigarettes or that encourages quitting in newspapers or magazines	20.2	20.5	19.9	28.1	16.0	32.3	24.4	19.1	15.0	17.4
Percentage of adults who noticed information about the dangers of smoking cigarettes or that encourages quitting on television	68.1	67.5	68.6	71.3	66.3	76.2	69.2	67.4	66.3	65.1
Percentage of current smokers who noticed health warning on cigarettes packages	94.6	95.4	81.5	97.3	93.5	98.2	98.0	85.0	95.9	95.4
Percentage of current smokers who reported thinking about quitting smoking because of health warning on cigarettes packages	62.6	62.9	59.0	60.8	63.4	59.9	54.7	55.7	72.5	61.3
<b>E: Enforce bans on tobacco advertising, promotion, and sponsorship</b>										
Percentage of adults who noticed any cigarette advertisement or promotion in stores where cigarettes are sold	18.2	19.4	17.1	19.7	17.4	24.9	14.8	12.4	18.8	25.8
Percentage of adults who noticed cigarette promotion on clothing/item with brand name or logo	3.9	4.9	2.9	5.3	3.1	7.7	2.2	3.9	4.1	3.1
Percentage of adults who noticed cigarette promotion by tobacco corporate social responsibility (CSR)	0.8	0.9	0.7	1.0	0.7	1.4	0.5	1.3	0.7	0.4
Percentage of adults who noticed other promotion of cigarettes	2.6	3.1	2.0	3.9	1.8	4.9	3.4	1.4	1.9	2.5
<b>R: Raise taxes on tobacco</b>										
Average price per pack of manufactured cigarettes (Baht)						58.0				
Paid price per 100 packs of manufactured cigarettes as a percentage of per capita gross domestic product (GDP)						3.6				

Note: 1) Current use includes both daily and occasional (less than daily) use.  
2) Cigarette use includes both manufactured and hand-rolled cigarettes.

## Appendix G: Technical and Survey Staffs

### Consultants

Organization	Position
<b>1. Ministry of Public Health</b>	
Dr Porntep Siriwanarangsarn	Director- General of Department of Disease Control (DDC)
Dr Nopporn Cheanklin	Deputy Director-General of Department of Disease Control (DDC)
<b>2. National Statistical Office</b>	
Mr Viboondhat Sudhantanakit	Director-General of National Statistical Office
Ms Rajana Netsangtip	Deputy Director-General of National Statistical Office
Ms Wilailuck Chulewatanakul	Director of Policy Statistical Techniques Bureau
Dr Malee Wongsaroje	Director of Information and Communications Technology Center (ICT Center)
Mrs Somsri Watsintham	Director of Data Capturing Technology group
<b>3. Action on Smoking and Health Foundation, Thailand</b>	
Prof. Dr Prakrit Vathesatogkit	Executive Secretary of Action on Smoking and Health Foundation, Thailand (ASH Thailand)
<b>4. Faculty of Public Health, Mahidol University</b>	
Associate Prof. Tharadol Kengganpanich	Statistician
Associate Prof. Dusit Sujirarat	Statistician
<b>5. World Health Organization</b>	
Dr Chai Krittiyapichatkul	National Professional Officer on Tobacco Control

**GATS Working Group**



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Mrs. Chantrarut Pruksasuy<sup>1</sup>



Ms. Patarin Siritrakul<sup>1</sup>



Ms. Tanyawan Sulumping<sup>1</sup>



Ms. Ratchada Gannika<sup>1</sup>

**ICT Center**



Ms. Chitlada Touchchai<sup>1</sup>



Mrs. Wanpen Toaditep<sup>1</sup>



Mrs. Siriporn Kulboonyiam<sup>1</sup>



Ms. Yupawadee Boohchanasap<sup>1</sup>

**National Statistical Office**

**Policy Statistical  
Techniques Bureau**



Mrs. Hataichanok Puckcharern



Mr. Bunpot Teemuangsong



Ms. Pompan Gawsringam

**Economic Social Bureau**



Ms. Areerat Lohtongmongkol



Mr. Apichat Thunyahan<sup>1</sup>

Note: <sup>1</sup> Core staff who undertake the role of field supervisors (FSs)



## Field Staff

### 1. Northern Region

#### 1.1 Provincial Technical Officers (PTOs)

Mrs Punnapa Rattanaburi	Mr Warayut Piyaphanee
Mr Vorachai Suwan	Mr Nipon Panhong
Mr Phakin Wanichde	Mrs Ruangvipha Vongsaroj
Mr Augsorn Vimol	Ms Tongngam Aussawamekagul
Ms Supattra Sarapun	Ms Kamolthip Chantavarang
Ms Patcharaporn Sirivoravejchayangkul	Mr Paithul Thrapmak
Mrs Songkran Vongsa	Mrs Sompong Saidang
Ms Piyanuch Tugaew	Mrs Theraporn Vichitpanya
Mr Chavalit Therakerayut	

#### 1.2 Field Interviewers (FIs)

Ms Pharade Boonmawong	Mr Apichat Chaiya
Mr Pithun Kamjina	Mr Sukij Chaowwong
Mr Nuttapol Taubon	Mr Somsuk Pattamasi
Mr Chatre Sukcharoen	Mr Narubej Singho
Mr Somsak Charoenkhunmueang	Ms Jitra Rutragan
Mr Apinya Charoenchaikittikul	Mrs Siriprapha Kadsanit
Ms Lhalana Phinthaprasat	Mr Thitikorn Chanawongsa
Mr Chanon Gassomboon	Mr Pongpun Pruchyasakul
Mrs Kodchaporn Thanutvoravanichkul	Mr Somjet Judgan
Ms Wilaiwan Mahawansri	Mr Rapin Reungsongkram
Mr Jirapit Singpun	Ms Thong Sukmueang

### 2. Northeastern Region

#### 2.1 Provincial Technical Officers (PTOs)

Ms Ketsara Sripha	Mr Tosaporn Wongla
Ms Somboon Chalewan	Mrs Jiraporn Tienpitak
Mr Manoon Sawisit	Mrs Thitarporn Phasaweth
Mr Sumit Chatchawan	Mrs Yupaporn Moonut
Mrs Kwanluk Siripobaumporn	Mrs Mathuwale Chuntomuk
Ms Chorrak Intanon	Mrs Kanlapat Mahipan
Mrs Sanyakorn Nasungnern	Ms Cheawchai Promwongshay
Ms Jutamas Kumguna	Mr Nopphadon Paoyaosuk
Mr Suphun Chatpaengta	Mr Thammasak Srisongkram
Mr Adisorn Jinavil	Mr Phanupun Piluk



## 2. Northeastern Region (Cont.)

### 2.2 Field Interviewers (FIs)

Mrs Busara Ratanaphatumwan  
Ms Kavarin jaikaewairi  
Ms Nichapak Jindapee  
Ms Janya Swamechai  
Mr Niwat Inhorm  
Ms Chotika Nonyai  
Mr Sumrit Phapol  
Mr Kawi Nimnual  
Mr Prachaup Srinat  
Mrs Nongnuch Sisisat  
Mr Adisak Raksasi  
Mr Aelvit Phromchan

Mr Panupat Atthachon  
Mr Suwit Napho  
Ms Rapeepan Boonpa  
Ms Parada Kungungwan  
Mr Chagkrapong Manade  
Ms Piyada Sanphu  
Mr Vatit Samritrin  
Ms Kantaporn Prapong  
Ms Pistaya Khunpanya  
Mr Yutthapong Tonggon  
Mr Putipong Thongon  
Mr Monchai Phasaweth

## 3. Southern Region

### 3.1 Provincial Technical Officers (PTOs)

Mr Somjit Raksrithong  
Mr Chaivut Hemtanond  
Mr Thakrit Chaleayvares  
Ms Prapai Pukngarm  
Ms Hasana Legheam  
Ms Supakul Rachpibul  
Mr Chirat Cheangkriyung

Ms Mukdarat Pechtnoo  
Mr Thanee Suwattikul  
Mrs Aonanong Chunpetch  
Mrs Noppawan Punrug  
Ms Methini Chumnitarakarn  
Ms Chaluay Sannichart  
Mr Rungsarit Rattanasarid

### 3.2 Field Interviewers (FIs)

Mr Withan Deenu  
Mr Winyoo Pislagram  
Mr Kriangsak Paensuwan  
Mrs Suwammine Phromhong  
Mr Nikom Kumleang  
Ms Piangjai Sudwilai  
Mr Somrak Saengarvut  
Ms Pornthip Sonbunpan  
Ms Punyanuch Rajasiri  
Ms Apinya Karawanont  
Mrs Pennapa Wattanont

Ms Supaporn Kwanchean  
Mr Yannapol Thummaro  
Ms Sirikwan Klaogaw  
Mr Kittipong Rongsamark  
Ms Jiraporn Rithima  
Mrs Kanda Rakkoeng  
Mr Rossalan Benno  
Mrs Kodchakorn Make  
Mrs Areeya Satirak  
Mr Santi Satirak

#### 4. Central Region

##### 4.1 Provincial Technical Officers (PTOs)

Mrs Nichaporn Sangsakul	Mrs Aunchale Thanagulmetha
Mrs Natchanok Sumetyachan	Ms Raweevan Booyakalampa
Ms Suttiya Tongchai	Mr Yothin Mekarun
Ms Nongluck Promrugsakul	Ms Sidarat Tharasombat
Ms Maneerat Sandtuppar	Mr Soontorn Fugsil
Mrs Raphatsha Phuthakorn	Ms Paphopsorn Timsrikulm
Mrs Rujisaya Mukdajarujinda	Ms Sutinee Keyata
Ms Kanchana Pajariyapong	Ms Muttawan Chaisuwan
Ms Pimporn Horasith	Mrs Nisra Pheetawee
Ms Manapapob Sangansat	Ms Waraporn Dejkrob
Mrs Nutcharat Lapboon	Mr Tepparit Pilanonth
Mr Somsak Peerachairat	Mrs Athtthan Changphueak
Ms Teanjai Panboon	

##### 4.2 Field Interviewers (FIs)

Ms Wararat Chantawad	Ms Pucharee Ngachur
Ms Nattanan Junsri	Mr Tossapol Singtoej
Ms Chanoknan Thunnthong	Ms Nittaya Wongsakul
Ms Patama Phuging	Mr Paruehas Suthipongphan
Mr Kritdakorn Lapjeam	Ms Wattana Phalahan
Ms Nuttaporn Yingsagul	Ms Ratchada Dachun
Ms Lamai Ritthiherm	Mr Samatcha Wisanwong
Mr Jedchan Lorprasert	Mr Sakkarin Seesom
Ms Wandee Gothum	Mr Ayutthaya Rugrajchakan
Mrs Prajin Klibpan	Ms Uraiwan Janthranonth
Mrs Wannapa Boonmakul	Mr Keatkong Tochumboon
Acting sub Lt. Watchara Thongma	Mrs Pranom Sukyu
Ms Kanokwan Vicheanlang	Ms Suviwan Pechtool
Mr Aekkachai Gimsri	Mrs Najjaree Sutthipan

**5. Bangkok Metropolis**

**5.1 Provincial Technical Officers (PTOs)**

Mr Somchai Klinkong  
Mr Chumpol Mephat

Mr Wasit Srisengchoti

**5.2 Field Interviewers (FIs)**

Ms Kamolthip Pulgeaw  
Ms Rungruedee Kaewkalong  
Ms Ratre Srirod  
Ms Phagawadee Kruganonth  
Mrs Lakkhana Loiboon  
Mr Jirapat Sangpap  
Mr Sripai Srisutham  
Mr Prasert Sanguansri

Ms Vinitha Pimpila  
Ms Jiruttikal Sujinthawong  
Ms Nareumol Panya  
Ms Patchane Thumcharean  
Mrs Lapusrada Cheatrakul  
Ms Vigave Aekaburt  
Ms Piyawan Ganchanarug  
Ms Rungthiwa Sukchaichanhol



## Global Adult Tobacco Survey, 2011

“Global Adult Tobacco Survey: Thailand Report, 2011” summarizes the findings of Global Adult Tobacco Survey on tobacco control indicators and compares the findings with the Global Adult Tobacco Survey conducted in 2009 in Thailand. It thus fulfills its obligation under the WHO Framework Convention on Tobacco Control and MPOWER policy package to monitor tobacco control in Thailand.



Action on Smoking and Health Foundation



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